Appendix B.2

Baseline Air Quality Monitoring Report

REPORT

Baseline Air Quality Monitoring Report

CNC Crawford Project – Timmins, Ontario

Submitted to:

Canada Nickel Company

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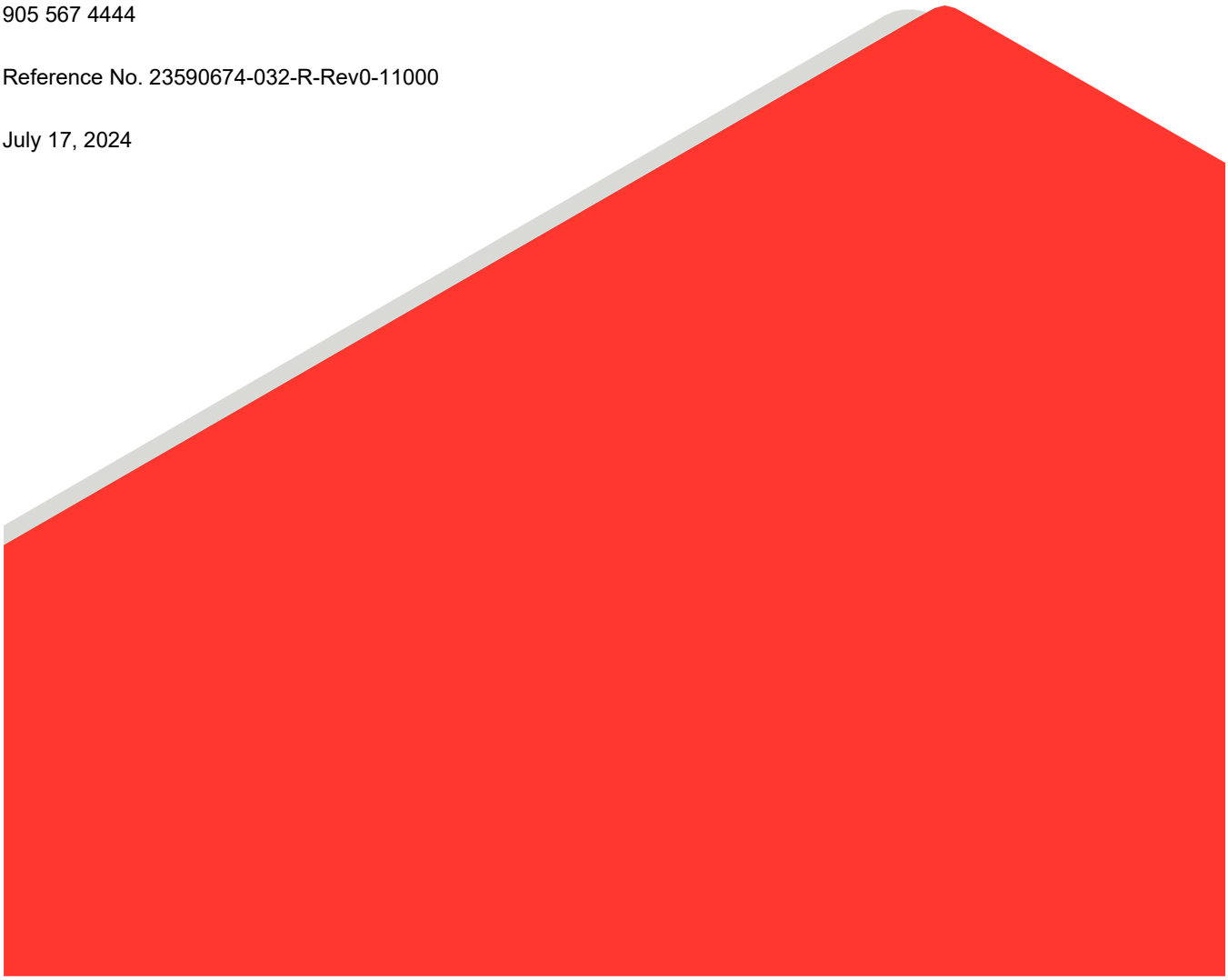
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Executive Summary

This Baseline Air Quality report provides a summary of the air quality monitoring data collected from November 2021 to December 2023 for the CNC Crawford Project by WSP E&I Canada Limited (WSP) on behalf of Canada Nickel Company.

The air quality parameters measured were:

- Suspended particulate matter;
- Metals on the suspended particulate matter size fraction;
- Particulate matter less than 10 micrometres in diameter (PM_{10});
- Particulate matter less than 2.5 micrometres in diameter ($PM_{2.5}$);
- Polycyclic aromatic hydrocarbons;
- Respirable silica;
- Asbestos;
- Diesel particulate matter;
- Volatile organic compounds;
- Nitrogen dioxide;
- Sulphur dioxide; and
- Total dustfall.

The monitoring data were generally consistent with what would be expected for a remote location, and with the regional data. Results for nitrogen dioxide, sulphur dioxide, volatile organic compounds, and metals were typically very low or below measurable levels (i.e., non-detect). Over the course of the baseline program, there were 8 exceedances of the 24-hour Ontario Ambient Air Quality Criteria measured for $PM_{2.5}$ and 3 exceedances of the 24-hour Ontario Ambient Air Quality Criteria for PM_{10}. Some of these measurements may have been influenced by wildfire smoke.

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Abbreviations

Term	Definition
°C	degrees Celsius
AAQC	Ambient Air Quality Criteria
AQMP	Air Quality Monitoring Plan
ASTM	American Society for Testing and Materials
CAAQS	Canadian Ambient Air Quality Standards
CAC	Criteria Air Contaminants
CCME	Canadian Council of Ministers of the Environment
CNC	Canada Nickel Company
CO	carbon monoxide
CVAA	Cold Vapour Atomic Absorption
DSP	Aeroqual Dust Sentry Pro (DSP) Particle Profiler
ECCC	Environment and Climate Change Canada
GAPS	Global Atmospheric Passive Sampling
g/m^2/30 days	grams per square metres per 30 days
ICPMS	inductively coupled plasma mass spectrometry
km	kilometres
L/m	litres per minute
m^3	cubic metres
MECP	Ontario Ministry of Environment, Conservation and Parks
NAPS	National Air and Pollution Surveillance
NO	nitric oxide
NO_2	nitrogen dioxide
NO_X	nitrogen oxides
O_3	ozone
PAH	polycyclic aromatic hydrocarbons
PM	particulate matter
PM_{10}	particulate matter less than 10 microns in diameter
$PM_{2.5}$	particulate matter less than 2.5 microns in diameter
ppb	parts per billion
Project	CNC Crawford Project
SO_2	sulphur dioxide
SO_3	sulphur trioxide
SO_X	sulphur oxides
SPM	suspended particulate matter
SVOC	semi-volatile organic compounds

Term	Definition
US EPA	United States Environmental Protection Agency
UTM	Universal Transverse Mercator
VOC	volatile organic compound
µg	micrograms
µg/m³	microgram per cubic metre

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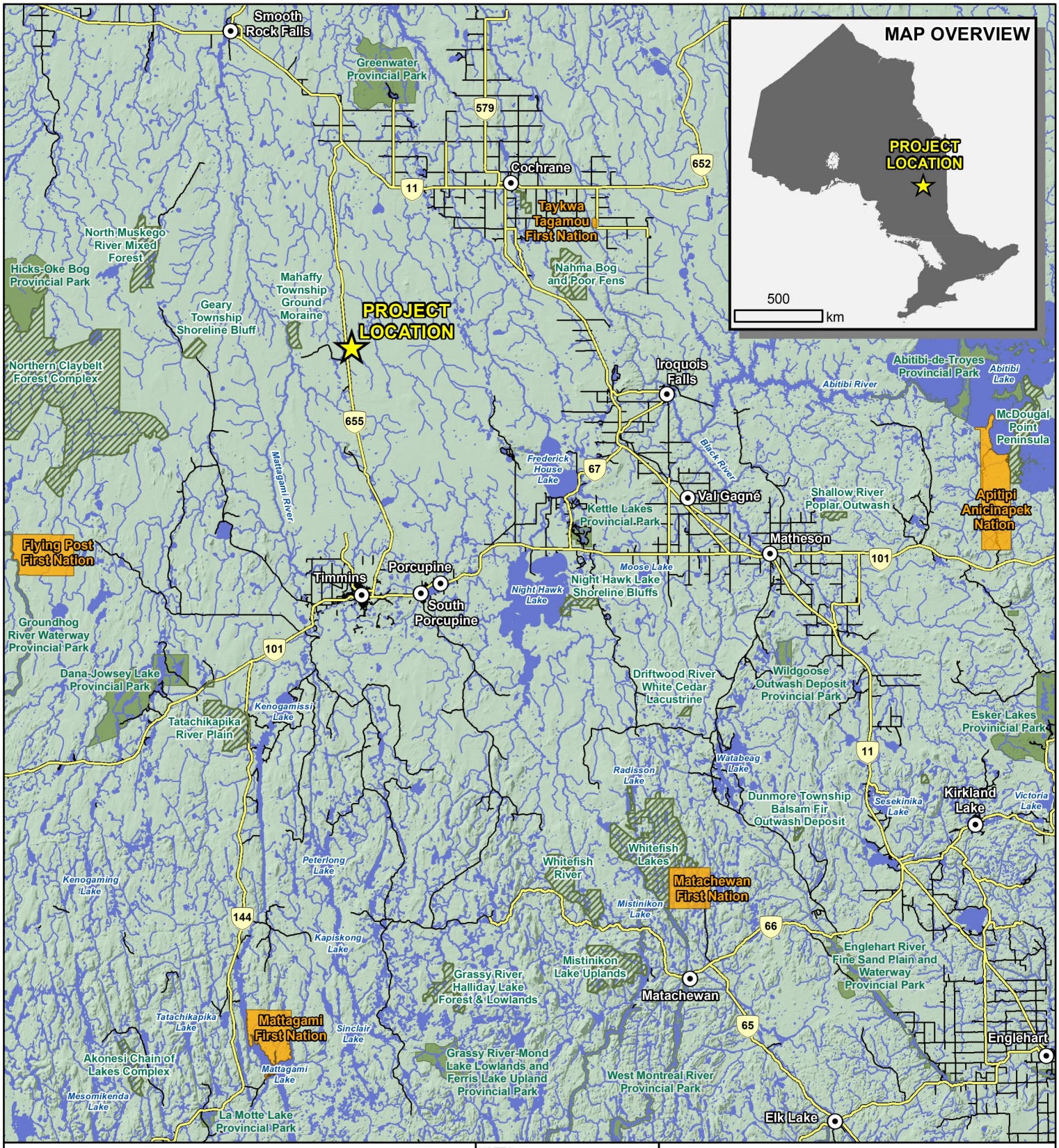
1.0 INTRODUCTION

Canada Nickel Company (CNC) is planning to develop, operate, and eventually reclaim a new nickel mine at the Crawford project site, which is located in northeastern Ontario approximately 40 km north of Timmins, Ontario (Figure 1.1).

An impact assessment pursuant to the *Impact Assessment Act, 2019* and the Ontario *Environmental Assessment Act, 1990* is required to be completed for the CNC Crawford Project (the Project). This document is one of a series of baseline reports prepared by WSP E&I Canada Limited (WSP) on behalf of CNC to describe the current environmental conditions and update existing information.

Tailored Impact Statement Guidelines for the Project were issued March 31, 2023; these Guidelines require that:

- baseline ambient air concentrations be provided for select contaminants;
- air concentrations be compared to the applicable regional, provincial, and federal criteria and standards;
- data collection methods and data source(s), including data validation and quality control methods be described; and
- representative monitoring data is collected over an appropriate duration and geographic scope.



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LEGEND

- Project Location
- First Nation Reserve
- Town / Community
- Conservation Reserve
- Provincial Park
- Local Street
- Highway
- Watercourse
- Waterbody

NOTES:
- Topographic map information extracted from Land Information Ontario (MNRF), Queen's Printer for Ontario, 2019/2020.

Datum: NAD83
Projection: UTM Zone 17N

0 5 10 20 30 40 50 Kilometres

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CRAWFORD NICKEL PROJECT

Project Location

PROJECT N°:OMEMA2002	**FIGURE: 1-1**
SCALE: 1:830,000	DATE: February 2023

1.1 Purpose and Objective of the Report

The baseline ambient air monitoring program was designed to measure air concentrations of key parameters that are anticipated to be present in air emissions from the Project to establish onsite baseline concentrations of these parameters prior to the construction phase.

The objective of this report is to provide a summary of the baseline air quality data collected between November 2021 and December 2023, in accordance with WSP's Air Quality Monitoring Plan, Revision 2 (AQMP, WSP 2023).

1.2 Project Overview

Ambient air quality at the Project site is influenced by natural and anthropogenic sources at the local and regional scales. Natural sources would include, but not be limited to, pollen from vegetation during spring and summer months and air pollutants associated with forest fires. Anthropogenic sources (i.e., those released due to human activity) include road traffic and construction along nearby unpaved logging and access roads, building heating, wind-blown particulate from exposed area sources, mining activity in and around the Timmins area, and contributions from transboundary or long-range transport of air contaminants.

With respect to the Project, the main sources of air emissions during mine construction, development, and closure would include fugitive dusts and Criteria Air Contaminants (CACs) from fuel combustion. During mine operations there would be air emissions from blasting, ore and mine rock handling and crushing, and ore processing, in addition to the fugitive dusts and CACs from fuel combustion.

In the vicinity of the Project, there are a number of cabins/outposts, which experience seasonal usage.

Additionally, relatively large communities located within approximately 50 km of the Site are:

- Timmins;
- Cochrane;
- Smooth Rock Falls;
- Iroquois Falls;
- Flying Post First Nation; and
- Taykwa Tagamou Nation.

1.3 Scope of Work

The baseline air quality dataset for 2021 to 2023 includes the following components:

- A summary of the air monitoring and meteorological data collected at the Project site from 2021 to 2023; and
- A summary of regional air quality data, including that measured by Environment and Climate Change Canada (ECCC), at the National Air and Pollution Surveillance (NAPS) Network of stations.

The contaminants sampled for include:

- Suspended particulate matter (SPM);
- Metals on the SPM size fraction;
- Particulate matter less than 10 micrometres in diameter (PM_{10});
- Particulate matter less than 2.5 micrometres in diameter ($PM_{2.5}$);
- Volatile organic compounds (VOCs);
- Polycyclic aromatic hydrocarbons (PAHs);
- Diesel particulate matter (DPM);
- Respirable silica;
- Asbestos;
- Nitrogen dioxide (NO_2);
- Sulphur dioxide (SO_2); and
- Total dustfall.

1.4 Regulatory Criteria and Guidelines

The measured concentrations were compared to the respective Ontario Ministry of Environment, Conservation and Parks (MECP) Ambient Air Quality Criteria (AAQC) and Canadian Ambient Air Quality Standards (CAAQS) endorsed by the Canadian Council of Ministers of the Environment (CCME).

The MECP's (2020) AAQC are established to be protective of potential effects on health, odour, vegetation, soiling, visibility, corrosion, or other effects; concentrations below the AAQC would not be expected to result in adverse health and/or environmental effects.

The CAAQS (CCME, 2014) were developed as part of the Canadian Air Quality Management System. The CAAQS are not intended for the assessment of the effects of individual facilities at the fenceline, but rather, to represent ambient air quality at locations that are not overly influenced by specific industrial sources.

2.0 MONITORING STATION

One solar/battery powered air quality monitoring station was established at the Project site to measure local baseline air concentrations. Local stakeholders were consulted to find a powered location; however, no suitable location could be agreed upon and thus a solar/battery-based system was selected and installed.

Siting and monitoring details of the baseline monitoring station including inlet/sampler heights above grade, which included a collocated meteorological station, are summarized in Table 2-1, with the general location of the station depicted in Figure 2.1. The location of the station is at the north end of Martin Lake, approximately 2 km west of Route 655 in a clearing (Figure 2.2). The MECP's siting requirements for clearing from vegetation and roads were met.

Table 2-1: Location of Monitoring Stations and Monitored Contaminants

Station	General Location	UTM Coordinates NAD83 Zone 17U		Parameters Measured												
				Discrete SPM/ Metals (PQ200)	Discrete PM_{10} (PQ200)	Continuous PM_{10}/ $PM_{2.5}$ (AQS1)	Passive Dustfall	Continuous (AQS1) and Passive NO_2	Passive SO_2	Discrete Asbestos (NIOSH 7400)	Discrete Silica (PQ200)	VOCs (Evacuated Canister, TO-15)	Diesel PM (mod. NIOSH 5040)	Meteorological Data	Passive Benzo(a)pyrene (ECCC Research)
Station 1	North end of Martin Lake west of HWY 655	5 407 216	470 577	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
			Inlet Height	2.6 m	2.6 m	2.7 m	3 m	2.6 m	2.6 m	1-2 m	1-2 m	1-2 m	1-2 m	3.2 m	1.7 m

470000 475000 480000

5415000 5410000 5405000 5400000

NESBITT TOWNSHIP
BECK TOWNSHIP
CRAWFORD TOWNSHIP
LUCAS TOWNSHIP
CARNEGIE TOWNSHIP
PROSSER TOWNSHIP

Existing Highway 655
North Driftwood River
Camp 40 Road
Lower Sturgeon Dam Road
West Biuskegaul River
Prosser Creek
Jocko Creek

WRS1
WRS2
LG3
OVB3
West Zone
East Zone
LG1
LG2
Main Zone
OVB2
OVB1
Tailings Management Facility

Process Plant Area
Station 1
Highway 655 Relocation
New Rail Line to Site (Connected to Existing Spur)
500 kV Transmission Line Relocation
New 230 kV Transmission Lines to Site

Martin Lake
Gerry Lake
Jack Lake
Sutherland Lake
Davis Lake
Prosser Lake

Exsiting Trasnsmission Line
Exsiting Trasnsmission Line

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LEGEND

- Air Quality Monitoring Location
- Township Boundary
- Existing Transmission Line
- Existing Primary Road / Highway
- Secondary Road (resource road)
- Contours (10 m interval)
- Waterbody
- Watercourse
- Proposed Site Plan Feature
- Proposed New Rail Line to Site
- Proposed New 230 kV Transmission Line to Site
- Proposed Highway 655 Relocation
- Proposed 500 kV Transmission Line Relocation

NOTES:
- Topographic map information extracted from Land Information Ontario (MNRF), Queen's Printer for Ontario, 2019/2020
- Preliminary site plan data extracted from Canada Nickel Company, April 5, 2022.
- Aerial imagery provided by CNC, scene date, summer 2021 and ESRI online mapping service, 2019.

0 0.5 1 2 3 4 5 Kilometres

Datum: NAD83
Projection: UTM Zone 17N

N W E S

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CRAWFORD NICKEL PROJECT

Air Quality Monitoring Location

PROJECT N°:OMEMA2002 | **FIGURE:** 2-1

SCALE: 1:60,000 | DATE: March 2023



Figure 2.2: Project Air Quality and Meteorology Monitoring Station

3.0 METHODS

3.1 Ambient Air Monitoring

CNC staff conducted the sample media changes and sample recovery, routine maintenance, and performed laboratory sample submission with support from WSP staff.

The laboratory analytical methods and detection limits are included in the appended laboratory reports (Appendix C).

3.1.1 Suspended Particulate Matter and Metals

Due to power limitations, suspended particulate matter (SPM) concentrations were measured using the gravimetric method with a low-volume BGI PQ200 air sampler.

SPM samples were collected from midnight to midnight on a 1-in-6-day sampling schedule that coincides with the standard National Air Pollution Surveillance (NAPS) sampling schedule (i.e., samples are collected for a continuous 48-hour period every 6 days). The sampling schedule frequency was increased to a 1-in-3-day schedule in spring of 2023 to address winter sampling gaps.

The PQ200 actively samples at a rate of approximately 16.7 litres per minute (L/min) for a total sample volume of 24 m^3 over 24 hours. The PQ200 runtime was doubled to 48 hours (48 m^3) to improve the metals' detection limits. Samples were collected on quartz filters with analysis performed by reference Method IO-3.1. SPM and metal concentrations were adjusted to 24-hour equivalent concentrations in accordance with the methodology outlined in the Procedure for Preparing an Emission Summary and Dispersion Modelling Report (MECP Guideline A-10). The quartz fibre filters have an approximate pore size of one micrometre and an average aerosol retention of 99.9% as per ASTM D 2986-95a (ASTM, 1999). Similarly, suitable Teflon filters were used where appropriate.

Equipment maintenance and calibration was carried out in accordance with the more stringent of the equipment manufacturer's operations manual and the MECP's Operations Manual.

PQ200 filters collected were further analyzed to determine the concentrations of the metal constituents. Inductively coupled plasma spectroscopy (ICPMS) was used for this analysis. Additionally, mercury was analyzed for using Cold Vapour Atomic Absorption (CVAA).

Bureau Veritas was the certified analytical service laboratory used for SPM and metals analyses.

3.1.2 Fine Particulate Matter <10 Micrometres

PM_{10} concentrations were measured using the standard gravimetric method with a low-volume BGI PQ200 air sampler to the same specification as described for SPM, but for the PM_{10} size fraction and for a 24-hour sample (24 m^3). PM_{10} samples were collected from midnight to midnight on a 1-in-6-day sampling schedule that coincides with the standard NAPS sampling schedule (i.e., samples are collected for a continuous 24-hour period every 6 days). The sampling schedule frequency was increased to a 1-in-3-day schedule in spring of 2023 to address winter sampling gaps. Teflon filters were used where appropriate.

Bureau Veritas was used for PM_{10} analysis.

Additionally, a "near-reference" continuous Particle Profiler in the AQS1, demonstrating good precision and accuracy in the field when calibrated against reference methods, was used to collect continuous PM_{10} data; the sampler was collocated with a PQ200 sampler, PM_{10} low volume sampler. The unit operated at a sampling rate of 1.0 L/min. The operation, service, and maintenance procedures detailed in the manual provided by the equipment manufacturer were followed. The manufacturer has tested units down to 40°C and concluded that the AQS operated adequately down to -40°C for short periods.

3.1.3 Fine Particulate Matter <2.5 Micrometres

The same AQS1 “near-reference” Particle Profiler as is listed above for the PM_{10} monitoring was used to measure $PM_{2.5}$.

3.1.4 Total Dustfall

Dustfall is primarily the result of deposition due to gravitational settling of larger particulates, typically greater than 20 micrometres in diameter. Material deposited during precipitation events (wet deposition) is also measured as part of the total dustfall.

Dustfall samples were collected using standard passive dustfall jars over a sampling period of 30-days (±3 days where possible). The Standard Method for the Collection and Analysis of Settleable Particulate, as suggested by ASTM Method D1739-98 (2004) was followed. The water soluble and insoluble portions of dustfall were determined using ASTM method D-1739-98 or the MECP method DF-E3043A. Bird deterrents and algaecide were used in summer months to minimize the interference of algae growth on dustfall measurements.

Bureau Veritas was used for dustfall analysis.

3.1.5 Nitrogen Dioxide

Though there are more than six forms of oxides of nitrogen, nitric oxide (NO) and nitrogen dioxide (NO_2) are the predominant forms found in air emissions and are the most noteworthy nitrogen-based air pollutants. Collectively, they are known as nitrogen oxides (NO_X) and are expressed as the equivalent mass concentration of NO_2.

Passive air monitors for NO_2 were deployed to monitor monthly average concentrations. The passive monitors were handled and analyzed in accordance with methods stipulated by Bureau Veritas for their Passive Air Sampling System. The samples were shipped in a re-sealable plastic bag as supplied with the sampler, and in a protective container with Teflon liner. The passive NO_2 monitors were exposed each month for a sampling period of 30 days (±3 days where possible).

Continuous data were recorded by a “near-reference” AQS1 monitor. The air was actively sampled by pump and traveled through a glass and Teflon coated inlet system to the analyzer module. The module incorporated an Aeroqual gas sensitive semiconductor (GSS) sensor with a tuned microstructure for NO_2 detection. A thermal scrubber removed the effect of ambient ozone, and a zero-cycle compensated for sensor drift and interference effects from humidity and VOCs. The manufacturer has tested units down to -40°C and concluded that the AQS operated adequately down to -40°C short periods.

The Aeroqual AQS1’s specifications are presented in Table 3-1.

Table 3-1: AQS1 Continuous Monitor Specifications

Parameter	Nitrogen Dioxide (NO_2)	Fine Particulate Matter ($PM_{2.5}$)
Range	0-500 ppb	60,000 µg/m^3
Resolution	0.1 ppb	0.1 µg/m^3
Lower Detection Limit (2s)	1 ppb	1 µg/m^3
Precision	2% of reading or 2 ppb	—
Accuracy	—	+ /- 2µg/m^3 +5% of reading
Noise Zero; Span% of reading	1 ppb; 1%	—
Linearity (% of FS)	1%	—
Drift 24 hour Zero; Span% of FS	2 ppb; 1%	—

3.1.6 Sulphur Dioxide

Sulphur oxides (SOx) include sulphur dioxide (SO_2), sulphur trioxide (SO_3), and solid sulphate forms. In connection with fuel burning, where the majority is in the form of SO_2, SOx is normally expressed in terms of the equivalent mass concentration of SO_2.

Passive air monitors for SO_2 were deployed to monitor monthly average concentrations. The passive monitors were handled and analyzed in accordance with the methods stipulated by Bureau Veritas for a Passive Air Sampling System. The samples were shipped in a re-sealable plastic bag as supplied with the sampler, and in a protective container with Teflon liner. The passive SO_2 monitors were exposed at the beginning of each month for a sampling period of 30 days (±3 days).

3.1.7 Volatile Organic Compounds

Volatile Organic Compounds (VOCs) were measured using evacuated cannisters (SUMMA Cannisters) in accordance with US EPA Method TO-15. Six-litre SUMMA Cannisters were fitted with 24-hour flow regulators and were sampled on a 1-in-12-day cycle, where possible, for select periods to capture seasonal variability.

Bureau Veritas was used for analysis.

3.1.8 Respirable Silica

Respirable silica was measured by a modified NIOSH 7500 method, using a low-volume PM_{10} PQ200. Air was drawn through the PM_{10} sampler onto a 47-mm poly-vinyl chloride filter. Approximately 24 m^3 was collected over a 24-hr sample period, which achieves a minimum detection limit of 0.4 µg/m^3 (<10% of the AAQC). Sampling was conducted such that seasonal variation was represented.

Bureau Veritas was used for analysis.

3.1.9 Polycyclic Aromatic Hydrocarbons

Benzo(a)pyrene, and other PAHs, were sampled passively using the Tisch TE-200-PAS, also known as the GAPS-type (Global Atmospheric Passive Sampling Network) sampler. The GAPS-type sampler consisted of a pole mounted domed metal enclosure (sampling chamber) containing a polyurethane foam (PUF) disk (sorbing medium). The sampler was installed approximately 1.5 metres above the ground and exposed for approximately three months per sample. Sample rates are estimated using ECCC methods and are typically 4 m^3/day. After exposure, the PUF disks were recovered and sent to Airzone One Ltd. for analysis. Note, this method is still under development by ECCC.

3.1.10 Asbestos

Asbestos was measured using NIOSH method 7400, which involves drawing air through a mixed cellulose ester membrane contained within a cassette at flow rate of approximately 2 L/min. A minimum volume of 400 litres is required. Asbestos samples were collected on a seasonal basis.

SGS Galson was used for analysis.

3.1.11 Diesel Particulate Matter

Diesel particulate matter was measured using a modified NIOSH 5040 method for elemental carbon as a surrogate. This method samples at approximately 4 L/min, using a 37-mm quartz filter cassette, for an exposure period of approximately 48 hours (11.5 m^3). Samples were collected on a seasonal basis.

SGS Galson was used for analysis.

3.1.12 Meteorological Parameters

A Vaisala meteorological sensor was fitted to the AQS1 to continuously measure meteorological data including temperature, wind speed, wind direction, relative humidity, and rainfall.

3.2 Published Air Quality Data

Existing published air quality data were obtained from the ECCC NAPS Network (ECCC 2023). The NAPS Network operates monitoring stations across Canada. The Network reports background air chemistry data for various gases, PM, as well as various VOCs and semi-volatile organic compounds (SVOCs). The closest relevant NAPS stations to the site are in Rouyn-Noranda, Quebec, Sudbury, Ontario, and Sault Ste. Marie, Ontario. See Table 3-2 for information regarding the NAPS stations.

Table 3-2: NAPS Monitoring Station Locations

Station	Station ID	UTM Coordinates (NAD83)			Distance from Site (km)	Relevant Contaminants Measured
		Northing (m)	Easting (m)	Zone		
Rouyn-Noranda	050604	5,344,285	649,790	17	190	SO_2, O_3, $PM_{2.5}$
Sault Ste. Marie	060709	5,156,807	706,285	16	330	SO_2, NO_2, NO, O_3, $PM_{2.5}$
Sudbury	060610	5,148,707	499,761	17	260	SO_2, NO_2, NO, O_3, $PM_{2.5}$

Ozone (O_3) concentrations were not monitored as part of the Project's baseline program; however, concentrations measured by the NAPS network from the closest station have been included in this report. Releases of ozone are not expected from mining operations; however, ozone data is used to estimate the extent of atmospheric conversion of nitrogen oxide (NO) to NO_2.

3.3 Quality Assurance and Quality Control Protocols

The ambient air quality monitoring program was carried out in accordance with defined QA/QC protocols to ensure that the basic elements outlined in the MECP Operations Manual are adhered to, which include:

- Strategic site selection to minimize interferences and obstacles that may affect airflow;
- Sampling system requirements;
- Site and analyzer operation;
- Frequency of sampler flow checks and equipment calibrations;
- Performance and system audits;
- Data validation, editing, and reporting;
  - A quality control protocol for comparing AQS1 concentrations to passive concentrations to qualify lower detection limits that are not more than 10 times below the AAQC.
- Documentation of field notes; and
- Personnel training.

Field staff were trained in the operation of the air monitoring equipment, sample recovery, transport, and shipment to the laboratory.

Blank discrete filters and passive sample cassettes were submitted to the listed laboratories for analysis on a routine basis. For the passive samplers, one duplicate of NO_2 or SO_2 samples were sent to the lab each month, as well as a travel blank.

The laboratory followed their internal QA/QC protocols, which included spiked sample recovery and duplicate analysis of some samples for the metals' analysis.

4.0 AIR QUALITY DATA SUMMARY

Statistical summaries of the data collected at the Project's baseline station were prepared in accordance with the MECP's Operations Manual for Air Monitoring in Ontario. The relevant air quality criteria are also provided, which include the federal CAAQs and the Ontario AAQC.

The complete set of results is included in Appendix A for the discrete data, and Appendix B for the continuous data. Laboratory raw data is included in the Appendix C laboratory reports.

For the purpose of performing statistical analyses, and in keeping with a commonly accepted practice, a value of half the detection limit was substituted for concentrations less than the detection limit.

Continuous data were summarized from the raw 1-minute data and hourly averages were calculated by averaging the 1-minute data in accordance with the MECP's 75% minimum validity requirement. For comparison with the ECCC NAPS data, 24-hr averages were calculated by averaging the 1-hour data in accordance with the MECP's 75% minimum validity requirement. Rolling averages were calculated with the 1-minute data.

A site-specific correlation factor was developed from the discrete PM_{10} data, which was used to correct the continuous $PM_{2.5}$ and PM_{10} data which multiplied the raw data by a factor of 4.5.

4.1 Suspended Particulate Matter and Metals

The SPM sampler was operated from November 2021 to November 2023, sampling every six days in accordance with the NAPS schedule, where possible. After periods of missed samples due to weather or power losses, the sampling frequency was increased. A total of 92 SPM samples were collected, with a 90th percentile concentration of 14.0 µg/m^3, a geometric mean of 6.9 µg/m^3, and an arithmetic mean of 8.6 µg/m^3. Metals analysis was performed on each SPM filter, with most metals present in concentrations below the laboratory's detection limit.

In spring 2023 there was a period of anomalous SPM data, where SPM results were significantly lower than PM_{10} results. No cause was identified, and to be conservative, PM_{10} data were used in place of SPM data for this period, noting that this may be an underestimation of SPM in 2023; in the absence of local dust sources, the SPM fraction is expected to be the predominantly smaller size fractions resulting from long range transport.

Metals concentrations are reasonably consistent throughout the entire program; however, data from the spring 2023 were excluded (for the preceding noted reason) from the summary in Table 4-2. The metal with the highest 90th percentile concentration as a percentage of its respective AAQC was beryllium at 3.8%.

In terms of seasonal variation, SPM concentrations were higher in the summer than in winter.

A summary of the SPM sampling results is provided in Table 4-1; the average and maximum metal concentrations are displayed in Table 4-2.

Table 4-1: Suspended Particulate Matter Summary Statistics

Statistic	Total
Geometric Mean SPM Concentration (µg/m^3)	6.9
Arithmetic Mean SPM Concentration (µg/m^3)	8.6
90th percentile (µg/m^3) (1)	14.0
Maximum 24-hour Concentration (µg/m^3) (1)	44.9
Ontario AAQC (24-hour, µg/m^3)	120
Ontario AAQC (Annual, µg/m^3)	60
Number of valid sampling days	92
Number of samples >Criteria (SPM)	0

Note:

(1) SPM statistics from spring 2023 include the greater value of SPM or PM_{10}.

Table 4-2: Summary Statistics for Metals Associated with SPM

Parameter	AAQC[2] (µg/m³)	Number of Detections	Number of samples	Typical Detection Limit (µg/m³)	Average[3] (µg/m³)	90th Percentile[3] (µg/m³)	Maximum[3] (µg/m³)
Aluminum (Al)	120	25	95	0.042	7.3E-02	2.1E-01	5.5E-01
Antimony (Sb)	25	0	95	0.0010	6.4E-04	6.3E-04	3.6E-03
Arsenic (As)	0.3	0	95	0.0010	6.4E-04	6.3E-04	3.6E-03
Barium (Ba)	10	51	95	0.0010	5.4E-03	4.3E-03	2.3E-01
Beryllium (Be)	0.01	0	95	0.00062	3.9E-04	3.8E-04	2.2E-03
Bismuth (Bi)	-	0	95	0.0010	6.4E-04	6.3E-04	3.6E-03
Boron (B)	120	0	95	0.021	1.3E-02	1.3E-02	7.2E-02
Cadmium (Cd)	0.025	0	95	0.00021	1.3E-04	1.3E-04	7.2E-04
Calcium (Ca)	10	34	95	0.10	1.5E-01	3.4E-01	1.1E+00
Chromium (Cr)	0.5	55	95	0.0010	1.6E-03	3.0E-03	5.1E-03
Cobalt (Co)	0.1	0	95	0.00062	3.9E-04	3.8E-04	2.2E-03
Copper (Cu)	50	64	95	0.00061	1.6E-03	2.9E-03	1.8E-02
Iron (Fe)	4	7	95	0.10	7.6E-02	1.1E-01	3.6E-01
Lead (Pb)	0.5	32	95	0.00061	8.2E-04	1.7E-03	3.4E-03
Magnesium (Mg)	120	59	95	0.020	4.8E-02	9.6E-02	2.2E-01
Manganese (Mn)	0.4	46	95	0.0010	2.1E-03	4.3E-03	1.7E-02
Molybdenum (Mo)	120	0	95	0.00061	3.9E-04	3.8E-04	2.2E-03
Nickel (Ni)	0.04	8	95	0.0010	8.3E-04	1.3E-03	7.4E-03
Potassium (K)	-	1	95	0.10	6.5E-02	6.3E-02	3.6E-01
Selenium (Se)	10	0	95	0.0020	1.3E-03	1.3E-03	7.2E-03
Silver (Ag)	1	1	95	0.00020	1.3E-04	1.3E-04	7.2E-04
Sodium (Na)	-	32	95	0.10	1.6E-01	2.6E-01	1.8E+00
Strontium (Sr)	120	7	95	0.0010	7.4E-04	7.5E-04	4.8E-03
Thallium (Tl)	-	0	95	0.00021	1.3E-04	1.3E-04	7.2E-04
Tin (Sn)	10	12	95	0.00062	5.2E-04	1.2E-03	2.3E-03

Table 4-2: Summary Statistics for Metals Associated with SPM

Parameter	AAQC[2] (µg/m³)	Number of Detections	Number of samples	Typical Detection Limit (µg/m³)	Average[3] (µg/m³)	90th Percentile[3] (µg/m³)	Maximum[3] (µg/m³)
Titanium (Ti)	120	19	95	0.0021	2.1E-03	4.4E-03	1.1E-02
Uranium (U)	2	0	95	0.00021	1.3E-04	1.3E-04	7.2E-04
Vanadium (V)	2	0	95	0.00062	3.9E-04	3.8E-04	2.2E-03
Zinc (Zn)	120	4	95	0.010	6.9E-03	7.5E-03	3.6E-02
Mercury (Hg)[1]	2	1	95	5.2E-05	3.4E-05	3.2E-05	9.9E-05

(1) Mercury analysis only includes the particulate-bound fraction.

(2) AAQCs are for the 24-hour Averaging Period.

(3) Results between February 6, 2023 and October 2023 are excluded from statistics (Section 4.1)

(4) Results were converted to 24-hour averaging period using the methodology noted in Section 3.1.

4.2 Fine Particulate Matter <10 Micrometres

The discrete PM_{10} sampler was operated from November 2021 to December 2023. Samples were collected every six days in accordance with the NAPS schedule, where possible. After periods of missed samples due to weather or power losses, the sampling frequency was increased. A total of 91 valid PM_{10} samples were collected, with a 90th percentile concentration of 13.1 µg/m^3 and an arithmetic mean of 8.3 µg/m^3. One exceedance of the 24-hour PM_{10} AAQC was measured in October 2023.

The AQS1 continuous PM_{10} sampler operated from November 2021 to December 2023, with the following notable data gaps resulting from instrument error, instrument failure, and instrument theft/vandalism:

- Intermittent data from November 2021- February 2022;
- Erroneous data from August 2022-October 2022, which were removed from statistics calculations;
- No data from January 2023-May 2023; and
- Intermittent data in late fall of 2023.

For the continuous data, the 90th percentile PM_{10} concentration was 14.7 µg/m^3 on a 1-hour basis, and the arithmetic mean concentration for the total sampling period was 7.3 µg/m^3 on a 1-hour basis (Table 4-5). Two exceedances of the 24-hour PM_{10} AAQC were measured in July 2023, and one was measured in September 2023 (Table 4-5). Concentrations were higher in the summer than in winter as illustrated in Table 4-3.

Table 4-3: Mean Particulate Matter by Month (Continuous)

Month	$PM_{2.5}$ (µg/m^3)	PM_{10} (µg/m^3)
January	6.0	6.6
February	6.2	7.0
March	3.1	3.6
April	1.9	2.4
May	4.1	5.8
June	4.3	6.5
July	11.8	14.6
August	7.7	8.9
September	8.4	9.8
October	2.8	4.1
November	4.6	5.3
December	2.2	2.6

A summary of the measured discrete PM_{10} concentrations is provided in Table 4-4, and the summarized continuous PM_{10} data is included in Table 4-5.

Table 4-4: PM_{10} Summary Statistics (Discrete Sampler)

Statistic	Total
Average PM_{10} Concentration (µg/m³) 24-hr	8.3
90th percentile Concentration (µg/m³) 24-hr	13.1
Maximum 24-hour Concentration (µg/m³)	94.1
Ontario Interim AAQC (24-hour Averaging Period, µg/m³)	50
Number of sampling days	91
Number of samples >Interim Criteria (PM_{10})	1

Table 4-5: PM_{10} Summary Statistics (Continuous Sampler)

Statistic	Total
Average PM_{10} Concentration (µg/m³) 24-hr	7.6
90th percentile Concentration (µg/m³) 24-hr	14.7
Maximum rolling 24-hour Concentration (µg/m³)	95.2
Ontario Interim AAQC (24-hour Averaging Period, µg/m³)	50
Number of sampling hours	8,435
Number of samples >Interim Criteria (PM_{10})	3

4.3 Fine Particulate Matter <2.5 Micrometres

The AQS1 continuous PM_{10} sampler was also capable of simultaneously measuring $PM_{2.5}$. The notes mentioned in Section 4.2 are applicable to the $PM_{2.5}$ sampling. The 90th percentile concentration was 11.9 µg/m³ on a 1-hour basis, and the overall arithmetic mean concentration was 5.9 µg/m³ on a 1-hour basis. Eight exceedances of the 24-hour averaging period CAAQS were measured.

A summary of the $PM_{2.5}$ sampling results is provided in Table 4-6.

Table 4-6: $PM_{2.5}$ Summary Statistics (Continuous Sampler)

Statistic	Total
Average $PM_{2.5}$ Concentration (µg/m³) 24-hr	6.2
90th percentile Concentration (µg/m³) 24-hr	12.4
Maximum calendar 24-hour Concentration (µg/m³)	69.3
CAAQS (24-hour Averaging Period, (µg/m³) (1)	27
Number of sampling hours	8,435
Number of 24-hr averages >Criteria ($PM_{2.5}$)	8
CAAQS (Annual Averaging Period, µg/m³)	8.8
Number of annual averages >Criteria ($PM_{2.5}$)	0

(1) Used “as is” as a stand in in lieu of 3-years of data. Compared using midnight-to-midnight 24-hour averages.

The hourly dataset is provided in Appendix B.

4.4 Total Dustfall

Dustfall samples were initially taken in December 2021 and continued until the end of May 2023.

All dustfall values were below the respective AAQC of 7 g/m^2/30-days. The arithmetic mean was 0.65 g/m^2/30-day at the Project Site. The dustfall results are summarized in Table 4-7.

Table 4-7: Total Dustfall Summary Statistics

Statistic	Total
Arithmetic mean dustfall (g/m^2/30d)	0.65
90th percentile dustfall (g/m^2/30d)	1.5
Maximum dustfall (g/m^2/30d)	1.8
AAQC (g/m^2/30d)	7
Number of samples	17

4.5 Sulphur Dioxide and Nitrogen Dioxide

Passive NO_2 and SO_2 sampling was initialized in December 2021 and continued until the end of May 2023. Eighteen valid samples were collected. Measured concentrations of NO_2 and SO_2 were either extremely low or below detection. These results are consistent with regional background concentrations.

The continuous NO_2 monitor operated from November 2021 to December 2023, with occasional down periods for power loss, maintenance, or repairs. The maximum hourly NO_2 concentration was 9.8 ppb and the arithmetic mean for the period of 0.3 ppb on a 1-hour and 24-hour basis. In total, 9,882 sampling hours were measured.

The continuous data is summarized in Table 4-8, and summarizes the passive NO_2 and SO_2 data collected.

Table 4-8: Continuous NO_2 Summary Statistics

Statistic	Total
Arithmetic mean concentration (ppb) 1-hr	0.3
90th percentile concentration (ppb) 1-hr	0.5
Arithmetic mean concentration (ppb) 24-hr	0.3
90th percentile concentration (ppb) 24-hr	0.4
Maximum rolling 1-hour concentration (ppb)	9.8
Maximum rolling 24-hour concentration (ppb)	1.3
Number of valid sampling hours	9,882
Number of sample hours >Criterion (100 ppb, 24-hr rolling average)	0
Number of sample hours >Criterion (200 ppb, 1-hr average)	0

Table 4-9: Passive NO_2 and SO_2 Summary Statistics

Statistic	NO_2	SO_2
Arithmetic mean concentration (ppb)	0.17	0.13
90th percentile concentration (ppb)	0.43	0.30
Maximum 30-day concentration (ppb)	0.71	0.40
Number of samples	18	18

4.6 Passive Volatile Organic Compounds

From August 2022 to December 2023, eighteen passive VOC samples were collected at the CNC Crawford Project. Most VOCs were measured below the detection limit.

A summary of the data collected for select VOCs is presented in Table 4-10. The entire VOC data summary is included in Appendix A.

Table 4-10: Passive VOCs Summary Statistics

VOC	AAQC (µg/m³)	Number of Samples	Number of Detections	Typical Detection Limit (µg/m³)	Average (µg/m³)	90th Percentile (µg/m³)	Maximum (µg/m³)
Benzene	2.3	18	15	0.160	0.37	0.49	0.72
Toluene	2,000		15	0.188	1.4	3.1	5.8
Ethylbenzene	1,000		4	0.217	0.19	0.38	0.86
M & P-Xylene	730		6	0.434	0.63	1.3	4.0
O-Xylene	730		5	0.217	0.24	0.44	1.3
1,3-Butadiene	10		0	1.11	0.56	0.56	1.1

Note:
Select VOCs listed, but the entire list of VOCs can be found in Appendix A.

4.7 Respirable Silica

Respirable silica was sampled at the Project site beginning in spring/summer of 2022 and again during the summer/fall of 2023. The analytes included cristobalite, quartz, and tridymite forms of silica.

A modified NIOSH method 7500 employing a BGI PQ200 was used to achieve lower detection limits than the standard NIOSH method by increasing the sample volumes collected. A total of 22 silica samples were obtained during the sample period.

The silica results are summarized in Table 4-11.

Table 4-11: Summary Statistics for Silica

Statistic	AAQC (µg/m³)	Number of samples	Number of Detections	Detection Limit (µg/m³)	Average (µg/m³)	90th Percentile (µg/m³)	Maximum (µg/m³)
Cristobalite	5	22	1	0.2	0.13	0.10	0.67
Quartz	5		9	0.2	0.41	0.99	1.87
Total (Quartz and Cristobalite)	-		5	0.4	0.49	1.56	1.87
Tridymite	5		0	0.4	0.21	0.21	0.43

Note: Concentrations are for the 24-hour Averaging Period. PQ200 modified method to reduce detection limits.

4.8 Polycyclic Aromatic Hydrocarbons

Passive sampling for PAHs was initiated in May 2023 and continued until December 2023. A total of two PAH long-term PAH samples were collected. The mean benzo(a)pyrene concentration was 0.012 ng/m^3. It should be noted that this method can be described as 'semi-quantitative'. The complete set of results can be found in Appendix A.

4.9 Diesel Particulate Matter

A total of eight diesel particulate matter (using elemental carbon as a surrogate) samples were collected. All samples collected were measured below the detection limit for elemental carbon. The average elemental carbon concentration was measured to be 0.035 µg/m^3, the 90th percentile value was 0.046 µg/m^3 using half the detection limit to calculate the statistics.

4.10 Asbestos

A total of twelve asbestos samples were collected. Three asbestos results were above the detection limit of 0.001 fibres per cubic centimetre. The average asbestos concentration was measured to be 0.001 fibres per cubic centimetre, the 90th percentile value was 0.0029 fibres per cubic centimetre using half the detection limit to calculate the statistics.

4.11 Meteorological Data

Meteorological data was collected at the Project site between November 2021 and December 2023.

There were notable down periods including:

- Intermittent data from November 2021 to February 2022;
- No data from January 2023 to May 2023; and
- Intermittent data in late fall of 2023 from power loss.

On-site meteorological data is summarized in Table 4-12. An on-site wind rose can be found in Appendix D.

Table 4-12: On-site Meteorological Data Summary

Year–Month	Temperature (°C)			Wind Speed (m/s)
	Average	Maximum	Minimum	
2021-11	-2.5	6.5	-12.5	2.5
2021-12	—	—	—	—
2022-01	—	—	—	—
2022-02	—	—	—	—
2022-03	-6.6	7.2	-24.8	2.3
2022-04	1.1	15.4	-11.3	2.6
2022-05	12.0	31.4	-4.9	2.1
2022-06	15.3	32.2	-0.5	2.1
2022-07	17.1	30.8	5.0	1.8
2022-08	16.4	28.7	2.4	1.5
2022-09	11.4	28.5	-1.9	1.5
2022-10	7.1	23.2	-5.3	2.3
2022-11	0.1	18.5	-16.8	2.5

Table 4-12: On-site Meteorological Data Summary

Year–Month	Temperature (°C)			Wind Speed (m/s)
	Average	Maximum	Minimum	
2022-12	-9.7	2.2	-25.4	1.8
2023-01	—	—	—	—
2023-02	—	—	—	—
2023-03	—	—	—	—
2023-04	—	—	—	—
2023-05	16.5	32.4	-3.5	2.0
2023-06	16.1	32.0	0.1	1.3
2023-07	17.3	31.3	2.5	1.2
2023-08	16.2	26.4	4.0	1.0
2023-09	12.8	32.5	-1.5	1.4
2023-10	8.6	29.2	-8.7	2.1
2023-11	-1.8	10.5	-14.0	2.7
2023-12	-7.6	-2.0	-16.9	1.7

— = no available data, see Section 4.1.1

5.0 PUBLISHED AIR QUALITY AND CLIMATE DATA

Regional background air quality is monitored at stations operated as part of ECCC's NAPS Network, which includes monitoring stations across Canada. The NAPS Network reports background air chemistry data that include particulate matter ($PM_{2.5}$ and PM_{10}), NO_2, SO_2, O_3, and CO..

NAPS Stations located at Rouyn-Noranda, Quebec, as well as Sault Ste. Marie and Sudbury, Ontario, were chosen as representative of regional air data to supplement the baseline data collected at the Project.

Table 5-1 through Table 5-5 provide summaries of regional air quality data obtained for this study.

5.1 Fine Particulate Matter <2.5 Micrometres

The Project concentrations measured on-site are reasonably consistent with the averages and 90th percentiles at the NAPS stations between 2018 and 2021; the 1-hour $PM_{2.5}$ 90th percentile measured on-site of 11.9 µg/m^3 is within the range of the nearby NAPS Stations' reported 1-hour $PM_{2.5}$ 90th percentiles of approximately 9 to 12 µg/m^3. The 1-hour $PM_{2.5}$ arithmetic mean of 5.9 µg/m^3 is similar to the means measured at the nearby NAPS Stations.

The $PM_{2.5}$ statistics from Rouyn-Noranda, Sault Ste. Marie, and Sudbury are provided in Table 5-1.

Table 5-1: Regional $PM_{2.5}$ Statistics for Rouyn-Noranda, Sault Ste. Marie, and Sudbury (µg/m^3)

Station	Averaging Period	CAAQS	Statistic	2018	2019	2020	2021
Rouyn-Noranda	1-hour	N/A	90th Percentile	11	10	10	12
			Mean	6	6	6	7
	24-hour	27 µg/m^3	90th Percentile	11	10	9	12
			Mean	6	6	6	7
Sault Ste. Marie	1-hour	N/A	90th Percentile	12	10	9	11
			Mean	5	5	5	6
	24-hour	27 µg/m^3	90th Percentile	10	8	8	10
			Mean	5	5	5	6
Sudbury	1-hour	N/A	90th Percentile	11	10	10	11
			Mean	5	5	5	6
	24-hour	27 µg/m^3	90th Percentile	10	8	9	10
			Mean	5	5	5	6

5.2 Nitrogen Dioxide

The Project's continuous NO_2 monitor measured much lower 1-hour average (0.3 ppb) and 90th percentile (0.4 ppb) concentrations (Table 4-8) than those measured at the Sault Ste. Marie and Sudbury NAPS monitors between 2018 and 2021.

The Project's passive NO_2 sampler also measured much lower average (0.17 ppb) and 90th percentile (0.43 ppb) concentrations than those measured at the Sault Ste. Marie and Sudbury NAPS monitors (Table 5-2). Depending on the station and the year, the range of 90th percentile concentrations measured at the NAPS monitors was 6 ppb to 15 ppb. The difference between the on-site and NAPS measurements is expected to be attributed to the remote location of the on-site monitor.

Table 5-2: Regional NO_2 Statistics for Sault Ste. Marie and Sudbury (ppb)

Station	Averaging Period	Standard / AAQC	Statistic	2018	2019	2020	2021
Sault Ste Marie	1-hour	200 ppb (400 µg/m^3)	90th Percentile	9.6	10.3	7.8	8.3
			Mean	4.4	4.5	3.7	3.9
	24-hour	100 ppb (200 µg/m^3)	90th Percentile	8.3	8.8	6.7	7.1
			Mean	4.4	4.5	3.7	3.9
Sudbury	1-hour	200 ppb (400 µg/m^3)	90th Percentile	13.9	15.3	14	12.1
			Mean	6.5	6.9	6.3	5.6
	24-hour	100 ppb (200 µg/m^3)	90th Percentile	12.8	13.7	13	10.7
			Mean	6.5	6.8	6.3	5.6

5.3 Sulphur Dioxide

The Project's passive SO_2 monitoring passive samplers measured 30-day average concentrations (0.1 ppb, Table 4-9) that were lower than the mean hourly concentrations at the Rouyn-Noranda, Sault Ste. Marie, and Sudbury NAPS monitoring stations (which ranged from 0.6 ppb to 1.8 ppb) between 2018 and 2021.

The background SO_2 statistics from the Rouyn-Noranda, Sault Ste. Marie, and Sudbury stations are displayed in Table 5-3.

Table 5-3: Regional SO_2 Statistics for Rouyn-Noranda, Sault Ste. Marie, and Sudbury (ppb)

Station	Averaging Period	Criteria	Statistic	2018	2019	2020	2021
Rouyn-Noranda	1-hour	40 ppb	90th Percentile	1.3	1.9	1.2	2.3
			Mean	1.4	1.8	1.7	1.8
	24-hour	100 ppb (275 µg/m^3)(1)	90th Percentile	3.7	5.8	5.2	5.4
			Mean	1.4	1.8	1.7	1.8
Sudbury	1-hour	40 ppb	90th Percentile	2.9	2.7	1.7	1.3
			Mean	1.2	1.2	0.9	0.9
	24-hour	100 ppb (275 µg/m^3)(1)	90th Percentile	3.2	2.8	2.1	2.4
			Mean	1.2	1.2	0.9	0.9
Sault Ste Marie	1-hour	40 ppb	90th Percentile	0.8	0.8	0.7	0.9
			Mean	0.8	0.7	0.6	0.8
	24-hour	100 ppb (275 µg/m^3(1)	90th Percentile	2.0	2	1.3	1.8
			Mean	0.8	0.7	0.6	0.8

(1) There is no 24-hour AAQC for SO_2, O.Reg. 419/05 Standard used.

5.4 Ozone

Regional ozone concentrations from the Rouyn-Noranda and Sault Ste. Marie stations are displayed in Table 5-4.

Ozone (O_3) concentrations were not monitored as part of the Project's baseline program.

Table 5-4: Regional O_3 Statistics for Rouyn-Noranda and Sault Ste. Marie (ppb)

Station	Averaging Period	Criteria	Statistic	2018	2019	2020	2021
Rouyn-Noranda	1-hour	0.08 ppm (165 µg/m^3)	90th Percentile	42	41	39	38
			Mean	29	28	27	27
	24-hour	N/A	90th Percentile	41	39	38	36
			Mean	29	28	27	27
Sault Ste. Marie	1-hour	0.08 ppm (165 µg/m^3)	90th Percentile	44	41	40	42
			Mean	30	28	28	29
	24-hour	N/A	90th Percentile	42	38	38	39
			Mean	30	28	28	29

5.5 Carbon Monoxide

There are 66 NAPS stations across Canada that currently monitor carbon monoxide (CO), of which 21 stations are in British Columbia. None of these stations are proximate to the Project site, with the closest in Ottawa more than 400 kilometres to the southeast.

The data collected at 45 of these stations are presented in Table 5-5 and are a reasonable depiction of regional CO concentrations when considered as a percent of the criteria. The data from British Columbia were excluded to avoid introducing a bias to the average and 90th percentile statistics.

Carbon monoxide (CO) concentrations were not monitored as part of the Project's baseline program.

Table 5-5: Canadian CO Statistics (ppb)

Stations	Averaging Period	Criteria	Statistic	2018	2019	2020
45 Canadian NAPS Stations	1-hour	30 ppm (36,200 µg/m^3)	Mean	0.20	0.19	0.20
			90th Percentile	0.60	0.52	1.27
	8-hour	13 ppm (15,700 µg/m^3)	Mean	0.20	0.19	0.20
			90th Percentile	0.60	0.50	1.30

Note:

The Canadian dataset used excludes the stations in British Columbia to avoid biasing the data with the number of stations located in the Metro Vancouver area.

The 90th percentile values cited were the maximum 90th percentiles of the 45 stations across Canada, excluding British Columbia.

5.6 Climate Data

Climate normal data from the Environment Canada and Climate Change (ECCC) Timmins Victor Power A (Climate ID 6078285) from 1981 to 2010 are summarised in Table 5-6.

Hourly data from Timmins A (Climate ID 6078286) from 2012 to 2022 are summarized in Table 5-7.

The on-site meteorological dataset is not considered to be of long enough duration for comparison against the long-term data collected in Timmins.

Table 5-6: ECCC Climate Normals Data for 1980 to 2010 (Timmins Victor Power A 6078285)

Station	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual
Daily Average Temperature (°C)	-16.8	-14.0	-7.4	1.8	9.6	14.9	17.5	16.0	11.1	4.4	-3.4	-11.9	1.8
Daily Maximum Temperature (°C)	-10.6	-7.2	-0.6	8.0	16.6	21.9	24.2	22.5	17.1	9.0	0.6	-6.9	7.9
Daily Minimum Temperature (°C)	-23.0	-20.7	-14.2	-4.5	2.5	7.8	10.7	9.4	5.2	-0.3	-7.4	-17.0	-4.3
Rainfall (mm)	3.2	1.7	14.1	30.1	62.3	83.2	90.9	81.6	83.7	68.1	30.9	8.5	558.3
Snowfall (cm)	57.8	45.9	44.8	27.2	5.0	0.2	0.0	0.0	1.0	15.1	49.0	65.2	311.3
Precipitation (mm)	51.8	41.3	54.5	56.2	67.4	83.4	90.9	81.6	84.7	82.5	75.9	64.5	834.6
Average Snow depth (cm)	53	64	54	18	1	0	0	0	0	0	7	28	19
Median Snow Depth (cm)	53	64	54	16	0	0	0	0	0	0	5	28	18
Wind Speed (km/h)	11.8	12.5	13.1	13.1	12.6	11.2	10.0	9.7	11.1	11.9	12.5	12.0	11.8
Most Frequent Direction	NW	S	NW	N	N	S	W	S	S	S	S	S	S
Maximum Hourly Speed (km/h)	57	59	58	56	64	56	48	72	56	56	61	56	—
Maximum Gust Speed (km/h)	105	96	108	89	104	158	85	105	105	95	89	105	—

Table 5-7: Climate Data from 2012 to 2023 (Timmins A 6078286, summarized from hourly data)

Station	Jan	Feb	Mar	Apr	May	June	Jul	Aug	Sept	Oct	Nov	Dec	Annual
Daily Average Temperature (°C)	-15.1	-14.9	-7.4	0.3	9.8	15.3	18.0	16.5	11.9	5.0	-3.1	-10.6	2.1
Daily Maximum Temperature (°C)	-10.1	-9.0	-1.6	5.8	16.3	21.7	24.4	22.6	17.7	9.4	0.5	-6.7	7.6
Daily Minimum Temperature (°C)	-20.9	-21.7	-14.5	-5.7	2.8	8.1	11.2	10.4	6.2	0.6	-7.1	-15.2	-3.8
Wind Speed (km/h)	12.8	12.9	13.7	14.0	12.1	11.2	10.4	10.1	10.7	12.0	13.2	12.4	12.1
Maximum Hourly Speed (km/h)	43	45	44	44	43	53	40	41	36	42	46	44	53
Most Frequent Direction	S	S	NW	N	N	S	SW	S	S	S	S	S	S

6.0 CONCLUSION

An ambient air quality baseline monitoring program was undertaken between November 2021 and December 2023 at the Project site to establish baseline air quality concentrations for the Project.

The ongoing program includes one ambient air monitoring station measuring the following contaminants:

- $PM_{2.5}$;
- PM_{10};
- SPM;
- Metals as constituents of SPM;
- Passive SO_2 and NO_2;
- Continuous NO_2;
- Passive VOCs;
- Passive PAHs;
- Diesel particulate matter;
- Asbestos;
- Silica; and
- Total dustfall

The monitoring data is generally consistent with what would be expected for a remote location, and with the regional data. Regional data for $PM_{2.5}$, NO_2, SO_2, O_3, and CO, collected as part of the federal NAPS network, were also provided.

The baseline concentrations for particulate, NO_2, SO_2, VOCs, silica, diesel particulate matter, asbestos, and metals were measured at low concentrations or below detectable levels.

Passive PAH concentrations for the ‘semi-quantitative’ method were measured as a qualifier.

There were eight exceedances of the 24-hour CAAQS measured for $PM_{2.5}$, three exceedances of the 24-hour AAQC for PM_{10} measured by the continuous monitor, and one exceedance of the 24-hour AAQC for PM_{10} measured by the discrete sampler; these measurements may have been influenced by wildfires.

The air quality monitoring station also includes a meteorological station, which measures temperature and wind speed.

The baseline monitoring program and the data summarized in this report are intended to support the Impact Assessment for the Project, specifically providing the baseline concentrations for air contaminants per the Tailored Impact Statement Guidelines.

7.0 CLOSING

The reader is referred to the Study Limitations section, which precedes the text and forms an integral part of this report.

This Baseline Air Quality Monitoring Report was prepared for CNC by WSP. The quality of information, conclusions and scheduling estimates contained herein is consistent with the level of effort involved in WSP's services and based on i) information available at the time of preparation; ii) data supplied by outside sources; and iii) the assumptions, conditions and qualifications set forth in this report.

We trust the above meets your present requirements. If you have any questions or comments, please contact the undersigned.

Signature Page

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https://wsponlinecan.sharepoint.com/sites/ca-cnccrawford/6 deliverables/3.0 issued/23590674-032-r-rev0-11000 air quality baseline report/23590674-032-r-rev0-11000-baseline air quality baseline report 17jul_24.docx

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APPENDIX A

Discrete Sampling Summary Tables

Passive NO2/SO2 Summary

Sample	Lab NO2 (ppb)	Lab SO2 (ppb)	On Date	Off Date	Exposure period (Days)	NO2 30 day (ppb)	SO2 30 day (ppb)
Dec-21	0.5	<0.1	2021-12-03	2022-01-03	31	0.505	0.050
Jan-22	<0.1	<0.1	2022-01-05	2022-02-04	30	0.1	0.050
Feb-22	<0.1	<0.1	2022-02-04	2022-03-03	27	0.0	0.049
Mar-22	<0.1	<0.1	2022-03-03	2022-04-04	32	0.1	0.051
Apr-22	<0.1	0.2	2022-04-04	2022-05-04	30	0.1	0.200
May-22	0.1	0.3	2022-05-04	2022-06-04	31	0.1	0.303
Jun-22	<0.1	<0.1	2022-06-04	2022-07-02	28	0.0	0.049
Jul-22	0.7	<0.1	2022-07-02	2022-08-03	32	0.7	0.051
Aug-22	<0.1	<0.1	2022-08-03	2022-09-02	30	0.1	0.050
Sep-22	<0.1	<0.1	2022-09-03	2022-10-04	31	0.1	0.050
Oct-22	0.3	0.4	2022-10-04	2022-11-02	29	0.3	0.396
Nov-22	0.2	0.1	2022-11-02	2022-12-02	30	0.2	0.100
Dec-22	0.2	0.2	2022-12-02	2023-01-02	31	0.2	0.202
Jan-23	<0.1	0.2	2023-01-02	2023-02-02	31	0.050	0.202
Feb-23	0.4	0.3	2023-02-02	2023-03-03	29	0.396	0.297
Mar-23	0.1	<0.1	2023-03-03	2023-04-04	32	0.102	0.051
Apr-23	<0.1	0.1	2023-04-04	2023-05-04	30	0.050	0.100
May-23	<0.1	<0.1	2023-05-04	2023-06-07	34	0.052	0.052
Average						**0.17**	**0.13**
90th Percentile						**0.43**	**0.30**
Maximum						**0.71**	**0.40**
Number of samples						**18**	**18**

Dustfall Summary

Sample ID	Insoluble Particulate (mg)	Soluble Particulate (mg)	On Date	Off Date	Exposure Period (Days)	Total Dustfall (g/m2/30day)
2021 DECEMBER DUSTFALL	1.1	4.6	2021-12-03	2022-01-03	31	0.30
2022 JANUARY DUSTFALL	2.2	2	2022-01-03	2022-02-04	32	0.22
2022 FEBRUARY DUSTFALL	<1.0	<2.0	2022-02-04	2022-03-03	27	0.09
2022 MARCH DUSTFALL	1.3	4.2	2022-03-03	2022-04-04	32	0.28
2022 APRIL DUSTFALL	8.1	5	2022-04-04	2022-05-04	30	0.72
2022 MAY DUSTFALL	4.3	2	2022-05-04	2022-06-04	31	0.33
2022 JUNE DUSTFALL	3	4.2	2022-06-04	2022-07-02	28	0.42
2022 AUGUST DUSTFALL	3.7	7.6	2022-08-03	2022-09-02	30	0.62
2022 SEPTEMBER DUSTFALL	12.2	17.6	2022-09-03	2022-10-04	31	1.58
2022 OCTOBER DUSTFALL	19.4	12.4	2022-10-04	2022-11-02	29	1.80
2022 NOVEMBER DUSTFALL	1.6	10.2	2022-11-02	2022-12-02	30	0.65
2022 DECEMBER DUSTFALL	4.2	3	2022-12-01	2023-01-02	32	0.37
2023 JANUARY DUSTFALL	<1.0	3.2	2023-01-02	2023-02-02	31	0.20
2023 February Dustfall	4.2	5.6	2023-02-02	2023-03-03	29	0.56
2023 MARCH DUSTFALL	4.4	5.2	2023-03-03	2023-04-04	32	0.49
2023 April DUSTFALL	13.2	12.6	2023-04-04	2023-05-04	30	1.41
2023 May DUSTFALL	10.8	9.6	2023-05-04	2023-06-07	34	0.99
Average						0.65
90th Percentile						1.5
Maximum						1.8
Number of samples						17

VOC Summary Table

VOC	Average (Half Detection Limit, ug/m3)	90th percentile (Half Detection Limit, ug/m3)	Max (Full Detection Limit, ug/m3)	Number of Detections
2-Propanone	6.67E+00	1.31E+01	1.55E+01	18
Dichlorodifluoromethane (FREON 12)	2.52E+00	2.81E+00	3.09E+00	18
1,2-Dichlorotetrafluoroethane	5.95E-01	5.95E-01	1.19E+00	0
Chloromethane	1.02E+00	1.19E+00	1.32E+00	18
Vinyl Chloride	2.56E-02	2.56E-02	5.11E-02	0
Chloroethane	3.96E-01	3.96E-01	7.92E-01	0
1,3-Butadiene	5.55E-01	5.55E-01	1.11E+00	0
Trichlorofluoromethane (FREON 11)	1.70E+00	1.83E+00	1.88E+00	18
Ethanol (ethyl alcohol)	4.15E+00	8.01E+00	8.44E+00	12
Trichlorotrifluoroethane	5.75E-01	5.75E-01	1.15E+00	0
2-propanol	1.23E+00	1.23E+00	2.46E+00	0
Methyl Ethyl Ketone (2-Butanone)	9.03E-01	1.47E+00	2.35E+00	16
Methyl Isobutyl Ketone	2.05E-01	2.05E-01	4.10E-01	0
Methyl Butyl Ketone (2-Hexanone)	2.05E+00	2.05E+00	4.10E+00	0
Methyl t-butyl ether (MTBE)	1.81E-01	1.81E-01	3.61E-01	0
Ethyl Acetate	1.80E+00	1.80E+00	3.60E+00	0
1,1-Dichloroethylene	9.90E-02	9.90E-02	1.98E-01	0
cis-1,2-Dichloroethylene	9.90E-02	9.90E-02	1.98E-01	0
trans-1,2-Dichloroethylene	1.98E-01	1.98E-01	3.96E-01	0
Methylene Chloride(Dichloromethane)	5.93E-01	8.13E-01	1.25E+00	18
Chloroform	1.04E-01	9.75E-02	2.12E-01	1
Carbon Tetrachloride	7.69E-01	8.61E-01	8.75E-01	18
1,1-Dichloroethane	1.01E-01	1.01E-01	2.02E-01	0
1,2-Dichloroethane	7.83E-02	1.10E-01	1.28E-01	18
Ethylene Dibromide	3.84E-02	3.84E-02	7.68E-02	0
1,1,1-Trichloroethane	1.37E-01	1.37E-01	2.73E-01	0
1,1,2-Trichloroethane	3.28E-02	3.28E-02	6.55E-02	0
1,1,2,2-Tetrachloroethane	9.25E-03	9.25E-03	1.85E-02	0
cis-1,3-Dichloropropene	1.14E-01	1.14E-01	2.27E-01	0
trans-1,3-Dichloropropene	1.14E-01	1.14E-01	2.27E-01	0
1,2-Dichloropropane	1.16E-01	1.16E-01	2.31E-01	0
Bromomethane	9.70E-02	9.70E-02	1.94E-01	0
Bromoform	5.15E-01	5.15E-01	1.03E+00	0
Bromodichloromethane	6.70E-01	6.70E-01	1.34E+00	0
Dibromochloromethane	8.50E-01	8.50E-01	1.70E+00	0
Trichloroethylene	1.35E-01	1.35E-01	2.69E-01	0
Tetrachloroethylene	1.70E-01	1.70E-01	3.39E-01	0
Benzene	3.70E-01	4.92E-01	7.18E-01	15
Toluene	1.39E+00	3.08E+00	5.83E+00	15
Ethylbenzene	1.94E-01	3.79E-01	8.63E-01	4
p+m-Xylene	6.29E-01	1.31E+00	3.95E+00	6
o-Xylene	2.37E-01	4.41E-01	1.34E+00	5
Styrene	1.07E-01	1.07E-01	2.13E-01	0
4-ethyltoluene	1.23E+00	1.23E+00	2.46E+00	0
1,3,5-Trimethylbenzene	1.23E+00	1.23E+00	2.45E+00	0
1,2,4-Trimethylbenzene	1.23E+00	1.23E+00	2.45E+00	0
Chlorobenzene	1.15E-01	1.15E-01	2.30E-01	0
Benzyl chloride	1.30E+00	1.30E+00	2.59E+00	0
1,3-Dichlorobenzene	1.20E+00	1.20E+00	2.40E+00	0
1,4-Dichlorobenzene	1.51E-01	1.51E-01	3.01E-01	0
1,2-Dichlorobenzene	1.51E-01	1.51E-01	3.01E-01	0
1,2,4-Trichlorobenzene	3.71E-01	3.71E-01	7.42E-01	0
Hexachlorobutadiene	2.51E-02	2.51E-02	5.01E-02	0
Hexane	3.16E-01	4.87E-01	7.49E-01	9
Heptane	6.15E-01	6.15E-01	1.23E+00	0
Cyclohexane	3.44E-01	3.44E-01	6.88E-01	0
Tetrahydrofuran	5.90E-01	5.90E-01	1.18E+00	0
1,4-Dioxane	1.80E+00	1.80E+00	3.60E+00	0
Naphthalene	2.62E-01	2.62E-01	5.24E-01	0
Total Xylenes	8.51E-01	1.76E+00	5.29E+00	5
1,1,1,2-Tetrachloroethane	7.20E-02	7.20E-02	1.44E-01	0
Vinyl Bromide	4.38E-01	4.38E-01	8.75E-01	0
Propene	4.64E-01	4.81E-01	1.72E+00	0
2,2,4-Trimethylpentane	4.67E-01	4.67E-01	9.34E-01	0
Carbon Disulfide	7.80E-01	7.80E-01	1.56E+00	0

VOC Summary Table

VOC	Average (Half Detection Limit, ug/m3)	90th percentile (Half Detection Limit, ug/m3)	Max (Full Detection Limit, ug/m3)	Number of Detections
Vinyl Acetate	3.52E-01	3.52E-01	7.04E-01	0

PM Summary (ug/m3)

Sample Date	TSP HALF DL	PM10 HALF DL	TSP HALF DL Edited and Converted to 24-hr
2021-11-18		3.7	
2021-11-24		7.3	
2021-11-30		7.1	
2021-12-24		6.5	
2021-12-30		6	
2022-01-05	8.3	4.6	10.07781754
2022-01-11		6.5	
2022-01-17	3.2	4.8	4.8
2022-01-23		3	
2022-01-29	2.7	3.4	3.4
2022-02-04	2.9		3.545449062
2022-02-10	3.1	6	6
2022-02-16	8.3	6	10.07683763
2022-02-22	3.1	6	6
2022-02-28	3.1	6	6
2022-03-06	3.1	15.2	15.2
2022-03-12	3.1		3.763638151
2022-03-18	3.1	4.8	4.8
2022-03-24	3.1	3	3.763638151
2022-03-30	3.1	5.3	5.3
2022-04-05	3.1	4.2	4.2
2022-04-11	3.1	5.4	5.4
2022-04-17	3.1	3.6	3.763638151
2022-04-23	7.2	4	8.741353125
2022-04-29	5.4	5.4	6.568155612
2022-05-05	3.1	6.2	6.2
2022-05-11	3.1	6	6
2022-05-17	3.1		3.763638151
2022-05-23	3.1	6.7	6.7
2022-05-29	16.1	14	19.54663685
2022-06-04	6.2	4.2	7.563698607
2022-06-10	6.7		8.085751641
2022-06-16	13.7		16.63285247
2022-06-22	10.1		12.26217591
2022-06-28	10.3		12.50499128
2022-07-04	6.5	5.8	7.903640117
2022-07-10	5.1	5.8	6.203932565
2022-07-16	14.9		18.08974466
2022-07-22	9.1	10.7	10.98739525
2022-07-28	5.5	7.6	7.6
2022-08-03	6.6	6.3	8.049329336
2022-08-09	10.9	11.6	13.2166787
2022-08-15	9.5	7.4	11.58229289

PM Summary (ug/m3)

Sample Date	TSP HALF DL	PM10 HALF DL	TSP HALF DL Edited and Converted to 24-hr
2022-08-21	6.5	3.6	7.867217812
2022-08-27	11.2	10.7	13.59766042
2022-09-02	9.2	13.1	13.1
2022-09-14	3.8	3.7	4.649914232
2022-09-20		2.3	
2022-09-26	5.9	3.8	6.952017265
2022-10-02	10.9		11.75014132
2022-10-08	2.6		3.193022044
2022-10-14	8.7		9.890904548
2022-10-26	1.4		1.748270625
2022-11-01	8.7		10.52706965
2022-11-06		7	
2022-11-12		2.4	
2022-11-18		4.6	
2022-11-24		8.7	
2022-11-30	3.7	2.2	4.504225013
2022-12-06	4.6	4.4	4.599105332
2022-12-10	2.4		2.87736207
2022-12-13	1.2	1.5	1.5
2022-12-19	7.7	1.4	9.299828464
2023-01-11	2.8	2.8	3.435837409
2023-01-13	2.9	2.4	3.460118945
2023-01-16	3.1	5.7	5.7
2023-01-18	1.6	2.1	2.1
2023-01-21	1.5	2.2	2.2
2023-01-24	1.8	1.5	2.173197513
2023-01-27	2.5	4.2	4.2
2023-01-30	3.1	2.8	3.763991815
2023-02-02	3.5	4.8	4.8
2023-02-06	9.2	30.8	30.8
2023-02-09	7.3	27.1	27.1
2023-02-11	2.6	13.2	13.2
2023-02-14	4.5	9.5	9.5
2023-02-17	2.2	14.1	14.1
2023-02-20	4.0	5.5	5.5
2023-02-23	4.5	6.2	6.2
2023-02-26	4.0	4.7	4.832025755
2023-03-01	4.1	9.1	9.1
2023-03-04	4.7	10	10
2023-03-07	4.0	8.8	8.8
2023-03-13	5.3	7.2	7.2
2023-03-16	4.3	9.4	9.4
2023-03-19	3.9	5.3	5.3

PM Summary (ug/m3)

Sample Date	TSP HALF DL	PM10 HALF DL	TSP HALF DL Edited and Converted to 24-hr
2023-03-22	3.1	7.9	7.9
2023-03-25	3.5	8.7	8.7
2023-03-27	3.1	13	13
2023-03-31	11.2	11.1	13.59766042
2023-04-03		7.5	
2023-04-06	7.6		9.275546927
2023-04-12	10.2	12.6	12.6
2023-04-16		12.6	
2023-04-18	5.6	3.5	6.847393281
2023-04-24	2.0	10.2	10.2
2023-04-30	2.6	3	3.15659974
2023-05-08	5.8	44.9	44.9
2023-05-15	5.1	0.6	6.24035487
2023-05-18	8.6	25.9	25.9
2023-10-04		94.1	
2023-10-09		1.6	
2023-10-17	6.6		7.964343958
2023-10-21	1.7		2.063930599
2023-10-23		5	
2023-10-27	2.2		2.622405937
2023-11-07		3.2	
2023-11-13		3.2	
2023-11-16		6	
2023-11-20	14.7		16.71851096
2023-11-23	3.3		4.04287582
2023-12-01	3.3		4.030735052
Average	5.3	8.3	8.6
90th percentile	10.2	13.1	14.0
Geomean	4.5	5.8	6.9
Max	16.1	94.1	44.9
Number of sample	92	91	92

Half Detection Limit Metals Concentrations (ug/m3), converted to 24-hr averages

Date	Total Aluminum (Al)	Total Antimony (Sb)	Total Arsenic (As)	Total Barium (Ba)	Total Beryllium (Be)	Total Bromium (Br)	Total Boron (B)	Total Cadmium (Cd)	Total Calcium (Ca)	Total Chromium (Cr)	Total Cobalt (Co)	Total Copper (Cu)	Total Iron (Fe)	Total Lead (Pb)	Total Magnesium (Mg)	Total Manganese (Mn)	Total Molybdenum (Mo)	Total Nickel (Ni)	Total Potassium (K)	Total Selenium (Se)	Total Silver (Ag)	Total Sodium (Na)	Total Strontium (Sr)	Total Thallium (Tl)	Total Tin (Sn)	Total Titanium (Ti)	Total Uranium (U)	Total Vanadium (V)	Total Zinc (Zn)	Mercury (Hg)
2021-11-24	0.072492165	0.001812304	0.001812304	0.001812304	0.001087382	0.001812304	0.036246083	0.000362461	0.886015354	0.004837811	0.001087382	0.002416406	0.181250413	0.001087382	0.104710905	0.001812304	0.001087382	0.001812304	0.181250413	0.003624608	0.000362461	0.483861100	0.004752764	0.000362461	0.001087382	0.001624608	0.000362461	0.001087382	0.072492165
2022-01-05	0.025498093	0.000607097	0.000607097	0.000607097	0.000382472	0.000607097	0.012749046	0.000127491	0.060709744	0.000607097	0.000382472	0.001274905	0.000382472	0.012749046	0.060709744	0.000607097	0.000382472	0.000607097	0.060709744	0.001274905	0.000127491	0.060709744	0.000607097	0.000127491	0.000382472	0.001274905	0.000127491	0.000382472	0.161976105
2022-01-17	0.021009784	0.000500233	0.000500233	0.000500233	0.000315147	0.000500233	0.010504897	0.000105049	0.050023318	0.000315147	0.000252472	0.001051467	0.050023318	0.010504897	0.050023318	0.000315147	0.010504897	0.000500233	0.050023318	0.010504897	0.000105049	0.050023318	0.000500233	0.000105049	0.000315147	0.010504897	0.000105049	0.000500233	0.161976105
2022-01-23	0.025498093	0.000607097	0.000607097	0.001578453	0.000382471	0.000607097	0.012749046	0.000127491	0.060709744	0.001457634	0.000382471	0.001382471	0.060709744	0.012749046	0.060709744	0.000607097	0.000382471	0.000607097	0.060709744	0.012749046	0.000127491	0.060709744	0.000607097	0.000127491	0.000382471	0.012749046	0.000127491	0.000382471	0.161976105
2022-01-29	0.025498093	0.000607097	0.000607097	0.000607097	0.000607097	0.000607097	0.012749046	0.000127491	0.060709744	0.000607097	0.000607097	0.000607097	0.000607097	0.012749046	0.060709744	0.000607097	0.000607097	0.000607097	0.060709744	0.012749046	0.000127491	0.060709744	0.000607097	0.000127491	0.000607097	0.012749046	0.000127491	0.000607097	0.161976105
2022-02-04	0.025498093	0.000607097	0.000607097	0.000607097	0.000382472	0.000607097	0.012749046	0.000127491	0.060709744	0.021855651	0.000382471	0.001007782	0.060709744	0.012749046	0.060709744	0.000382471	0.013640041	0.000607097	0.060709744	0.012749046	0.000127491	0.060709744	0.000607097	0.000127491	0.000382471	0.012749046	0.000127491	0.000382471	0.161976105
2022-02-10	0.025498093	0.000607097	0.000607097	0.001578453	0.000382471	0.000607097	0.012749046	0.000127491	0.060709744	0.000607097	0.000382471	0.000473536	0.060709744	0.012749046	0.060709744	0.000382471	0.000959214	0.000607097	0.060709744	0.012749046	0.000127491	0.060709744	0.000607097	0.000127491	0.000382471	0.012749046	0.000127491	0.000382471	0.161976105
2022-02-16	0.025495613	0.000607038	0.000607038	0.000913784	0.000376364	0.000607038	0.012747807	0.000127478	0.145689219	0.001335485	0.000376364	0.002306746	0.060709841	0.000607038	0.040364919	0.000376364	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160764105
2022-02-22	0.025495613	0.000607038	0.000607038	0.001456892	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001335485	0.000376364	0.003945561	0.060709841	0.000607038	0.060709708	0.000376364	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160764105
2022-02-28	0.025495613	0.000607038	0.000607038	0.001456892	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001456892	0.000376364	0.002792377	0.060709841	0.000607038	0.060709841	0.000776009	0.060709841	0.001335485	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160764105
2022-03-06	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001335485	0.000376364	0.001842523	0.060709841	0.000607038	0.060709841	0.001689708	0.060709841	0.001335485	0.060709841	0.012747807	0.000607038	0.060709841	0.000607038	0.000607038	0.000376364	0.012747781	0.000127478	0.000376364	0.160764105
2022-03-12	0.025495613	0.000607038	0.000607038	0.001335485	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001699708	0.000376364	0.000837713	0.060709841	0.000376364	0.060709841	0.033165597	0.001821115	0.000376364	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160764105
2022-03-18	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001842523	0.000376364	0.002783364	0.060709841	0.001031995	0.012747807	0.000607038	0.000376364	0.002792377	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159126105
2022-03-24	0.025495613	0.000607038	0.000607038	0.001342523	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001457634	0.000376364	0.000849854	0.060709841	0.000607038	0.060709841	0.001689708	0.060709841	0.001335485	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-03-30	0.157829987	0.000607038	0.000607038	0.004006454	0.000376364	0.000607038	0.012747807	0.000127478	0.145689219	0.001942523	0.000376364	0.002670969	0.060709841	0.000861995	0.040134919	0.002428154	0.000376364	0.002063931	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-04-05	0.025495613	0.000607038	0.000607038	0.007284461	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.002063931	0.000376364	0.002428154	0.060709841	0.002670969	0.012747807	0.001456892	0.000376364	0.001699708	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-04-11	0.025495613	0.000607038	0.000607038	0.002792377	0.000376364	0.000607038	0.012747807	0.000127478	0.169970755	0.002549561	0.000376364	0.00157583	0.060709841	0.000376364	0.060709841	0.033639415	0.000376364	0.002306746	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-04-17	0.54633457	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.0031566	0.000376364	0.003520823	0.060709841	0.001699708	0.060709841	0.033051921	0.001456892	0.000376364	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000376364	0.012747781	0.000127478	0.000376364	0.000607038	0.160764105
2022-04-23	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.206383306	0.001699708	0.000376364	0.002549561	0.060709841	0.000376364	0.060709841	0.040364535	0.001821138	0.000376364	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-04-29	0.061917918	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.145689219	0.001335485	0.000376364	0.00157583	0.060709841	0.001081795	0.033994151	0.001699708	0.000376364	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-05-05	0.112140782	0.000607038	0.000607038	0.001335485	0.000376364	0.000607038	0.012747807	0.000127478	0.242815365	0.001335485	0.000376364	0.004977715	0.163979755	0.003399415	0.087413531	0.004127861	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-05-11	0.169970755	0.000607038	0.000607038	0.014568922	0.000376364	0.000607038	0.012747807	0.000127478	0.461349193	0.000607038	0.000376364	0.002913784	0.20639306	0.002306746	0.121407682	0.000607038	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-05-17	0.025495613	0.000607038	0.000607038	0.014568922	0.000376364	0.000607038	0.012747807	0.000127478	0.145689219	0.000607038	0.000376364	0.000752728	0.060709841	0.000376364	0.060709841	0.041278612	0.001942523	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-05-23	0.025495613	0.000607038	0.000607038	0.013354845	0.000376364	0.000607038	0.012747807	0.000127478	0.145689219	0.001335485	0.000376364	0.002428154	0.060709841	0.000376364	0.060709841	0.041706766	0.002549561	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-05-29	0.194252292	0.000607038	0.000607038	0.002063931	0.000376364	0.000607038	0.012747807	0.000127478	0.461349193	0.001335485	0.000376364	0.001214077	0.315959974	0.000376364	0.060709841	0.041278612	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.010926691	0.159626105
2022-06-04	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001457634	0.000376364	0.002670969	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-06-10	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-06-16	0.065502148	0.000607038	0.000607038	0.001456892	0.000376364	0.000607038	0.012747807	0.000127478	0.182111523	0.000607038	0.000376364	0.001031965	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-06-22	0.881343147	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.242815365	0.002428154	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-06-28	0.388504581	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.230674596	0.001335485	0.000376364	0.001821115	0.121407682	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-07-04	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.230674596	0.000607038	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-07-10	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000935192	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-07-16	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.157829987	0.000607038	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-07-22	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.002549561	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-07-28	0.025495613	0.000607038	0.000607038	0.00157583	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-08-03	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.00157583	0.060709841	0.000376364	0.060709841	0.012747807	0.001335485	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-08-09	0.116403776	0.00060627	0.00060627	0.00060627	0.000188195	0.00060627	0.012731663	0.000122717	0.266758653	0.001188809	0.000188195	0.000860903	0.194006293	0.000188195	0.060709841	0.011883884	0.004365142	0.000188195	0.00060627	0.006062997	0.012731660	0.006062997	0.00060627	0.000122717	0.000188195	0.00739649	0.000122717	0.000188195	0.006262697	0.171496105
2022-08-15	0.066774225	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.157829987	0.000607038	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.040774225	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-08-21	0.025495613	0.000607038	0.000607038	0.002308746	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-08-27	0.025495613	0.000607038	0.000607038	0.002308746	0.000376364	0.000607038	0.012747807	0.000127478	0.157829987	0.000607038	0.000376364	0.001104981	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159626105
2022-09-02	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.339941551	0.000607038	0.000376364	0.000789515	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-09-14	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001578453	0.000376364	0.000789515	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000376364	0.012747781	0.000127478	0.000376364	0.000607038	0.160076105
2022-09-20	0.025495493	0.000582493	0.000582493	0.000582493	0.000376364	0.000582493	0.012747807	0.000127478	0.313643037	0.000582493	0.000376364	0.000582493	0.060709841	0.000376364	0.060709841	0.012747807	0.000582493	0.000582493	0.060709841	0.012747781	0.000127478	0.060709841	0.000582493	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-10-02	0.034995828	0.000862396	0.000862396	0.000862396	0.000376364	0.000862396	0.012747807	0.000127478	0.441977793	0.002155989	0.000376364	0.000862396	0.060709841	0.000376364	0.060709841	0.012747807	0.000862396	0.000862396	0.060709841	0.012747781	0.000127478	0.060709841	0.000862396	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-10-08	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000607038	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-10-14	0.026611305	0.000741537	0.000741537	0.000741537	0.000376364	0.000741537	0.014830653	0.000148307	0.28520486	0.000741537	0.000376364	0.000439215	0.074153266	0.000439215	0.074153266	0.000439215	0.053618514	0.000449196	0.000439215	0.000741537	0.014830653	0.000148307	0.148306527	0.000741537	0.000376364	0.000439215	0.000148307	0.000439215	0.074153266	0.688899105
2022-10-20	0.059312069	0.000607038	0.000607038	0.004006454	0.000376364	0.000607038	0.012747807	0.000127478	0.192669141	0.004006454	0.000376364	0.000983402	0.239074596	0.001068388	0.012933828	0.001697076	0.000376364	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-10-26	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001335485	0.000376364	0.000801291	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-11-01	0.076484278	0.000607097	0.000607097	0.000305487	0.0003764	0.000607097	0.012749046	0.000127491	0.376400414	0.001942712	0.0003764	0.003521165	0.060709744	0.00242839	0.060709744	0.000607097	0.000607097	0.001335614	0.060709744	0.012749056	0.000127491	0.060709744	0.000607097	0.000127491	0.0003764	0.004371102	0.000127491	0.0003764	0.160076105
2022-11-10	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.001116951	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-12-06	0.044419292	0.001049798	0.001049798	0.001049798	0.000599883	0.001049798	0.020999618	0.000209962	0.149679578	0.001049798	0.000599883	0.017796499	0.104979578	0.000599883	0.104979578	0.000599883	0.001049798	0.000599883	0.104979578	0.020999592	0.000209963	0.104979578	0.001049798	0.000209963	0.000599883	0.020999592	0.000209963	0.000599883	0.160497958
2022-12-10	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000923208	0.060709841	0.000376364	0.060709841	0.003115568	0.012747807	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-12-13	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000833408	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.158656105
2022-12-19	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000983402	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.160076105
2022-12-31	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.001059969	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159126105
2023-01-13	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.002792377	0.000376364	0.002549561	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159126105
2023-01-16	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000976569	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159126105
2023-01-18	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.000607038	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159126105
2023-01-21	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001942523	0.000376364	0.000376364	0.060709841	0.000376364	0.060709841	0.012747807	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159126105
2023-01-24	0.025495613	0.000607038	0.000607038	0.000607038	0.000376364	0.000607038	0.012747807	0.000127478	0.060709841	0.001699708	0.000376364	0.001842523	0.060709841	0.000376364	0.060709841	0.033994151	0.000607038	0.000607038	0.060709841	0.012747781	0.000127478	0.060709841	0.000607038	0.000127478	0.000376364	0.012747781	0.000127478	0.000376364	0.159126105
2023-01-27	0.02626169	0.000631542	0.000631542	0.000631542	0.000378925	0.000631542	0.012630845	0.000126308	0.061354225	0.000631542	0.000378925	0.000934683	0.063154225	0.000378925	0.063154225	0.012630845	0.000631542	0.000378925	0.063154225	0.012630808	0.000126308	0.063154225	0.000631542	0.000126308	0.000378925	0.012630808	0.000126308	0.000378925	0.159126105
2023-01-30	0.02626169	0.000631542	0.000631542	0.000631542	0.000378925	0.000631542	0.012630845	0.000126308	0.061354225	0.000631542	0.000378925	0.001037729	0.063154225	0.000378925	0.063154225	0.012778159	0.000631542	0.000378925	0.063154225	0.012630845	0.000126308	0.063154225	0.000631542	0.000126308	0.000378925	0.012630845	0.000126308	0.000378925	0.159126105
2023-02-02	0.02626169	0.000631542	0.000631542	0.000631542	0.000378925	0.000631542	0.012630845	0.000126308	0.061354225	0.000331403	0.000378925	0.000378925	0.063154225	0.000378925	0.063154225	0.060628056	0.000631542	0.000378925	0.063154225	0.012630845	0.000126308	0.063154225	0.000631542	0.000126308	0.000378925	0.012630845	0.000126308	0.000378925	0.956468105
2023-02-06	0.02626169	0.000631542	0.000631542	0.229881179	0.000378925	0.000631542	0.012630845	0.000126308	0.061354225	0.002526149	0.000378925	0.001465319	0.063154225	0.000378925	0.063154225	0.012630845	0.000631542	0.000378925	0.063154225	0.012630808	0.000126308	0.063154225	0.000631542	0.000126308	0.000378925	0.012630808

Passive PAH Concentrations

	On Date	Off Date	Exposure (Days)
PAH1	15-May	12-Sep	120
PAH2	26-Sep	12-Dec-23	77

PAH	PAH 1 (ng/m3)	PAH 2 (ng/m3)	Mean PAH Concentration (ng/m3)
Naphthalene	3.06	2.51	2.787
Acenaphthylene	3.18	1.23	2.209
Acenaphthene	1.71	0.68	1.193
Fluorene	0.17	0.25	0.215
Phenanthrene	0.54	0.70	0.620
Anthracene	0.04	0.05	0.044
Fluoranthene	0.10	0.37	0.237
Pyrene	0.10	0.31	0.203
Retene	0.69	1.23	0.960
Chrysene	0.08	0.11	0.096
Benzo(b)fluoranthene	0.02	0.06	0.038
Benzo(k)fluoranthene	0.02	0.06	0.039
Benzo(a)pyrene	0.01	0.02	0.012

APPENDIX B

Continuous Sampling Summary Tables

Time	NO2 (ppb)	PM2.5 (µg/m³)	PM10 (µg/m³)	WS (mph)	WD (°)	RAIN (mm/hr)	HAIL (/cm²h)	PRESS (hPa)	AIR T (°C)	AIR RH (%)	Battery voltage (V)
2021-11-12 16:00	1.04	3.69	5.805	0.88	215.9		0	968.7	5.6	69.6	13.108
2021-11-12 17:00	0.15	3.24	4.68	1.49	214.2		0	968.7	4.1	76.8	13.081
2021-11-12 18:00	0.50	2.52	3.555	1.35	247.6		0	969	3.9	78.7	13.082
2021-11-12 19:00	0.63	2.115	3.015	1.69	233.4		0	968.8	3.3	82.8	13.083
2021-11-12 20:00	0.22	2.07	2.925	1.35	222		0	968.5	1.5	90.7	13.081
2021-11-12 21:00	0.72	2.97	4.14	2.01	226.2		0	968.2	0.5	92.7	13.08
2021-11-12 22:00	0.53	3.33	4.365	1.54	220.5		0	968.1	-0.2	97	13.079
2021-11-12 23:00	0.20	3.15	4.185	1.92	232.7		0	968.1	0.3	97.8	13.078
2021-11-13 0:00	0.47	2.97	3.96	1.45	235.2		0	967.9	0.5	96.8	13.076
2021-11-13 1:00	-0.07	2.88	3.78	1.07	224.7		0	967.4	0.2	98.8	13.076
2021-11-13 2:00	0.48	2.745	3.87	1.6	228.6		0	967	0.1	99.6	13.073
2021-11-13 3:00	0.80	2.7	3.555	1.65	235.3		0	966.6	0.3	98.9	13.072
2021-11-13 4:00	-0.57	2.565	3.375	0.88	241.9		0	966.3	0.1	99.8	13.068
2021-11-13 5:00	-0.23	2.52	3.375	1.35	265.6		0	966.4	0.3	99.5	13.068
2021-11-13 6:00	-0.10	2.565	3.195	1.65	351.9		0	966.4	0	98.8	13.066
2021-11-13 7:00	-0.03	0.855	1.17	1.59	332.9		0	966.7	-0.1	97.5	13.065
2021-11-13 8:00	0.10	0.405	0.72	1.9	318.3		0	966.9	-0.2	96.6	13.073
2021-11-13 9:00	1.92	0.27	0.54	2.2	303.4		0	966.7	-0.1	96	13.122
2021-11-13 10:00	0.77	0.315	2.34	2.55	279.4		0	966.8	0	95.1	13.208
2021-11-13 11:00	0.15	0.225	0.54	2.8	262.8		0	966.7	0.3	93.2	13.332
2021-11-13 12:00	0.15	0.27	0.405	3.31	279		0	966.5	0.6	89.4	13.631
2021-11-13 13:00	0.12	0.27	0.36	3.72	279.5		0	966.3	1	83.2	13.586
2021-11-13 14:00	-0.48	0.315	0.495	3.62	287.3		0	966.4	0.4	86.2	13.394
2021-11-13 15:00	0.15	0.405	0.585	3.28	273.5		0	966.8	0.1	85.8	13.413
2021-11-13 16:00	0.47	0.495	0.585	2.71	274.8		0	967.3	-0.3	90.5	13.212
2021-11-13 17:00	0.13	0.72	0.9	3.05	266.6		0	967.8	-1	90.4	13.091
2021-11-13 18:00	0.10	0.81	0.9	2.59	263.5		0	968.1	-1.3	91.2	13.081
2021-11-13 19:00	0.15	1.125	1.26	2.64	252		0	968.2	-1.6	93.2	13.076
2021-11-13 20:00	0.17	1.575	1.665	3.11	266.7		0	968.2	-1.4	91	13.076
2021-11-13 21:00	0.18	1.62	1.755	2.93	259.1		0	968.6	-1.6	91.3	13.074
2021-11-13 22:00	0.17	1.935	2.115	3	260.4		0	968.7	-1.5	88.9	13.069
2021-11-13 23:00	-0.20	2.115	2.295	3.11	253.3		0	968.7	-1.6	87.6	13.066
2021-11-14 0:00	0.02	2.25	2.385	3.02	246.5		0	969	-1.6	86.8	13.057
2021-11-14 1:00	0.55	2.385	2.52	3.15	252.7		0	968.9	-1.6	86.3	13.054
2021-11-14 2:00	0.07	2.475	2.7	2.84	246.3		0	969	-1.9	87.5	13.052
2021-11-14 3:00	0.05	2.43	2.565	3.01	239.3		0	969.1	-2	86	13.05
2021-11-14 4:00	-0.23	2.43	2.565	2.97	228.9		0	969	-2.4	86.8	13.048
2021-11-14 5:00	0.00	2.52	2.7	3.08	232.3		0	969.2	-2.3	86.9	13.045
2021-11-14 6:00	0.17	2.475	2.655	3.17	235.9		0	969.5	-2.2	86.7	13.045
2021-11-14 7:00	-0.13	2.25	2.43	2.69	240.1		0	969.6	-2.1	87.3	13.043
2021-11-14 8:00	0.02	2.205	2.43	2.62	229.4		0	970	-2	88.7	13.05
2021-11-14 9:00	0.10	2.205	2.385	2.75	234.1		0	970.2	-1.9	96.2	13.104
2021-11-14 10:00	0.18	1.575	1.71	2.82	244.5		0	970.2	-1.5	95.1	13.166
2021-11-14 11:00	0.17	1.035	1.17	3.26	247		0	970	-0.8	87.2	13.437
2021-11-14 12:00	0.23	0.675	0.855	3.34	256.5		0	969.9	0	80.5	13.729
2021-11-14 13:00	-0.37	0.63	0.81	2.09	275.1		0	970.1	-0.2	85.1	13.289
2021-11-14 14:00	0.02	0.585	0.675	2.3	275.2		0	970.2	-0.2	86.8	13.418
2021-11-14 15:00	0.42	0.45	0.54	1.81	299.2		0	970.6	-0.2	86.3	13.255
2021-11-14 16:00	0.15	0.585	0.72	1.01	233		0	971.2	-0.4	86.8	13.083
2021-11-14 17:00	0.42	0.495	0.585	0.65	220.5		0	971.5	-0.7	89.2	13.041
2021-11-14 18:00	-0.22	0.585	0.675	0.92	241.5		0	971.9	-0.7	90.1	13.025
2021-11-14 19:00	0.07	0.675	0.81	1	225.5		0	972.2	-0.8	93.3	13.013
2021-11-14 20:00	-0.10	0.765	0.99	0.84	222.7		0	972.4	-0.9	97.3	13.011
2021-11-14 21:00	0.07	0.945	1.08	0.9	254.8		0	972.7	-0.8	98.4	13.008
2021-11-14 22:00	-0.28	0.855	0.99	1.37	291.4		0	972.5	-0.8	99	13.006
2021-11-14 23:00	0.40	0.54	0.585	1.71	333.2		0	972.8	-0.9	99.8	13.006
2021-11-15 0:00	0.02	0.36	0.405	1.21	326.3		0	973.2	-1	100	13.005
2021-11-15 1:00	0.27	0.315	0.45	1.26	302.3		0	973.5	-0.9	100	13.004
2021-11-15 2:00	0.25	0.225	0.27	1.32	324.7		0	973.9	-0.7	100	13.004
2021-11-15 3:00	-0.28	0.18	0.225	1.48	328.3		0	974.2	-0.6	100	12.999
2021-11-15 4:00	0.32	0.27	0.315	1.77	322.3		0	974.5	-0.7	100	13.001
2021-11-15 5:00	0.27	1.26	1.395	2.68	330.5		0	975.1	-0.7	98.8	12.999
2021-11-15 6:00	-0.30	1.755	1.89	2.88	326.2		0	975.8	-0.9	97.1	13
2021-11-15 7:00	0.18	1.44	1.485	2.38	328.7		0	976.5	-1.1	96.4	12.996
2021-11-15 8:00	0.65	1.305	1.44	2.38	322		0	977.1	-1.1	96	13.01
2021-11-15 9:00	-0.55	1.17	1.305	2.65	319.9		0	977.7	-1.2	92.8	13.019
2021-11-15 10:00	-0.15	1.17	1.305	2.54	316.5		0	978.1	-1	86.2	13.078
2021-11-15 11:00	1.27	1.08	1.35	3.01	309.3		0	978.3	-1.3	89.2	13.104
2021-11-15 12:00	2.43	0.945	1.035	3.52	302.9		0	978.5	-1.8	84.7	13.167
2021-11-15 13:00	0.37	0.765	0.855	3.69	301.4		0	979	-2.5	83.4	13.096
2021-11-15 14:00	0.32	0.9	1.125	3.06	313.3		0	979.2	-2.7	79.2	13.064
2021-11-15 15:00	-0.07	1.125	1.26	2.79	302.3		0	979.7	-2.5	76	13.017
2021-11-15 16:00	0.43	1.395	1.575	2.51	292		0	980.2	-2.4	73.6	12.994
2021-11-15 17:00	0.13	1.53	1.755	2.24	285.2		0	980.6	-2.9	88	12.983
2021-11-15 18:00	0.07	1.53	1.71	1.43	278.2		0	980.6	-3.3	93.1	12.978
2021-11-15 19:00	0.00	1.44	1.62	1.47	287.5		0	980.7	-3.3	92	12.976
2021-11-15 20:00	0.12	1.755	1.98	2.06	306.9		0	980.7	-3.5	85.6	12.975
2021-11-15 21:00	-0.08	2.16	2.43	1.76	296.6		0	980.9	-3.9	84.1	12.972
2021-11-15 22:00	-0.45	2.475	2.745	2.34	294.1		0	981	-4.1	82.9	12.969
2021-11-15 23:00	-0.08	2.88	3.15	1.99	299.4		0	981.3	-4.8	82.9	12.964
2021-11-16 0:00	0.18	2.7	2.97	1.1	285.9		0	981.5	-5.5	89.3	12.958
2021-11-16 1:00	-0.25	2.925	3.195	1.94	266.4		0	981.6	-5	89.2	12.947
2021-11-16 2:00	-0.08	3.195	3.51	2.01	276.6		0	981.9	-4.8	93.5	12.941
2021-11-16 3:00	0.17	3.285	3.555	1.93	289.2		0	982	-4.6	93.3	12.939
2021-11-16 4:00	0.05	3.42	3.735	2.35	297		0	982.5	-4.6	90.9	12.931
2021-11-16 5:00	-0.58	3.465	3.735	2.32	293.9		0	983.2	-4.8	87.1	12.923
2021-11-16 6:00	0.47	2.97	3.24	2.17	275.9		0	983.7	-5	84.2	12.909

2021-11-16 7:00	4.83	3.51	3.87	1.82	281.6	0	984	-5.1	80.8	12.903
2021-11-16 8:00	-0.05	2.43	2.655	2.06	286.4	0	984.6	-5	81.3	12.905
2021-11-16 9:00	-0.20	2.25	2.475	2.48	300.3	0	984.8	-4.5	75.6	12.958
2021-11-16 10:00	0.38	2.34	3.6	2.15	321.9	0	985.1	-4.1	69.1	13.033
2021-11-16 11:00	0.03	1.845	2.025	2.31	273.8	0	985.4	-3.7	62.8	13.203
2021-11-16 12:00	0.60	1.575	1.755	2.65	264.8	0	985.4	-3.7	59.3	13.221
2021-11-16 13:00	0.37	1.575	1.8	2.05	240.7	0	985.4	-3.8	60.8	13.259
2021-11-16 14:00	0.10	1.395	1.575	1.3	234.7	0	985.6	-3.5	55.9	13.282
2021-11-16 15:00	0.12	1.395	1.575	1.41	238.4	0	986.1	-3.6	56.5	13.08
2021-11-16 16:00	0.30	1.395	1.575	1.59	251.4	0	986	-4	59.2	12.992
2021-11-16 17:00	-0.22	1.305	1.485	1.02	221.2	0	986.3	-4.5	62.1	12.94
2021-11-16 18:00	0.37	1.215	1.35	1	197.4	0	986.4	-5.2	64.5	12.903
2021-11-16 19:00	0.12	1.17	1.305	0.98	162.1	0	986	-5.4	66.4	12.88
2021-11-16 20:00	0.13	1.215	1.395	0.8	123.2	0	985.7	-5.5	69.7	12.862
2021-11-16 21:00	0.52	1.35	1.575	0.72	118.6	0	985.6	-6.3	75.1	12.848
2021-11-16 22:00	0.15	1.395	1.89	0.77	114.8	0	985.6	-7.9	82	12.212
2021-11-16 23:00	0.03	1.575	1.89	1.07	96.9	0	985.3	-8.7	84.9	12.194
2021-11-17 0:00	0.37	1.935	2.34	1.27	110.2	0	984.8	-8.6	87	12.184
2021-11-17 1:00	0.25	1.71	1.935	1.93	114.4	0	984.2	-7.1	82	12.171
2021-11-17 2:00	-0.05	1.89	3.015	2.47	117.3	0	983.5	-6.1	77.8	12.166
2021-11-17 3:00	0.12	2.07	2.79	2.27	114.3	0	983	-5.4	74.8	12.162
2021-11-17 4:00	-0.10	2.205	2.745	2.63	126.4	0	982.1	-4.8	73.4	12.163
2021-11-17 5:00	0.23	2.43	3.6	2.63	119	0	981.3	-5.2	88.3	12.161
2021-11-17 6:00	0.30	3.24	4.635	2.92	116.4	0	980.2	-5.2	94.2	12.16
2021-11-17 7:00	-0.02	3.465	5.04	3.48	109.2	0	979.3	-4.8	95.2	12.159
2021-11-17 8:00	0.23	2.79	3.375	3.16	114.8	0	978.7	-4.2	94.9	12.161
2021-11-17 9:00	0.18	1.845	2.115	3.13	116.9	0	978	-3.6	97.1	12.171
2021-11-17 10:00	0.27	1.44	1.62	3.09	120	0	977	-2.7	98.7	12.188
2021-11-17 11:00	0.75	1.35	1.485	3.54	135.9	0	976.2	-1.8	97.4	12.205
2021-11-17 12:00	0.58	1.26	1.395	3.28	139.3	0	975	-1.6	96.9	12.22
2021-11-17 13:00	0.72	1.08	1.215	3.17	137.4	0	974	-1.3	97.9	12.226
2021-11-17 14:00	0.97	0.99	1.08	2.75	137.1	0	973.3	-1.3	98.2	12.186
2021-11-17 15:00	0.48	1.035	1.17	2.41	132.5	0	972.8	-1.2	99.1	12.173
2021-11-17 16:00	0.52	1.575	1.665	2.67	143	0	972.6	-1	99.8	12.168
2021-11-17 17:00	0.05	2.115	2.25	2.42	148.1	0	972.5	-0.8	100	12.168
2021-11-17 18:00	0.85	1.89	1.935	2.3	145.7	0	972	-0.6	100	12.167
2021-11-17 19:00	0.75	1.575	1.62	2.15	147.9	0	971.7	-0.3	100	12.166
2021-11-17 20:00	0.32	1.35	1.395	2.12	152.7	0	971.1	0	100	12.166
2021-11-17 21:00	0.87	1.71	1.935	1.9	177.5	0	970.9	0.1	100	12.166
2021-11-17 22:00	0.68	2.205	2.34	2.72	176.9	0	971	0.2	100	12.619
2021-11-17 23:00	0.92	3.15	3.33	2.12	184.9	0	970.8	0.3	100	12.796
2021-11-18 0:00	0.50	3.555	3.96	2.1	168.8	0	970.3	0.3	100	12.797
2021-11-18 1:00	0.50	3.555	4.095	3.75	170.9	0	970.1	0	100	12.794
2021-11-18 2:00	0.95	3.51	4.275	4.5	167.5	0	970	0.1	99.9	12.794
2021-11-18 3:00	0.65	3.33	4.23	2.51	162.1	0	969.7	0.1	98.7	12.793
2021-11-18 4:00	0.18	2.925	3.96	1.78	189.5	0	969.5	0.1	97.9	12.79
2021-11-18 5:00	-0.42	1.71	2.385	2.76	204.7	0	969.5	0.3	94.1	12.79
2021-11-18 6:00	0.38	1.8	2.475	1.67	165.7	0	969.2	0.1	98.9	12.787
2021-11-18 7:00	0.33	2.25	3.015	1.88	161.2	0	969.2	-0.2	98.2	12.787
2021-11-18 8:00	0.30	1.89	2.52	2.7	182.1	0	969.3	0	95.8	12.807
2021-11-18 9:00	0.18	1.305	1.665	3.37	202.8	0	969.3	0.2	92.5	12.836
2021-11-18 10:00	-0.03	0.63	0.855	3.85	211	0	969.6	0.3	91.1	12.942
2021-11-18 11:00	-0.27	0.585	0.855	3.26	204.9	0	969.5	0.7	89.9	13.215
2021-11-18 12:00	0.18	0.72	0.9	3	200.7	0	969.4	0.8	88.8	13.042
2021-11-18 13:00	0.30	0.855	1.125	3.32	199.7	0	969.3	0.9	86.8	13.028
2021-11-18 14:00	0.15	0.945	1.215	3.48	202.6	0	969.3	0.8	86.9	13.006
2021-11-18 15:00	0.05	0.855	1.08	2.93	226.8	0	969.7	0.7	86.9	12.913
2021-11-18 16:00	0.13	0.54	0.72	3.19	234.8	0	970.5	0.2	92.2	12.855
2021-11-18 17:00	0.15	0.315	0.45	2.6	245.2	0	971.4	-0.2	92.4	12.832
2021-11-18 18:00	-0.02	0.405	0.54	3.63	257.5	0	972.2	-0.2	85.6	12.821
2021-11-18 19:00	-0.08	0.495	0.9	4.28	284.3	0	973.4	-1.7	86.4	12.809
2021-11-18 20:00	-0.12	0.54	0.72	4.25	275.5	0	974.4	-2.5	83.2	12.801
2021-11-18 21:00	0.13	0.405	0.72	3.52	258.7	0	975.1	-3.3	85.4	12.798
2021-11-18 22:00	0.50	0.405	0.63	3.91	261.7	0	975.7	-3.2	88	12.795
2021-11-18 23:00	-0.23	0.36	0.495	3.96	272.1	0	976.5	-2.8	87.9	12.786
2021-11-19 0:00	0.12	0.36	0.54	3.59	268.7	0	977.4	-2.5	90	12.773
2021-11-19 1:00	-0.15	0.315	0.63	3.8	277.6	0	978.3	-2.4	92	12.766
2021-11-19 2:00	-0.65	0.315	0.45	3.54	281.4	0	979.4	-2.3	90.9	12.764
2021-11-19 3:00	-0.07	0.405	0.54	3.73	283.1	0	980.7	-2.3	91.6	12.76
2021-11-19 4:00	0.12	0.405	0.585	3.86	287.5	0	981.9	-2.5	93.8	12.753
2021-11-19 5:00	0.15	0.315	0.45	3.83	293.4	0	983.3	-2.6	90.5	12.743
2021-11-19 6:00	0.20	0.27	0.405	4.13	293.3	0	984.7	-3.1	88.9	12.732
2021-11-19 7:00	0.27	0.18	0.225	3.73	295.9	0	986	-3.6	86	12.727
2021-11-19 8:00	-0.05	0.18	0.225	4.22	293.5	0	987.3	-3.8	83.2	12.901
2021-11-19 9:00	-0.32	0.18	0.225	3.87	295.8	0	988.3	-3.8	85.2	13.112
2021-11-19 10:00	0.42	0.27	0.315	4.1	285.7	0	989.4	-3.8	83	13.346
2021-11-19 11:00	-0.35	0.36	0.36	4.28	282.8	0	990	-3.4	78.9	13.651
2021-11-19 12:00	0.28	0.495	0.63	3.6	292	0	990.2	-3.1	74.8	13.478
2021-11-19 13:00	0.53	0.36	0.45	2.83	308.1	0	990.5	-2.7	75.6	13.418
2021-11-19 14:00	-0.20	0.495	0.54	2.83	273.4	0	990.7	-2.6	76.3	13.343
2021-11-19 15:00	0.13	0.495	0.585	2.53	260.6	0	991	-2.5	73.7	13.249
2021-11-19 16:00	-0.18	0.405	0.45	1.36	248.3	0	991.1	-3.1	72	13.033
2021-11-19 17:00	0.38	0.36	0.495	0.94	203.6	0	991.3	-4.8	80.9	12.966
2021-11-19 18:00	-0.07	0.405	0.495	0.79	182.9	0	991.4	-6.3	89.2	12.94
2021-11-19 19:00	0.02	0.45	0.54	0.67	169	0	991.4	-7.4	94	12.917
2021-11-19 20:00	0.87	0.585	0.675	0.83	170.2	0	991	-7.6	95.2	12.899
2021-11-19 21:00	0.10	0.495	0.54	1.25	174.8	0	990.7	-7.1	92.2	12.875
2021-11-19 22:00	0.22	0.765	1.035	1.94	184.7	0	990.5	-6.4	90.6	12.862
2021-11-19 23:00	0.15	0.765	0.99	2.07	182.1	0	990.3	-5.8	89.4	12.49
2021-11-20 0:00	-0.33	0.675	0.855	2.46	179	0	989.9	-4.6	86.2	12.195

2021-11-20 1:00	-0.03	0.81	0.945	2.69	176	0	989.4	-4	84.3	12.183
2021-11-20 2:00	0.05	0.945	1.125	2.9	171.3	0	988.7	-3.6	84.2	12.17
2021-11-20 3:00	-0.10	0.81	0.945	2.93	168.7	0	988	-3.1	83.9	12.164
2021-11-20 4:00	0.45	0.855	0.99	3.04	166.7	0	987.2	-3.3	85.9	12.156
2021-11-20 5:00	0.37	1.08	1.395	3.87	165.2	0	986.5	-2.5	84	12.138
2021-11-20 6:00	0.47	1.53	2.61	3.61	159.7	0	985.8	-2.6	83.9	12.129
2021-11-20 7:00	1.25	1.62	2.61	3.04	155.3	0	985.2	-2.8	85.7	12.124
2021-11-20 8:00	0.57	1.665	2.025	3.33	165.8	0	984.8	-1.9	84.1	12.172
2021-11-20 9:00	0.17	2.16	2.43	3.13	168.2	0	984.2	-0.7	81.6	13.495
2021-11-20 10:00	0.75	3.195	3.555	3.64	170.6	0	983.6	0.2	79.5	13.702
2021-11-20 11:00	0.47	4.995	5.715	4.08	176.2	0	982.7	1.3	76.5	13.716
2021-11-20 12:00	0.57	6.975	7.92	4.36	177.1	0	981.5	2	73.8	13.223
2021-11-20 13:00	0.88	7.695	8.64	3.33	178.6	0	980.9	2.2	74.9	12.755
2021-11-20 14:00	0.82	8.1	9.045	3.1	178.4	0	980.3	2.2	76.4	12.808
2021-11-20 15:00	1.23	8.325	9.315	2.84	179.4	0	980.2	2	81	12.782
2021-11-20 16:00	1.28	8.37	9.135	2.84	178.6	0	980.4	1.1	93.9	12.74
2021-11-20 17:00	1.03	9.315	9.9	2.6	184.2	0	981	0.5	99	12.726
2021-11-20 18:00	1.00	11.25	11.745	2.55	189.1	0	981.4	0.6	99.5	12.715
2021-11-20 19:00	1.12	13.005	13.86	2.48	195.3	0	981.7	0.9	98	12.7
2021-11-20 20:00	0.95	14.22	15.57	2.21	200.7	0	982.1	1.1	96.8	12.692
2021-11-20 21:00	0.62	14.85	16.47	1.84	212.5	0	982.5	0.9	97.1	12.685
2021-11-20 22:00	0.63	14.715	16.605	1.27	235.9	0	983.2	0.1	99.1	12.671
2021-11-20 23:00	1.02	14.13	16.83	2.16	268.9	0	984.1	0.1	93.8	12.662
2021-11-21 0:00	0.52	10.575	12.6	1.48	271	0	984.7	-1	91.2	12.655
2021-11-21 1:00	0.37	9.54	11.16	1.01	262.4	0	984.9	-2.2	97.1	12.645
2021-11-21 2:00	0.68	7.875	9.09	0.87	189.9	0	985.5	-3.4	99.5	12.629
2021-11-21 3:00	0.18	7.56	8.775	0.74	162.4	0	985.4	-4.6	99.6	12.62
2021-11-21 4:00	0.25	7.47	8.82	0.79	119.6	0	985.1	-5.7	99.9	12.604
2021-11-21 5:00	0.33	8.19	9.45	0.92	131.4	0	984.3	-5.7	100	12.587
2021-11-21 6:00	0.67	7.605	8.82	0.43	117.5	0	983.8	-7.3	98.4	12.45
2021-11-21 7:00	0.28	7.83	8.955	0.85	128.3	0	983.3	-6.9	99.3	11.912
2021-11-21 8:00	1.08	11.97	13.545	1.88	146.8	0	982.3	-4.9	100	11.936
2021-11-21 9:00	0.58	17.325	19.395	2.71	154.2	0	981.1	-2.8	100	12.141
2021-11-21 10:00	0.47	17.19	19.125	3.01	161	0	980	-1.7	99.6	13.593
2021-11-21 11:00	0.95	19.395	22.635	2.75	157	0	978.4	-0.4	96.9	14.042
2021-11-21 12:00	0.32	19.44	21.96	2.89	146.5	0	976.4	0.6	93.9	13.478
2021-11-21 13:00	0.75	20.115	23.085	3.04	142.9	0	974.4	1.3	90.5	12.303
2021-11-21 14:00	0.48	26.73	29.34	2.82	140.4	0	972.4	1.4	91.8	11.919
2021-11-21 15:00	0.70	24.435	25.83	2.54	133.7	0	970.5	0.7	98.5	12.051
2021-11-21 16:00	0.22	10.17	10.305	2.68	130.5	0	968.8	0.2	100	12.486
2021-11-21 17:00	0.92	3.87	3.915	3.06	122.4	0	967.3	0.1	100	12.477
2021-11-21 18:00	0.43	2.79	2.835	2.86	169.1	0	965.9	0.2	100	12.459
2021-11-21 19:00	1.37	3.465	3.51	1.89	183.6	0	964.3	0.1	100	12.442
2021-11-21 20:00	1.95	4.275	4.365	1.52	195.7	0	962.7	0.1	100	12.419
2021-11-21 21:00	1.75	4.05	4.14	3.32	253.5	0	961.1	0.1	100	12.403
2021-11-21 22:00	1.23	2.61	2.7	4.6	286	0	959.9	0.1	100	12.384
2021-11-21 23:00	0.43	1.44	2.25	4.6	286	0	959.9	-1.4	97.2	12.375
2021-11-22 0:00	0.00	1.215	3.87	4.6	286	0	961.9	-6.3	91.3	12.37
2021-11-22 1:00	0.00	2.295	6.03	4.6	286	0	964	-8.6	91.1	12.35
2021-11-22 2:00	-0.02	2.925	7.335	4.6	286	0	965.5	-10.1	91.6	12.333
2021-11-22 3:00	-0.05	3.555	8.325	4.6	286	0	966.4	-11.3	91.8	12.307
2021-11-22 4:00	0.30	3.6	7.56	4.6	286	0	966.8	-11.7	92.3	12.173
2021-11-22 5:00	-0.02	3.42	6.165	4.6	286	0	967.6	-11.8	92	11.601
2021-11-22 6:00	0.08	3.285	5.625	4.6	286	0	968.5	-11.9	91.5	11.549
2021-11-22 7:00	-0.10	3.375	5.22	4.6	286	0	969.6	-12.1	91	11.471
2021-11-22 8:00	0.10	3.645	5.175	4.6	286	0	970.9	-12.4	89.6	10.966
2021-11-22 9:00	0.25	3.24	4.275	4.6	286	0	971.9	-12.4	88.5	10.453
2021-11-22 10:00	0.47	2.475	3.375	4.6	286	0	972.5	-11.8	89.3	10.236
2021-11-22 11:00	-0.33	2.385	3.33	3.79	279.9	0	973	-10.8	89.8	9.963
2021-11-22 12:00	-0.07	2.79	3.735	2.52	255.2	0	973.2	-10.1	89.5	9.572
2021-11-22 13:00	-0.37	2.7	3.78	2.78	257.3	0	973.6	-9.6	88.5	8.783
2021-11-23 9:00		3.15	3.6	1.57	219.9	0	985.7	-9.2	95.7	9.163
2021-11-23 10:00		3.06	3.555	1.96	210.8	0	985.9	-9.2	96	8.491
2021-11-23 11:00		2.88	3.285	1.28	197.9	0	985.3	-8.6	95.3	10.524
2021-11-23 12:00		3.15	3.555	1.34	195.4	0	984.3	-8	95.4	13.899
2021-11-23 13:00		3.105	3.465	1.23	207.3	0	983.9	-7	93.5	14.056
2021-11-23 14:00		3.195	3.555	1.46	194.6	0	983.8	-6.6	92.8	13.387
2021-11-23 15:00		3.555	3.915	1.43	185	0	983.6	-6.7	93.7	10.33
2021-11-24 10:00		8.775	9.585							10.599
2021-11-24 11:00		9.09	10.08							13.975
2021-11-24 12:00		8.955	9.9							11.155
2021-11-24 13:00		9.09	10.035							10.155
2021-11-24 14:00		9.315	10.305							12.694
2021-11-26 14:00		10.98	11.475							11.124
2021-11-27 9:00		5.58	5.94							10.608
2021-11-27 10:00		5.94	6.165							14.021
2021-11-27 11:00		3.375	3.51							14.055
2021-11-27 12:00		2.43	2.52							13.362
2021-11-27 13:00		2.07	2.16							13.359
2021-11-27 14:00		1.89	1.98							13.357
2021-11-27 15:00		1.665	1.755							12.004
2021-11-27 16:00		1.575	1.71							8.064
2021-11-28 9:00		3.555	3.735							9.834
2021-11-28 10:00		3.465	3.69							12.965
2021-11-28 11:00		3.42	3.645							14.061
2021-11-28 12:00		3.105	3.33							13.607
2021-11-28 13:00		2.79	3.015							13.351
2021-11-28 14:00		2.385	2.52							11.572
2021-11-28 15:00		2.295	2.43							8.196
2021-12-03 11:00		1.44	1.62							13.829

2021-12-03 12:00	1.17	1.35	13.961
2021-12-03 13:00	1.17	1.305	13.674
2021-12-03 14:00	1.125	1.26	13.331
2021-12-03 15:00	1.035	1.17	9.697
2021-12-04 9:00	1.935	2.07	9.576
2021-12-04 10:00	2.25	2.385	10.507
2021-12-04 11:00	2.115	2.25	13.927
2021-12-04 12:00	2.07	2.25	13.939
2021-12-04 13:00	2.16	2.43	13.402
2021-12-04 14:00	2.025	2.295	10.604
2021-12-05 8:00	1.395	1.44	10.227
2021-12-05 9:00	1.26	1.305	12.456
2021-12-05 10:00	1.35	1.395	13.912
2021-12-05 11:00	1.26	1.395	13.666
2021-12-05 12:00	1.215	1.35	13.337
2021-12-05 13:00	1.395	1.485	13.341
2021-12-05 14:00	1.71	1.845	11.14
2021-12-07 10:00	1.215	1.26	10.078
2021-12-07 11:00	1.215	1.35	12.904
2021-12-07 12:00	1.26	1.44	14.054
2021-12-07 13:00	1.26	1.44	13.609
2021-12-07 14:00	1.17	1.35	13.353
2021-12-07 15:00	1.125	1.26	11.793
2021-12-08 12:00	1.62	1.845	11.648
2021-12-08 13:00	1.485	1.62	10.556
2021-12-09 11:00	1.755	1.935	12.064
2021-12-09 12:00	1.62	1.71	12.87
2021-12-09 13:00	1.98	2.115	12.859
2021-12-09 14:00	1.665	1.755	10.79
2021-12-10 11:00	7.155	7.47	13.756
2021-12-10 12:00	6.3	6.705	14.055
2021-12-10 13:00	4.59	4.815	13.51
2021-12-10 14:00	3.42	3.6	13.357
2021-12-10 15:00	3.06	3.24	12.696
2021-12-10 16:00	2.88	3.015	8.58
2021-12-12 14:00	3.06	3.87	10.505
2021-12-12 15:00	2.835	3.33	10.753
2021-12-12 16:00	2.7	3.285	10.497
2021-12-12 17:00	2.655	3.33	9.5
2021-12-13 10:00	5.22	6.03	9.523
2021-12-13 11:00	5.76	6.84	11.084
2021-12-13 12:00	6.165	7.515	11.59
2021-12-13 13:00	5.985	7.11	11.528
2021-12-13 14:00	5.49	6.48	11.321
2021-12-13 15:00	4.545	5.535	11.022
2021-12-13 16:00	3.69	4.32	10.585
2021-12-13 17:00	2.745	3.15	9.742
2021-12-14 10:00	2.385	2.565	12.162
2021-12-14 11:00	2.34	2.565	14.026
2021-12-14 12:00	2.25	2.475	13.78
2021-12-14 13:00	2.52	2.7	13.357
2021-12-14 14:00	2.475	2.7	13.306
2021-12-14 15:00	2.925	3.15	10.893
2021-12-14 16:00	3.105	3.42	8.235
2021-12-15 11:00	2.385	2.88	10.277
2021-12-15 12:00	2.61	3.24	10.545
2021-12-15 13:00	2.565	3.06	10.276
2021-12-15 14:00	2.34	2.565	9.314
2021-12-17 11:00	11.655	12.375	12.511
2021-12-17 12:00	14.085	15.435	10.583
2021-12-18 12:00	1.845	2.07	8.117
2021-12-19 9:00	1.44	1.53	12.859
2021-12-19 10:00	1.44	1.53	14.045
2021-12-19 11:00	1.395	1.44	13.671
2021-12-19 12:00	1.395	1.44	13.283
2021-12-19 13:00	1.44	1.53	13.359
2021-12-19 14:00	1.575	1.71	13.333
2021-12-19 15:00	2.295	2.61	11.712
2021-12-20 13:00	6.885	7.335	11.304
2021-12-20 14:00	7.335	7.875	9.686
2021-12-21 8:00	2.115	3.06	8.336
2021-12-21 9:00	1.755	1.89	12.885
2021-12-21 10:00	1.62	1.755	14.048
2021-12-21 11:00	1.44	1.53	13.526
2021-12-21 12:00	1.53	1.62	13.139
2021-12-21 13:00	1.845	1.98	10.138
2021-12-21 14:00	1.845	1.98	9.89
2021-12-22 12:00	1.26	1.485	11.169
2021-12-22 13:00	1.485	1.665	8.787
2021-12-26 9:00	2.025	2.25	10.764
2021-12-26 10:00	2.16	2.295	13.86
2021-12-26 11:00	2.07	2.25	14.056
2021-12-26 12:00	2.025	2.25	13.402
2021-12-26 13:00	2.025	2.34	13.36
2021-12-26 14:00	2.115	2.43	13.357
2021-12-26 15:00	2.205	2.52	13.356
2021-12-26 16:00	2.16	2.475	11.27
2021-12-27 10:00	1.98	2.25	9.386
2021-12-27 11:00	2.07	2.25	13.13
2021-12-27 12:00	2.16	2.43	14.05

2021-12-27 13:00	2.7	2.925	12.203
2021-12-27 14:00	3.195	3.465	8.557
2021-12-28 9:00	1.485	1.665	9.559
2021-12-28 10:00	1.53	1.575	10.439
2021-12-28 11:00	1.575	1.71	12.286
2021-12-28 12:00	1.62	1.755	9.489
2021-12-28 13:00	1.575	1.8	13.69
2021-12-28 14:00	1.575	1.755	13.878
2021-12-28 15:00	1.53	1.71	10.945
2021-12-29 10:00	4.14	4.32	9.917
2021-12-29 11:00	4.365	4.5	13.243
2021-12-29 12:00	3.735	3.87	12.794
2021-12-29 13:00	3.24	3.375	8.319
2022-01-01 12:00	6.03	6.255	8.266
2022-01-02 12:00	4.05	4.095	10.517
2022-01-02 13:00	4.14	4.23	10.621
2022-01-03 10:00	2.52	2.61	9.132
2022-01-03 11:00	2.565	2.7	8.203
2022-01-03 12:00	2.34	2.475	8.706
2022-01-06 11:00	7.155	8.775	10.283
2022-01-06 12:00	7.29	7.515	11.213
2022-01-06 13:00	7.11	7.515	10.222
2022-01-06 14:00	7.38	7.74	9.262
2022-01-07 10:00	5.58	5.67	10.422
2022-01-07 11:00	4.995	5.085	14.055
2022-01-07 12:00	4.14	4.275	14.055
2022-01-07 13:00	3.51	3.69	13.345
2022-01-07 14:00	2.97	3.105	13.306
2022-01-07 15:00	2.835	3.015	12.234
2022-01-07 16:00	2.835	3.015	8.38
2022-01-08 10:00	2.205	3.645	10.248
2022-01-10 16:00	19.575	21.015	12.246
2022-01-10 17:00	17.37	18.18	12.229
2022-01-10 18:00	16.92	17.505	12.189
2022-01-10 19:00	15.705	16.11	12.142
2022-01-10 20:00	14.94	15.39	12.093
2022-01-10 21:00	14.94	15.345	12.046
2022-01-10 22:00	14.265	14.67	12.002
2022-01-10 23:00	13.185	13.59	11.957
2022-01-11 0:00	12.6	12.96	11.916
2022-01-11 1:00	12.465	12.825	11.877
2022-01-11 2:00	11.97	12.42	11.842
2022-01-11 3:00	12.15	12.6	11.809
2022-01-11 4:00	12.15	12.555	11.78
2022-01-11 5:00	13.095	13.545	11.758
2022-01-11 6:00	13.455	13.95	11.736
2022-01-11 7:00	13.86	14.355	11.711
2022-01-11 8:00	15.705	16.2	11.696
2022-01-11 9:00	16.74	17.325	11.698
2022-01-11 10:00	18.36	18.945	11.704
2022-01-11 11:00	19.26	19.89	11.701
2022-01-11 12:00	17.055	17.595	11.713
2022-01-11 13:00	14.445	14.895	12.014
2022-01-11 14:00	13.77	14.445	11.689
2022-01-11 15:00	13.59	15.03	11.813
2022-01-11 16:00	13.005	14.445	12.151
2022-01-11 17:00	12.825	14.895	12.123
2022-01-11 18:00	12.15	14.355	12.097
2022-01-11 19:00	11.205	12.42	12.074
2022-01-11 20:00	10.575	11.115	12.052
2022-01-11 21:00	11.79	12.555	12.026
2022-01-11 22:00	11.88	12.735	12.007
2022-01-11 23:00	11.835	12.6	11.988
2022-01-12 0:00	12.195	13.275	11.97
2022-01-12 1:00	14.04	15.3	11.955
2022-01-12 2:00	13.005	13.995	11.946
2022-01-12 3:00	12.285	12.915	11.925
2022-01-12 4:00	7.965	8.82	11.917
2022-01-12 5:00	7.605	8.64	11.915
2022-01-12 6:00	7.245	7.785	11.901
2022-01-12 7:00	6.255	6.57	11.882
2022-01-12 8:00	5.535	5.85	11.874
2022-01-12 9:00	5.175	5.445	11.881
2022-01-12 10:00	4.59	4.905	11.922
2022-01-12 11:00	4.275	4.5	12.001
2022-01-12 12:00	3.69	3.825	12.47
2022-01-12 13:00	3.15	3.24	13.097
2022-01-12 14:00	2.925	3.195	14.073
2022-01-12 15:00	2.97	3.105	13.21
2022-01-12 16:00	3.06	3.15	12.461
2022-01-12 17:00	3.015	3.15	12.281
2022-01-12 18:00	2.7	2.745	12.152
2022-01-12 19:00	2.7	2.79	12.052
2022-01-12 20:00	2.115	2.16	11.922
2022-01-12 21:00	1.845	1.89	11.834
2022-01-12 22:00	1.8	1.89	11.789
2022-01-12 23:00	1.485	1.62	11.758
2022-01-13 0:00	2.43	2.655	11.735
2022-01-13 1:00	4.815	5.445	11.71
2022-01-13 2:00	7.065	7.515	11.7

2022-01-13 3:00	5.895	6.21	11.68
2022-01-13 4:00	4.275	4.41	11.674
2022-01-13 5:00	3.87	3.96	11.677
2022-01-13 6:00	3.78	3.87	11.679
2022-01-13 7:00	3.96	4.095	11.681
2022-01-13 8:00	3.825	3.96	11.7
2022-01-13 9:00	3.96	4.095	11.831
2022-01-13 10:00	3.96	4.14	11.881
2022-01-13 11:00	3.825	4.095	11.842
2022-01-13 12:00	3.555	3.69	11.8
2022-01-13 13:00	3.69	3.915	11.766
2022-01-13 14:00	4.05	4.41	11.751
2022-01-13 15:00	4.14	4.59	11.743
2022-01-13 16:00	4.635	5.04	12.266
2022-01-13 17:00	5.895	6.3	12.414
2022-01-13 18:00	7.245	7.83	12.371
2022-01-13 19:00	7.155	7.875	12.324
2022-01-13 20:00	7.02	7.47	12.281
2022-01-13 21:00	7.65	7.965	12.235
2022-01-13 22:00	9.225	9.495	12.192
2022-01-13 23:00	10.62	10.98	12.148
2022-01-14 0:00	11.52	11.88	12.107
2022-01-14 1:00	11.205	11.565	12.065
2022-01-14 2:00	11.205	11.565	12.023
2022-01-14 3:00	10.8	11.115	11.981
2022-01-14 4:00	11.295	11.655	11.941
2022-01-14 5:00	11.52	11.97	11.906
2022-01-14 6:00	11.745	12.465	11.869
2022-01-14 7:00	9.945	10.215	11.834
2022-01-14 8:00	9.855	11.34	11.953
2022-01-14 9:00	10.575	11.655	13.972
2022-01-14 10:00	11.655	11.97	14.572
2022-01-14 11:00	11.43	11.7	14.578
2022-01-14 12:00	12.375	12.735	14.592
2022-01-14 13:00	13.095	13.455	13.931
2022-01-14 14:00	13.41	13.815	13.671
2022-01-14 15:00	13.23	13.635	13.658
2022-01-14 16:00	12.285	12.6	13.226
2022-01-14 17:00	11.385	11.7	12.395
2022-01-14 18:00	9.765	10.035	12.295
2022-01-14 19:00	8.685	8.91	12.209
2022-01-14 20:00	8.505	8.73	12.131
2022-01-14 21:00	7.65	7.83	12.05
2022-01-14 22:00	8.01	8.28	11.958
2022-01-14 23:00	6.48	6.705	11.85
2022-01-15 0:00	6.435	7.83	11.785
2022-01-15 1:00	6.435	12.33	11.746
2022-01-15 2:00	5.22	7.965	11.709
2022-01-15 3:00	4.365	4.995	11.677
2022-01-15 4:00	3.825	9.945	11.64
2022-01-15 5:00	3.915	7.875	11.589
2022-01-15 6:00	3.6	14.625	11.515
2022-01-15 7:00	3.735	10.71	11.457
2022-01-15 8:00	3.465	7.605	11.75
2022-01-15 9:00	6.57	6.93	14.394
2022-01-15 10:00	10.26	10.575	14.578
2022-01-15 11:00	10.98	11.25	14.583
2022-01-15 12:00	11.925	12.24	14.593
2022-01-15 13:00	11.52	11.79	14.591
2022-01-15 14:00	10.08	10.305	14.589
2022-01-15 15:00	9.72	9.99	13.927
2022-01-15 16:00	9.315	9.585	12.895
2022-01-15 17:00	9.225	9.45	12.418
2022-01-15 18:00	9.045	9.315	12.329
2022-01-15 19:00	8.325	8.505	12.262
2022-01-15 20:00	7.11	7.38	12.21
2022-01-15 21:00	6.435	6.705	12.156
2022-01-15 22:00	5.85	6.075	12.107
2022-01-15 23:00	5.625	5.85	12.062
2022-01-16 0:00	5.265	5.58	12.015
2022-01-16 1:00	4.905	5.22	11.964
2022-01-16 2:00	5.355	5.94	11.9
2022-01-16 3:00	5.445	5.895	11.814
2022-01-16 4:00	5.49	5.76	11.751
2022-01-16 5:00	5.49	5.715	11.709
2022-01-16 6:00	5.355	5.58	11.672
2022-01-16 7:00	5.04	5.175	11.633
2022-01-16 8:00	4.815	4.95	11.626
2022-01-16 9:00	4.365	4.59	11.713
2022-01-16 10:00	3.96	4.14	12.033
2022-01-16 11:00	3.735	3.915	12.469
2022-01-16 12:00	3.51	3.825	12.552
2022-01-16 13:00	3.195	3.42	12.403
2022-01-16 14:00	3.15	3.375	12.223
2022-01-16 15:00	3.33	3.465	11.993
2022-01-16 16:00	3.6	3.825	11.772
2022-01-16 17:00	3.915	4.185	12.155
2022-01-16 18:00	4.86	5.49	12.343
2022-01-16 19:00	5.445	5.985	12.303
2022-01-16 20:00	5.535	6.165	12.274

2022-01-16 21:00	5.58	5.94	12.251
2022-01-16 22:00	5.13	5.535	12.225
2022-01-16 23:00	4.41	4.725	12.202
2022-01-17 0:00	3.825	4.14	12.18
2022-01-17 1:00	3.285	3.6	12.158
2022-01-17 2:00	3.15	3.33	12.132
2022-01-17 3:00	3.06	3.33	12.115
2022-01-17 4:00	3.06	3.285	12.091
2022-01-17 5:00	3.015	3.195	12.071
2022-01-17 6:00	3.105	3.33	12.057
2022-01-17 7:00	5.13	5.4	12.036
2022-01-17 8:00	4.005	4.32	12.022
2022-01-17 9:00	3.195	3.42	12.026
2022-01-17 10:00	4.005	4.32	12.057
2022-01-17 11:00	5.49	5.805	12.052
2022-01-17 12:00	4.815	5.175	12.092
2022-01-17 13:00	3.285	3.42	12.102
2022-01-17 14:00	2.79	3.06	12.034
2022-01-17 15:00	3.51	3.645	12.009
2022-01-17 16:00	4.365	4.545	12.256
2022-01-17 17:00	5.13	5.265	12.299
2022-01-17 18:00	4.995	5.085	12.254
2022-01-17 19:00	4.455	4.545	12.216
2022-01-17 20:00	3.69	3.825	12.179
2022-01-17 21:00	4.455	4.59	12.146
2022-01-17 22:00	5.13	5.265	12.115
2022-01-17 23:00	5.13	5.22	12.083
2022-01-18 0:00	5.265	5.4	12.051
2022-01-18 1:00	5.58	5.67	12.021
2022-01-18 2:00	6.21	6.345	11.99
2022-01-18 3:00	8.235	8.46	11.958
2022-01-18 4:00	9.135	9.36	11.927
2022-01-18 5:00	9.135	9.315	11.9
2022-01-18 6:00	8.865	9.045	11.87
2022-01-18 7:00	8.28	8.46	11.836
2022-01-18 8:00	7.74	8.01	12.106
2022-01-18 9:00	8.01	8.235	14.48
2022-01-18 10:00	9.315	9.54	14.581
2022-01-18 11:00	10.125	10.395	14.583
2022-01-18 12:00	10.98	11.34	14.587
2022-01-18 13:00	12.195	12.6	13.794
2022-01-18 14:00	13.23	13.635	13.676
2022-01-18 15:00	12.915	13.275	13.567
2022-01-18 16:00	12.87	13.365	12.548
2022-01-18 17:00	12.555	13.185	12.303
2022-01-18 18:00	12.87	13.275	12.228
2022-01-18 19:00	13.725	14.22	12.163
2022-01-18 20:00	13.905	14.31	12.097
2022-01-18 21:00	14.535	15.075	12.014
2022-01-18 22:00	14.4	15.39	11.922
2022-01-18 23:00	14.22	15.84	11.878
2022-01-19 0:00	14.67	16.425	11.856
2022-01-19 1:00	14.715	16.2	11.845
2022-01-19 2:00	13.32	14.445	11.831
2022-01-19 3:00	11.565	12.69	11.815
2022-01-19 4:00	10.935	11.79	11.806
2022-01-19 5:00	11.07	11.7	11.789
2022-01-19 6:00	11.43	12.15	11.778
2022-01-19 7:00	10.8	11.385	11.773
2022-01-19 8:00	10.215	10.845	11.763
2022-01-19 9:00	9.765	10.485	11.769
2022-01-19 10:00	9.09	10.17	12.306
2022-01-19 11:00	10.26	11.52	13.819
2022-01-19 12:00	10.89	12.06	13.652
2022-01-19 13:00	10.305	11.61	13.653
2022-01-19 14:00	9.945	10.89	13.652
2022-01-19 15:00	10.08	10.935	13.595
2022-01-19 16:00	8.865	9.585	12.582
2022-01-19 17:00	7.155	7.56	12.344
2022-01-19 18:00	6.57	6.93	12.328
2022-01-19 19:00	6.435	6.57	12.306
2022-01-19 20:00	6.03	6.21	12.284
2022-01-19 21:00	5.4	5.535	12.264
2022-01-19 22:00	4.95	5.13	12.235
2022-01-19 23:00	4.905	5.04	12.21
2022-01-20 0:00	4.77	4.86	12.185
2022-01-20 1:00	4.77	4.905	12.16
2022-01-20 2:00	5.22	5.31	12.133
2022-01-20 3:00	4.545	4.635	12.11
2022-01-20 4:00	4.545	4.68	12.088
2022-01-20 5:00	4.725	4.815	12.059
2022-01-20 6:00	4.725	4.86	12.033
2022-01-20 7:00	4.68	4.86	12.01
2022-01-20 8:00	4.59	4.725	12.324
2022-01-20 9:00	4.815	5.04	14.512
2022-01-20 10:00	5.49	5.715	14.583
2022-01-20 11:00	5.94	6.21	14.584
2022-01-20 12:00	5.94	6.21	14.585
2022-01-20 13:00	5.985	6.255	13.775
2022-01-20 14:00	5.76	6.075	13.66

2022-01-20 15:00	5.13	5.355	13.655
2022-01-20 16:00	4.815	4.995	13.498
2022-01-20 17:00	4.41	4.545	12.523
2022-01-20 18:00	4.14	4.275	12.423
2022-01-20 19:00	3.87	4.005	12.35
2022-01-20 20:00	3.645	3.735	12.281
2022-01-20 21:00	3.51	3.555	12.205
2022-01-20 22:00	3.375	3.51	12.12
2022-01-20 23:00	3.51	3.69	12.045
2022-01-21 0:00	3.375	3.51	12.014
2022-01-21 1:00	2.97	3.105	11.989
2022-01-21 2:00	2.79	2.88	11.967
2022-01-21 3:00	2.97	3.105	11.948
2022-01-21 4:00	2.97	3.06	11.924
2022-01-21 5:00	3.465	3.51	11.909
2022-01-21 6:00	3.42	3.645	11.887
2022-01-21 7:00	3.105	3.42	11.878
2022-01-21 8:00	2.34	2.565	11.887
2022-01-21 9:00	2.34	2.43	12.173
2022-01-21 10:00	2.205	2.25	13.72
2022-01-21 11:00	1.71	1.8	14.17
2022-01-21 12:00	1.53	1.755	14.45
2022-01-21 13:00	1.71	2.52	14.582
2022-01-21 14:00	1.71	2.43	14.602
2022-01-21 15:00	1.71	2.34	14.438
2022-01-21 16:00	1.35	1.845	13.655
2022-01-21 17:00	1.215	1.575	12.619
2022-01-21 18:00	1.215	1.44	12.539
2022-01-21 19:00	1.305	1.53	12.485
2022-01-21 20:00	1.35	1.8	12.444
2022-01-21 21:00	1.395	1.98	12.407
2022-01-21 22:00	1.53	2.115	12.372
2022-01-21 23:00	1.89	2.61	12.338
2022-01-22 0:00	2.295	3.15	12.306
2022-01-22 1:00	2.88	4.23	12.27
2022-01-22 2:00	3.375	4.14	12.238
2022-01-22 3:00	4.185	4.905	12.2
2022-01-22 4:00	4.995	5.76	12.159
2022-01-22 5:00	6.57	9.045	12.115
2022-01-22 6:00	6.66	8.01	12.077
2022-01-22 7:00	7.29	8.235	12.054
2022-01-22 8:00	7.875	8.775	12.031
2022-01-22 9:00	8.325	9.18	12.048
2022-01-22 10:00	8.685	9.63	12.112
2022-01-22 11:00	8.775	9.765	12.161
2022-01-22 12:00	8.415	9.45	12.309
2022-01-22 13:00	8.28	9.09	12.511
2022-01-22 14:00	8.37	9.135	12.509
2022-01-22 15:00	7.875	8.595	12.174
2022-01-22 16:00	6.795	8.55	12.029
2022-01-22 17:00	8.64	10.08	11.998
2022-01-22 18:00	8.64	9.855	11.977
2022-01-22 19:00	7.38	8.595	11.953
2022-01-22 20:00	5.85	6.885	11.927
2022-01-22 21:00	4.275	4.86	11.905
2022-01-22 22:00	3.735	4.185	11.88
2022-01-22 23:00	3.465	3.78	11.854
2022-01-23 0:00	2.79	3.06	11.829
2022-01-23 1:00	2.7	2.925	11.806
2022-01-23 2:00	2.655	2.835	11.777
2022-01-23 3:00	2.475	2.7	11.752
2022-01-23 4:00	2.385	2.565	11.728
2022-01-23 5:00	2.295	2.52	11.703
2022-01-23 6:00	2.16	2.34	11.675
2022-01-23 7:00	2.115	2.34	11.651
2022-01-23 8:00	1.98	2.205	11.695
2022-01-23 9:00	2.07	2.205	12.599
2022-01-23 10:00	2.295	2.43	13.472
2022-01-23 11:00	2.52	2.61	13.703
2022-01-23 12:00	2.565	2.745	14.28
2022-01-23 13:00	2.79	2.925	14.557
2022-01-23 14:00	3.24	3.465	14.526
2022-01-23 15:00	3.78	3.96	14.121
2022-01-23 16:00	4.05	4.23	13.668
2022-01-23 17:00	3.87	4.005	12.56
2022-01-23 18:00	3.6	3.735	12.471
2022-01-23 19:00	3.285	3.42	12.412
2022-01-23 20:00	3.15	3.285	12.362
2022-01-23 21:00	3.42	3.555	12.315
2022-01-23 22:00	3.51	3.6	12.271
2022-01-23 23:00	3.465	3.555	12.233
2022-01-24 0:00	3.42	3.555	12.196
2022-01-24 1:00	3.465	3.645	12.164
2022-01-24 2:00	3.42	3.69	12.13
2022-01-24 3:00	3.285	3.42	12.099
2022-01-24 4:00	3.42	3.51	12.073
2022-01-24 5:00	3.465	3.645	12.046
2022-01-24 6:00	3.375	3.465	12.018
2022-01-24 7:00	3.69	3.78	11.988
2022-01-24 8:00	3.555	3.69	12.015

2022-01-24 9:00	3.555	3.645	12.376
2022-01-24 10:00	3.78	3.915	12.7
2022-01-24 11:00	3.96	4.14	14.331
2022-01-24 12:00	4.275	4.41	14.646
2022-01-24 13:00	4.455	4.635	14.632
2022-01-24 14:00	4.5	4.68	14.615
2022-01-24 15:00	4.5	4.68	13.811
2022-01-24 16:00	4.545	4.725	13.432
2022-01-24 17:00	4.545	4.725	12.547
2022-01-24 18:00	4.545	4.68	12.462
2022-01-24 19:00	4.68	4.815	12.401
2022-01-24 20:00	4.545	4.635	12.352
2022-01-24 21:00	4.59	4.68	12.299
2022-01-24 22:00	4.59	4.68	12.254
2022-01-24 23:00	4.5	4.59	12.21
2022-01-25 0:00	4.095	4.185	12.166
2022-01-25 1:00	4.365	4.5	12.119
2022-01-25 2:00	4.68	4.815	12.074
2022-01-25 3:00	5.175	5.31	12.031
2022-01-25 4:00	4.905	4.995	11.988
2022-01-25 5:00	4.275	4.41	11.952
2022-01-25 6:00	3.915	4.05	11.92
2022-01-25 7:00	4.59	4.905	11.885
2022-01-25 8:00	4.815	5.31	12.166
2022-01-25 9:00	5.445	5.67	13.775
2022-01-25 10:00	6.84	7.02	14.622
2022-01-25 11:00	7.245	7.47	14.607
2022-01-25 12:00	7.335	7.56	14.599
2022-01-25 13:00	6.975	7.2	14.178
2022-01-25 14:00	6.84	7.065	13.676
2022-01-25 15:00	6.885	7.2	13.677
2022-01-25 16:00	6.84	7.065	13.479
2022-01-25 17:00	6.615	6.84	12.493
2022-01-25 18:00	6.075	6.3	12.399
2022-01-25 19:00	5.67	5.85	12.332
2022-01-25 20:00	5.31	5.49	12.272
2022-01-25 21:00	4.455	4.635	12.216
2022-01-25 22:00	3.78	4.14	12.157
2022-01-25 23:00	3.42	3.69	12.103
2022-01-26 0:00	3.24	6.435	12.042
2022-01-26 1:00	3.51	13.59	11.988
2022-01-26 2:00	6.525	59.355	11.932
2022-01-26 3:00	3.15	10.035	11.88
2022-01-26 4:00	4.815	21.51	11.837
2022-01-26 5:00	5.49	7.65	11.804
2022-01-26 6:00	8.145	8.685	11.778
2022-01-26 7:00	8.73	9	11.753
2022-01-26 8:00	7.65	7.965	12.214
2022-01-26 9:00	7.02	7.515	14.383
2022-01-26 10:00	6.21	6.435	14.613
2022-01-26 11:00	5.76	5.985	14.599
2022-01-26 12:00	5.67	5.94	14.596
2022-01-26 13:00	4.68	4.95	13.955
2022-01-26 14:00	3.825	4.275	13.669
2022-01-26 15:00	2.88	3.375	13.586
2022-01-26 16:00	2.25	2.7	13.365
2022-01-26 17:00	1.575	1.935	12.494
2022-01-26 18:00	1.665	2.07	12.401
2022-01-26 19:00	2.07	3.15	12.349
2022-01-26 20:00	2.385	3.735	12.297
2022-01-26 21:00	2.52	3.915	12.256
2022-01-26 22:00	2.565	3.6	12.22
2022-01-26 23:00	2.79	3.735	12.18
2022-01-27 0:00	3.195	4.005	12.146
2022-01-27 1:00	3.69	4.32	12.113
2022-01-27 2:00	3.96	4.59	12.077
2022-01-27 3:00	4.635	5.715	12.042
2022-01-27 4:00	5.58	7.29	12.003
2022-01-27 5:00	6.66	8.73	11.98
2022-01-27 6:00	7.11	8.685	11.958
2022-01-27 7:00	7.56	9.09	11.939
2022-01-27 8:00	7.56	8.775	11.921
2022-01-27 9:00	8.1	9.27	11.917
2022-01-27 10:00	7.11	8.64	11.908
2022-01-27 11:00	4.365	5.67	11.983
2022-01-27 12:00	4.14	5.13	12.219
2022-01-27 13:00	4.41	5.175	12.697
2022-01-27 14:00	4.68	5.13	13.169
2022-01-27 15:00	6.57	7.29	12.83
2022-01-27 16:00	8.46	8.955	12.59
2022-01-27 17:00	8.28	8.685	12.272
2022-01-27 18:00	7.56	7.965	12.164
2022-01-27 19:00	7.065	7.38	12.078
2022-01-27 20:00	6.255	6.615	11.994
2022-01-27 21:00	5.625	5.985	11.914
2022-01-27 22:00	5.13	5.4	11.855
2022-01-27 23:00	5.22	5.49	11.809
2022-01-28 0:00	4.905	5.175	11.77
2022-01-28 1:00	4.5	4.725	11.73
2022-01-28 2:00	4.365	4.59	11.692

2022-01-28 3:00	4.365	4.545	11.658
2022-01-28 4:00	4.275	4.455	11.625
2022-01-28 5:00	4.005	4.185	11.593
2022-01-28 6:00	3.555	3.735	11.567
2022-01-28 7:00	3.33	3.555	11.561
2022-01-28 8:00	3.51	3.735	12.039
2022-01-28 9:00	3.825	4.005	13.901
2022-01-28 10:00	4.545	4.86	14.697
2022-01-28 11:00	5.4	5.715	14.691
2022-01-28 12:00	5.265	5.625	14.671
2022-01-28 13:00	5.31	5.58	14.652
2022-01-28 14:00	5.49	5.805	14.634
2022-01-28 15:00	5.31	5.625	14.552
2022-01-28 16:00	5.04	5.31	13.271
2022-01-28 17:00	5.31	5.625	12.521
2022-01-28 18:00	6.075	6.48	12.455
2022-01-28 19:00	6.03	6.345	12.402
2022-01-28 20:00	5.85	6.255	12.36
2022-01-28 21:00	5.22	5.58	12.32
2022-01-28 22:00	5.04	5.355	12.284
2022-01-28 23:00	4.995	5.265	12.251
2022-01-29 0:00	4.95	5.175	12.219
2022-01-29 1:00	4.905	5.175	12.188
2022-01-29 2:00	4.59	4.905	12.159
2022-01-29 3:00	4.05	4.23	12.13
2022-01-29 4:00	3.96	4.185	12.105
2022-01-29 5:00	3.915	4.14	12.081
2022-01-29 6:00	3.645	3.825	12.055
2022-01-29 7:00	3.465	3.645	12.029
2022-01-29 8:00	3.375	3.555	12.031
2022-01-29 9:00	3.285	3.465	12.099
2022-01-29 10:00	3.105	3.285	12.182
2022-01-29 11:00	3.06	3.24	12.358
2022-01-29 12:00	3.06	3.285	12.434
2022-01-29 13:00	2.925	3.15	12.683
2022-01-29 14:00	2.7	2.88	13.031
2022-01-29 15:00	2.475	2.745	13.925
2022-01-29 16:00	2.385	2.655	12.88
2022-01-29 17:00	2.385	2.61	12.425
2022-01-29 18:00	2.25	2.385	12.336
2022-01-29 19:00	2.34	2.475	12.267
2022-01-29 20:00	2.52	2.7	12.207
2022-01-29 21:00	2.79	2.925	12.146
2022-01-29 22:00	2.745	2.88	12.099
2022-01-29 23:00	2.655	2.79	12.065
2022-01-30 0:00	2.565	2.88	12.034
2022-01-30 1:00	2.52	2.745	12.015
2022-01-30 2:00	2.565	2.79	11.988
2022-01-30 3:00	2.7	2.88	11.966
2022-01-30 4:00	2.7	2.88	11.944
2022-01-30 5:00	2.88	3.015	11.92
2022-01-30 6:00	3.06	3.195	11.896
2022-01-30 7:00	3.6	3.78	11.875
2022-01-30 8:00	4.05	4.275	11.895
2022-01-30 9:00	4.185	4.365	12.428
2022-01-30 10:00	4.275	4.455	13.179
2022-01-30 11:00	4.32	4.5	13.711
2022-01-30 12:00	4.41	4.59	14.078
2022-01-30 13:00	4.5	4.68	14.303
2022-01-30 14:00	4.77	4.95	14.279
2022-01-30 15:00	4.635	4.86	13.402
2022-01-30 16:00	3.96	4.05	12.848
2022-01-30 17:00	4.005	4.095	12.502
2022-01-30 18:00	3.915	4.05	12.441
2022-01-30 19:00	4.41	4.59	12.394
2022-01-30 20:00	4.59	4.77	12.35
2022-01-30 21:00	4.68	4.815	12.307
2022-01-30 22:00	4.77	4.905	12.263
2022-01-30 23:00	3.915	4.05	12.225
2022-01-31 0:00	3.825	3.915	12.184
2022-01-31 1:00	4.275	4.41	12.145
2022-01-31 2:00	3.825	3.96	12.109
2022-01-31 3:00	3.465	3.51	12.075
2022-01-31 4:00	2.61	2.7	12.039
2022-01-31 5:00	2.34	2.43	12.001
2022-01-31 6:00	2.7	2.835	11.967
2022-01-31 7:00	4.23	4.725	11.932
2022-01-31 8:00	4.68	5.13	11.947
2022-01-31 9:00	6.57	7.335	12.3
2022-01-31 10:00	6.075	6.345	14.03
2022-01-31 11:00	5.985	6.885	14.637
2022-01-31 12:00	5.445	5.85	14.616
2022-01-31 13:00	5.175	5.58	14.596
2022-01-31 14:00	4.725	5.445	14.048
2022-01-31 15:00	4.275	5.22	13.673
2022-01-31 16:00	4.32	4.995	13.072
2022-01-31 17:00	3.87	4.185	12.486
2022-01-31 18:00	3.15	3.375	12.419
2022-01-31 19:00	3.24	3.96	12.366
2022-01-31 20:00	4.23	5.31	12.322

2022-01-31 21:00	4.365	4.77	12.278
2022-01-31 22:00	4.455	4.68	12.235
2022-01-31 23:00	4.23	4.5	12.194
2022-02-01 0:00	3.825	4.095	12.155
2022-02-01 1:00	3.645	3.87	12.117
2022-02-01 2:00	3.645	3.915	12.079
2022-02-01 3:00	5.76	6.12	12.041
2022-02-01 4:00	9.09	9.495	12.018
2022-02-01 5:00	12.285	12.735	11.993
2022-02-01 6:00	15.57	16.155	11.979
2022-02-01 7:00	12.645	13.23	11.959
2022-02-01 8:00	12.825	13.59	11.965
2022-02-01 9:00	12.96	13.815	12.023
2022-02-01 10:00	12.645	13.86	12.229
2022-02-01 11:00	12.87	14.265	12.302
2022-02-01 12:00	13.725	14.805	12.922
2022-02-01 13:00	17.325	18.9	12.652
2022-02-01 14:00	18.81	19.935	12.375
2022-02-01 15:00	18.99	20.07	12.233
2022-02-01 16:00	22.77	24.39	12.128
2022-02-01 17:00	24.615	25.83	12.046
2022-02-01 18:00	25.47	26.73	12.001
2022-02-01 19:00	28.215	29.385	11.973
2022-02-01 20:00	31.68	32.895	11.952
2022-02-01 21:00	32.535	33.93	11.933
2022-02-01 22:00	29.925	31.23	11.919
2022-02-01 23:00	24.615	25.785	11.902
2022-02-02 0:00	13.815	15.39	11.885
2022-02-02 1:00	9.54	11.205	11.869
2022-02-02 2:00	5.535	6.795	11.849
2022-02-02 3:00	4.23	5.175	11.827
2022-02-02 4:00	5.76	6.975	11.807
2022-02-02 5:00	6.66	7.425	11.78
2022-02-02 6:00	5.4	6.255	11.759
2022-02-02 7:00	5.265	6.48	11.736
2022-02-02 8:00	5.085	5.985	11.737
2022-02-02 9:00	5.13	6.075	11.803
2022-02-02 10:00	5.31	5.94	12.175
2022-02-02 11:00	5.31	5.94	12.683
2022-02-02 12:00	5.445	5.985	12.901
2022-02-02 13:00	5.445	5.895	13.053
2022-02-02 14:00	5.535	5.985	12.978
2022-02-02 15:00	5.76	6.3	12.889
2022-02-02 16:00	5.67	6.075	12.702
2022-02-02 17:00	5.31	5.67	12.271
2022-02-02 18:00	5.085	5.625	12.171
2022-02-02 19:00	4.68	4.95	12.107
2022-02-02 20:00	4.455	4.725	12.051
2022-02-02 21:00	4.41	4.725	12.001
2022-02-02 22:00	3.96	4.275	11.95
2022-02-02 23:00	3.645	4.005	11.903
2022-02-03 0:00	4.455	4.905	11.859
2022-02-03 1:00	5.625	5.985	11.813
2022-02-03 2:00	6.75	6.975	11.768
2022-02-03 3:00	8.28	8.55	11.723
2022-02-03 4:00	8.415	8.73	11.678
2022-02-03 5:00	7.38	7.605	11.627
2022-02-03 6:00	7.2	7.425	11.577
2022-02-03 7:00	8.19	8.46	11.546
2022-02-03 8:00	7.92	8.235	12.298
2022-02-03 9:00	9.99	10.35	14.29
2022-02-03 10:00	10.395	10.755	14.696
2022-02-03 11:00	10.44	10.8	14.675
2022-02-03 12:00	10.125	10.485	14.655
2022-02-03 13:00	9.81	10.17	14.652
2022-02-03 14:00	9.18	9.45	14.635
2022-02-03 15:00	8.73	10.08	14.245
2022-02-03 16:00	8.37	8.73	13.682
2022-02-03 17:00	8.19	8.46	12.707
2022-02-03 18:00	7.605	7.785	12.423
2022-02-03 19:00	6.705	6.885	12.362
2022-02-03 20:00	6.345	6.525	12.308
2022-02-03 21:00	5.445	5.625	12.254
2022-02-03 22:00	4.995	5.175	12.212
2022-02-03 23:00	4.635	4.815	12.164
2022-02-04 0:00	4.14	4.32	12.121
2022-02-04 1:00	4.095	4.275	12.082
2022-02-04 2:00	3.69	4.14	12.04
2022-02-04 3:00	3.735	4.05	12.004
2022-02-04 4:00	4.05	4.32	11.97
2022-02-04 5:00	4.05	4.23	11.938
2022-02-04 6:00	3.87	4.095	11.91
2022-02-04 7:00	4.05	4.365	11.883
2022-02-04 8:00	4.455	4.77	12.012
2022-02-04 9:00	6.525	6.795	13.618
2022-02-04 10:00	8.1	8.55	14.621
2022-02-04 11:00	8.82	9.18	14.608
2022-02-04 12:00	8.955	9.945	14.598
2022-02-04 13:00	8.325	8.595	14.293
2022-02-04 14:00	7.695	8.595	13.677

2022-02-04 15:00		7.335	8.37	13.677
2022-02-04 16:00		6.57	6.795	13.673
2022-02-04 17:00		6.3	6.48	12.745
2022-02-04 18:00		5.94	6.075	12.394
2022-02-04 19:00		5.49	5.67	12.328
2022-02-04 20:00		5.13	5.265	12.266
2022-02-04 21:00		4.275	4.365	12.212
2022-02-04 22:00		4.23	4.32	12.157
2022-02-04 23:00		4.14	4.275	12.109
2022-02-05 0:00		3.555	3.69	12.061
2022-02-05 1:00		3.69	3.825	12.013
2022-02-05 2:00		3.375	3.6	11.968
2022-02-05 3:00		3.6	5.175	11.925
2022-02-05 4:00		3.465	9.9	11.888
2022-02-05 5:00		3.96	7.425	11.855
2022-02-05 6:00		5.31	5.535	11.822
2022-02-05 7:00		5.76	6.165	11.798
2022-02-05 8:00		5.355	5.535	12.462
2022-02-05 9:00		4.95	5.265	14.552
2022-02-05 10:00		4.725	4.86	14.617
2022-02-05 11:00		4.725	4.95	14.61
2022-02-05 12:00		4.32	4.545	14.614
2022-02-05 13:00		4.05	4.32	13.815
2022-02-05 14:00		3.87	4.095	13.688
2022-02-05 15:00		3.78	3.96	13.671
2022-02-05 16:00		3.6	3.735	13.603
2022-02-05 17:00		3.465	3.6	12.599
2022-02-05 18:00		3.78	4.095	12.427
2022-02-05 19:00		3.825	4.23	12.37
2022-02-05 20:00		3.87	4.185	12.323
2022-02-05 21:00		3.96	4.905	12.278
2022-02-05 22:00		4.095	5.04	12.241
2022-02-05 23:00		4.05	4.815	12.204
2022-02-06 0:00		4.59	5.535	12.167
2022-02-06 1:00		5.4	6.48	12.131
2022-02-06 2:00		6.165	8.775	12.098
2022-02-06 3:00		6.615	11.025	12.064
2022-02-06 4:00		5.985	9.135	12.032
2022-02-06 5:00		5.13	5.895	12.007
2022-02-06 6:00		5.535	6.39	11.983
2022-02-06 7:00		5.895	6.705	11.958
2022-02-06 8:00		6.57	7.335	11.95
2022-02-06 9:00		7.335	8.325	11.953
2022-02-06 10:00		8.235	9.27	11.954
2022-02-06 11:00		8.955	9.675	11.994
2022-02-06 12:00		9.945	10.62	11.996
2022-02-06 13:00		10.935	11.475	12.066
2022-02-06 14:00		11.475	11.88	11.945
2022-02-06 15:00		11.295	11.79	11.923
2022-02-06 16:00		10.755	11.07	11.894
2022-02-06 17:00		9.9	10.305	11.87
2022-02-06 18:00		8.955	9.405	11.848
2022-02-06 19:00		8.82	9.225	11.827
2022-02-06 20:00		8.19	8.595	11.804
2022-02-06 21:00		7.695	8.1	11.778
2022-02-06 22:00		6.705	7.11	11.751
2022-02-06 23:00		6.165	6.57	11.721
2022-02-07 0:00		5.175	5.445	11.689
2022-02-07 1:00		4.545	4.86	11.663
2022-02-07 2:00		4.365	4.68	11.638
2022-02-07 3:00		4.275	4.5	11.614
2022-02-07 4:00		4.275	4.5	11.598
2022-02-07 5:00		4.14	4.32	11.572
2022-02-07 6:00		4.05	4.275	11.553
2022-02-07 7:00		4.05	4.23	11.531
2022-02-07 8:00		4.05	4.275	11.52
2022-02-07 9:00		4.05	4.275	11.516
2022-02-07 10:00		4.05	4.365	11.529
2022-02-07 11:00		4.005	4.275	11.576
2022-02-07 12:00		4.59	5.265	11.58
2022-02-07 13:00		4.905	5.31	11.548
2022-02-07 14:00		5.85	6.39	11.552
2022-02-07 15:00		6.885	7.425	11.549
2022-02-07 16:00		7.605	8.28	11.471
2022-02-07 17:00		6.795	7.335	11.452
2022-02-07 18:00		18.855	45.18	0
2022-02-07 19:00		23.67	51.3	0
2022-02-08 10:00		30.96	60.435	0
2022-02-08 11:00		33.66	63.9	0
2022-02-18 15:00	0.90	6.255	9.63	13.97
2022-02-18 16:00	0.40	5.265	6.165	13.905
2022-02-18 17:00	0.40	4.275	4.68	12.554
2022-02-18 18:00	0.20	4.365	4.86	12.335
2022-02-18 19:00	0.10	4.095	4.545	12.311
2022-02-18 20:00	0.20	4.815	6.525	12.3
2022-02-18 21:00	0.40	4.68	6.795	12.283
2022-02-18 22:00	0.30	4.59	7.065	12.272
2022-02-18 23:00	0.30	5.22	9.135	12.266
2022-02-19 0:00	0.10	4.41	5.58	12.254
2022-02-19 1:00	0.40	4.32	5.31	12.239

2022-02-19 2:00	0.30	4.455	4.86	12.232
2022-02-19 3:00	0.30	4.725	5.265	12.221
2022-02-19 4:00	0.10	4.725	5.085	12.203
2022-02-19 5:00	0.20	4.815	6.075	12.195
2022-02-19 6:00	0.30	4.77	5.76	12.178
2022-02-19 7:00	0.20	4.545	6.255	12.166
2022-02-19 8:00	0.20	4.365	5.31	12.202
2022-02-19 9:00	0.20	4.905	5.805	12.636
2022-02-19 10:00	0.10	5.31	6.57	13.496
2022-02-19 11:00	0.20	4.815	5.76	14.048
2022-02-19 12:00	0.30	4.005	4.86	14.315
2022-02-19 13:00	0.20	3.375	4.05	14.754
2022-02-19 14:00	0.30	2.7	3.465	13.84
2022-02-19 15:00	0.10	2.34	3.33	13.701
2022-02-19 16:00	0.30	2.115	2.835	13.642
2022-02-19 17:00	0.10	1.935	2.25	12.809
2022-02-19 18:00	0.10	1.755	1.98	12.498
2022-02-19 19:00	0.10	1.71	1.935	12.434
2022-02-19 20:00	0.20	1.8	2.07	12.385
2022-02-19 21:00	0.10	1.845	2.16	12.336
2022-02-19 22:00	0.40	2.43	2.7	12.289
2022-02-19 23:00	0.30	2.16	2.475	12.248
2022-02-20 0:00	0.10	1.755	2.07	12.214
2022-02-20 1:00	0.20	1.53	1.98	12.192
2022-02-20 2:00	0.30	1.35	1.845	12.169
2022-02-20 3:00	0.40	1.665	2.25	12.161
2022-02-20 4:00	0.30	1.665	2.475	12.142
2022-02-20 5:00	0.20	1.8	2.7	12.129
2022-02-20 6:00	0.40	2.07	3.24	12.121
2022-02-20 7:00	0.40	2.385	3.87	12.105
2022-02-20 8:00	0.30	2.745	4.05	12.134
2022-02-20 9:00	0.40	3.33	4.545	12.221
2022-02-20 10:00	0.60	4.275	5.355	12.346
2022-02-20 11:00	0.40	4.77	5.76	12.454
2022-02-20 12:00	0.40	5.355	6.03	12.492
2022-02-20 13:00	0.40	5.49	6.075	12.274
2022-02-20 14:00	0.50	5.31	5.94	12.167
2022-02-20 15:00	0.60	4.905	5.49	12.132
2022-02-20 16:00	0.20	4.635	5.13	12.112
2022-02-20 17:00	0.10	4.275	4.995	12.087
2022-02-20 18:00	0.20	3.33	5.985	12.069
2022-02-20 19:00	0.40	3.375	6.48	12.059
2022-02-20 20:00	0.10	2.925	5.445	12.048
2022-02-20 21:00	0.10	2.925	4.14	12.027
2022-02-20 22:00	0.10	3.195	3.735	12.016
2022-02-20 23:00	0.20	3.6	4.005	11.99
2022-02-21 0:00	0.10	4.185	4.59	11.973
2022-02-21 1:00	0.20	5.04	5.4	11.953
2022-02-21 2:00	0.20	5.85	6.165	11.93
2022-02-21 3:00	0.30	6.435	6.705	11.914
2022-02-21 4:00	0.20	6.615	6.885	11.888
2022-02-21 5:00	0.20	6.795	7.065	11.868
2022-02-21 6:00	0.10	7.2	7.47	11.845
2022-02-21 7:00	0.30	6.93	7.2	11.822
2022-02-21 8:00	0.10	8.1	8.415	11.864
2022-02-21 9:00	0.10	9.18	9.495	12.084
2022-02-21 10:00	0.20	9.36	9.675	12.427
2022-02-21 11:00	0.10	9.72	10.08	12.729
2022-02-21 12:00	0.20	9.72	9.99	12.865
2022-02-21 13:00	0.20	9.81	10.485	12.957
2022-02-21 14:00	0.10	9.18	9.585	12.683
2022-02-21 15:00	0.10	9.36	9.72	12.382
2022-02-21 16:00	0.10	9.63	10.035	12.216
2022-02-21 17:00	0.10	9.765	10.17	12.1
2022-02-21 18:00	0.20	9.54	10.035	12.018
2022-02-21 19:00	0.30	9.54	9.855	11.946
2022-02-21 20:00	0.20	9.81	10.17	11.884
2022-02-21 21:00	0.30	9.585	9.9	11.844
2022-02-21 22:00	0.20	9.18	9.72	11.813
2022-02-21 23:00	0.30	9.18	9.63	11.789
2022-02-22 0:00	0.30	9.225	9.9	11.769
2022-02-22 1:00	0.20	9.045	9.945	11.744
2022-02-22 2:00	0.20	8.955	9.855	11.725
2022-02-22 3:00	0.40	8.955	10.44	11.707
2022-02-22 4:00	0.30	8.64	10.395	11.683
2022-02-22 5:00	0.20	8.82	11.16	11.666
2022-02-22 6:00	0.20	8.505	10.26	11.64
2022-02-22 7:00	0.20	8.01	9.585	11.619
2022-02-22 8:00	0.20	7.65	9.495	11.602
2022-02-22 9:00	0.40	7.155	8.55	11.586
2022-02-22 10:00	0.30	7.155	8.955	11.579
2022-02-22 11:00	0.30	7.425	9.81	11.576
2022-02-22 12:00	0.30	7.29	9.63	11.648
2022-02-22 13:00	0.20	7.11	9.27	12.368
2022-02-22 14:00	0.20	6.615	8.145	12.041
2022-02-22 15:00	0.30	6.165	7.425	11.842
2022-02-22 16:00	0.20	6.3	7.56	11.668
2022-02-22 17:00	0.10	6.615	7.875	11.542
2022-02-22 18:00	0.30	6.795	7.74	11.498
2022-02-22 19:00	0.10	7.335	8.145	11.473

2022-02-22 20:00	0.10	7.65	8.865	11.458
2022-02-22 21:00	0.20	7.83	9.36	11.443
2022-02-22 22:00	0.20	8.325	11.07	11.432
2022-02-22 23:00	0.10	8.55	11.97	11.423
2022-02-23 0:00	0.20	8.775	12.51	11.411
2022-02-23 1:00	0.10	9	12.645	11.393
2022-02-23 2:00	0.10	9	11.835	11.375
2022-02-23 3:00	0.10	8.82	11.88	11.35
2022-02-23 4:00	0.20	7.83	9.9	11.312
2022-02-23 5:00	0.30	6.885	8.82	11.256
2022-02-23 6:00	0.20	6.075	8.01	11.118
2022-02-23 12:00	0.30	3.69	5.31	13.452
2022-02-23 13:00	0.20	3.87	4.41	13.494
2022-02-23 14:00	0.20	3.6	4.14	13.554
2022-02-23 15:00	0.20	3.42	3.825	13.698
2022-02-23 16:00	0.20	3.33	3.735	13.165
2022-02-23 17:00	0.10	3.195	3.51	12.677
2022-02-23 18:00	0.30	3.15	3.42	12.257
2022-02-23 19:00	0.10	3.33	3.555	12.178
2022-02-23 20:00	0.20	3.195	3.42	12.119
2022-02-23 21:00	0.20	2.79	2.925	12.073
2022-02-23 22:00	0.10	2.43	2.61	12.027
2022-02-23 23:00	0.10	2.16	2.295	11.984
2022-02-24 0:00	0.10	1.8	1.89	11.945
2022-02-24 1:00	0.10	1.755	1.845	11.903
2022-02-24 2:00	0.30	1.71	1.755	11.869
2022-02-24 3:00	0.20	1.935	2.025	11.834
2022-02-24 4:00	0.30	2.385	2.475	11.801
2022-02-24 5:00	0.50	4.23	4.365	11.776
2022-02-24 6:00	1.40	4.725	4.95	11.765
2022-02-24 7:00	0.90	4.905	5.04	11.821
2022-02-24 8:00	0.60	3.825	4.095	12.674
2022-02-24 9:00	0.80	3.375	3.96	14.356
2022-02-24 10:00	0.20	3.6	3.87	14.684
2022-02-24 11:00	0.10	4.275	4.5	14.68
2022-02-24 12:00	0.30	3.915	4.23	14.682
2022-02-24 13:00	0.20	3.645	3.915	14.156
2022-02-24 14:00	0.20	3.51	3.78	13.729
2022-02-24 15:00	0.20	3.285	3.555	13.718
2022-02-24 16:00	0.20	3.105	3.42	13.696
2022-02-24 17:00	0.10	3.015	3.375	13.351
2022-02-24 18:00	0.20	2.745	2.925	12.474
2022-02-24 19:00	0.10	2.655	2.79	12.405
2022-02-24 20:00	0.30	2.52	2.7	12.356
2022-02-24 21:00	0.20	2.25	2.385	12.308
2022-02-24 22:00	0.20	2.16	2.25	12.269
2022-02-24 23:00	0.20	2.295	2.52	12.231
2022-02-25 0:00	0.50	2.655	2.97	12.195
2022-02-25 1:00	0.70	2.205	2.475	12.16
2022-02-25 2:00	1.50	2.655	2.925	12.127
2022-02-25 3:00	1.60	2.16	2.385	12.092
2022-02-25 4:00	2.10	2.16	2.34	12.06
2022-02-25 5:00	1.60	2.025	2.115	12.027
2022-02-25 6:00	1.40	1.8	1.845	11.994
2022-02-25 7:00	0.70	1.62	1.8	12.006
2022-02-25 8:00	0.60	1.8	1.935	13.065
2022-02-25 9:00	0.30	2.61	2.79	14.623
2022-02-25 10:00	0.20	2.835	3.06	14.617
2022-02-25 11:00	0.10	2.97	3.285	14.608
2022-02-25 12:00	0.10	2.97	3.375	14.604
2022-02-25 13:00	0.20	2.925	3.285	13.739
2022-02-25 14:00	0.30	2.97	3.33	13.693
2022-02-25 15:00	0.10	3.105	3.555	13.68
2022-02-25 16:00	0.70	3.51	3.87	13.678
2022-02-25 17:00	0.90	3.375	3.78	13.449
2022-02-25 18:00	1.10	2.655	2.925	12.494
2022-02-25 19:00	1.40	2.88	3.465	12.421
2022-02-25 20:00	2.00	2.97	4.14	12.371
2022-02-25 21:00	0.30	2.61	2.835	12.325
2022-02-25 22:00	0.20	2.52	2.79	12.284
2022-02-25 23:00	0.20	3.015	3.285	12.247
2022-02-26 0:00	3.00	3.015	3.51	12.211
2022-02-26 1:00	0.10	2.88	3.015	12.179
2022-02-26 2:00	0.10	2.88	3.105	12.145
2022-02-26 3:00	0.30	2.7	2.925	12.117
2022-02-26 4:00	0.20	2.745	2.925	12.09
2022-02-26 5:00	0.20	3.15	3.42	12.063
2022-02-26 6:00	0.30	3.015	3.24	12.044
2022-02-26 7:00	0.20	3.06	3.285	12.103
2022-02-26 8:00	0.20	3.105	3.42	12.317
2022-02-26 9:00	0.10	3.285	3.825	13.015
2022-02-26 10:00	0.20	3.285	4.14	13.819
2022-02-26 11:00	0.20	3.375	4.545	13.211
2022-02-26 12:00	0.20	3.465	4.68	13.336
2022-02-26 13:00	0.40	4.095	6.12	14.013
2022-02-26 14:00	0.20	4.5	6.525	13.674
2022-02-26 15:00	0.20	4.815	6.255	12.869
2022-02-26 16:00	0.10	5.085	6.795	12.666
2022-02-26 17:00	0.20	5.49	6.525	12.465
2022-02-26 18:00	0.30	5.985	7.155	12.378

2022-02-26 19:00	0.30	6.615	8.235	12.328
2022-02-26 20:00	0.10	6.93	8.865	12.286
2022-02-26 21:00	0.10	6.615	8.01	12.244
2022-02-26 22:00	0.10	4.905	7.11	12.202
2022-02-26 23:00	0.30	4.41	5.13	12.163
2022-02-27 0:00	0.40	4.185	4.68	12.123
2022-02-27 1:00	0.20	4.095	4.5	12.096
2022-02-27 2:00	0.30	4.185	4.635	12.077
2022-02-27 3:00	0.10	4.23	4.59	12.057
2022-02-27 4:00	0.10	4.275	4.725	12.037
2022-02-27 5:00	0.30	4.455	4.95	12.021
2022-02-27 6:00	1.50	4.5	5.175	12
2022-02-27 7:00	4.00	4.41	6.57	11.99
2022-02-27 8:00	0.20	3.78	4.455	12.099
2022-02-27 9:00	0.20	3.42	4.95	12.35
2022-02-27 10:00	0.50	3.33	5.175	12.849
2022-02-27 11:00	0.50	4.14	5.4	13.477
2022-02-27 12:00	0.20	3.645	4.41	13.683
2022-02-27 13:00	0.10	3.825	5.13	14.404
2022-02-27 14:00	0.10	4.725	5.805	14.542
2022-02-27 15:00	0.40	4.32	4.95	14.617
2022-02-27 16:00	0.10	4.23	4.815	13.756
2022-02-27 17:00	0.30	4.86	5.265	13.501
2022-02-27 18:00	0.30	7.65	8.145	12.496
2022-02-27 19:00	0.10	11.7	12.24	12.425
2022-02-27 20:00	0.30	13.23	13.815	12.378
2022-02-27 21:00	0.30	12.6	13.185	12.331
2022-02-27 22:00	0.10	12.915	13.455	12.29
2022-02-27 23:00	0.20	13.005	13.5	12.251
2022-02-28 0:00	0.10	11.745	12.195	12.21
2022-02-28 1:00	0.10	10.17	10.62	12.17
2022-02-28 2:00	0.20	12.195	12.735	12.131
2022-02-28 3:00	0.20	11.7	12.24	12.091
2022-02-28 4:00	0.20	11.025	11.43	12.048
2022-02-28 5:00	0.10	11.115	11.655	12.012
2022-02-28 6:00	0.10	10.53	10.935	11.978
2022-02-28 7:00	0.20	9.495	9.855	12.035
2022-02-28 8:00	0.30	10.62	11.07	13.224
2022-02-28 9:00	0.30	10.485	10.89	14.641
2022-02-28 10:00	0.20	10.89	11.385	14.616
2022-02-28 11:00	0.20	9.9	10.305	14.605
2022-02-28 12:00	0.20	8.955	9.36	14.608
2022-02-28 13:00	0.20	8.28	8.55	13.711
2022-02-28 14:00	0.30	7.695	8.19	13.684
2022-02-28 15:00	0.20	7.47	8.01	13.685
2022-02-28 16:00	0.30	7.965	8.685	13.684
2022-02-28 17:00	0.10	7.335	8.1	12.858
2022-02-28 18:00	0.30	7.02	8.46	12.478
2022-02-28 19:00	0.60	7.515	9.54	12.426
2022-02-28 20:00	0.70	7.47	9.63	12.38
2022-02-28 21:00	0.70	7.695	9.585	12.338
2022-02-28 22:00	0.90	7.65	8.775	12.298
2022-02-28 23:00	0.60	7.515	8.145	12.261
2022-03-01 0:00	0.30	7.38	8.055	12.224
2022-03-01 1:00	0.60	7.245	8.235	12.185
2022-03-01 2:00	0.20	7.47	8.235	12.146
2022-03-01 3:00	0.20	7.38	7.875	12.105
2022-03-01 4:00	0.50	7.425	7.965	12.069
2022-03-01 5:00	0.50	7.11	7.56	12.042
2022-03-01 6:00	0.30	6.75	7.2	12.023
2022-03-01 7:00	0.30	6.435	6.795	12.007
2022-03-01 8:00	0.50	6.435	6.93	12.016
2022-03-01 9:00	0.50	6.48	6.885	12.1
2022-03-01 10:00	1.20	6.39	6.75	12.22
2022-03-01 11:00	0.30	5.67	6.03	12.217
2022-03-01 12:00	0.10	5.175	5.4	12.468
2022-03-01 13:00	0.30	4.59	4.95	13.637
2022-03-01 14:00	0.30	3.915	4.185	13.259
2022-03-01 15:00	0.20	3.33	3.555	12.917
2022-03-01 16:00	0.40	3.06	3.33	12.772
2022-03-01 17:00	0.30	3.015	3.285	12.469
2022-03-01 18:00	0.10	3.24	3.555	12.36
2022-03-01 19:00	0.20	3.87	4.14	12.296
2022-03-01 20:00	0.40	4.005	4.185	12.239
2022-03-01 21:00	0.10	3.645	3.825	12.177
2022-03-01 22:00	0.40	3.42	3.645	12.118
2022-03-01 23:00	0.00	3.465	3.69	12.076
2022-03-02 0:00	0.20	3.195	3.33	12.047
2022-03-02 1:00	0.20	3.105	3.24	12.024
2022-03-02 2:00	0.20	2.835	2.97	12.003
2022-03-02 3:00	0.20	2.79	2.88	11.987
2022-03-02 4:00	0.10	2.655	2.745	11.963
2022-03-02 5:00	0.30	2.655	2.835	11.946
2022-03-02 6:00	0.20	2.745	2.88	11.921
2022-03-02 7:00	0.70	2.745	2.88	11.917
2022-03-02 8:00	1.10	3.06	3.24	11.997
2022-03-02 9:00	0.40	3.42	3.555	12.557
2022-03-02 10:00	0.10	3.6	3.825	12.983
2022-03-02 11:00	0.10	3.825	4.05	13.642
2022-03-02 12:00	0.40	3.555	3.78	14.41

2022-03-02 13:00	0.20	3.195	3.42								14.509
2022-03-02 14:00	0.40	2.97	3.24								14.315
2022-03-02 15:00	0.20	3.105	3.555								14.022
2022-03-02 16:00	0.20	3.15	3.555								13.794
2022-03-02 17:00	0.30	3.375	3.69								13.98
2022-03-02 18:00	0.20	3.69	4.005								12.535
2022-03-02 19:00	0.10	3.87	4.095								12.462
2022-03-02 20:00	0.30	4.095	4.32								12.413
2022-03-02 21:00	0.70	4.365	4.635								12.37
2022-03-02 22:00	0.40	4.5	4.725								12.329
2022-03-02 23:00	0.20	4.5	4.815								12.291
2022-03-03 0:00	0.10	4.5	4.725								12.254
2022-03-03 1:00	0.10	4.14	4.365								12.217
2022-03-03 2:00	0.20	4.185	4.41								12.179
2022-03-03 3:00	0.20	4.23	4.5								12.142
2022-03-03 4:00	0.30	3.78	4.005								12.106
2022-03-03 5:00	0.20	3.465	3.645								12.068
2022-03-03 6:00	0.30	3.375	3.555								12.028
2022-03-03 7:00	0.60	3.06	3.195								12.095
2022-03-03 8:00	0.50	4.095	4.545								13.567
2022-03-03 9:00	0.20	4.95	5.265								14.648
2022-03-03 10:00	0.40	6.795	7.29								14.626
2022-03-03 11:00	0.20	6.975	7.515								14.62
2022-03-03 12:00	0.20	6.615	6.93								14.433
2022-03-03 13:00	0.90	6.3	6.705								13.697
2022-03-03 14:00	1.40	5.76	6.075								13.694
2022-03-03 15:00	1.10	5.355	5.76								13.692
2022-03-03 16:00	0.70	4.635	4.995	3.86	238.7	0	0	989.2	-10.7	33.7	13.664
2022-03-03 17:00	0.10	3.915	4.23	3.31	240.4	0	0	989.1	-10.7	34.3	13.557
2022-03-03 18:00	0.20	3.69	3.915	1.42	216.6	0	0	988.9	-12.2	36.4	12.444
2022-03-03 19:00	0.40	3.465	3.735	1.19	186.8	0	0	988.6	-14.3	40.9	12.348
2022-03-03 20:00	0.10	3.465	3.645	1.33	183.3	0	0	988.2	-15.7	45.3	12.289
2022-03-03 21:00	0.40	3.24	3.42	1.87	184	0	0	987.7	-16.7	49.9	12.238
2022-03-03 22:00	0.20	3.33	3.555	1.72	187.6	0	0	987.9	-16.8	52.8	12.184
2022-03-03 23:00	0.30	3.33	3.51	1.61	204.6	0	0	988.2	-17.3	59.1	12.13
2022-03-04 0:00	0.40	3.645	3.87	2.54	229.7	0	0	988.3	-16	63	12.076
2022-03-04 1:00	0.40	3.645	3.87	2.13	226.5	0	0	988	-16.1	68.2	12.018
2022-03-04 2:00	0.30	3.6	3.78	2.08	223.4	0	0	987.5	-16.1	72	11.971
2022-03-04 3:00	0.20	3.51	3.69	2.03	218.6	0	0	987	-15.8	73.7	11.932
2022-03-04 4:00	0.30	3.465	3.69	1.68	219.8	0	0	986.9	-16.2	75.2	11.9
2022-03-04 5:00	0.30	3.51	3.69	1.5	235.7	0	0	987	-16.6	74.3	11.872
2022-03-04 6:00	0.40	3.555	3.78	1.35	235.5	0	0	987.7	-17.5	73	11.844
2022-03-04 7:00	0.40	3.645	3.87	1.34	241.1	0	0	988.3	-17.9	71.2	11.9
2022-03-04 8:00	0.50	3.96	4.14	2.96	267.6	0	0	989.1	-15.4	62.5	12.744
2022-03-04 9:00	0.30	3.96	4.185	3.36	280.6	0	0	989.7	-13.7	53.4	13.925
2022-03-04 10:00	0.30	3.78	4.05	2.84	283.4	0	0	990	-11.9	46.5	14.663
2022-03-04 11:00	0.20	3.375	3.6	3.67	288.5	0	0	990.1	-10.3	41.6	14.628
2022-03-04 12:00	0.20	3.195	3.465	3.72	269.8	0	0	990.1	-9.2	39.6	14.598
2022-03-04 13:00	0.30	3.015	3.285	4.07	275.1	0	0	990.5	-8.3	38	14.583
2022-03-04 14:00	0.30	2.925	3.195	3.5	258.5	0	0	990.6	-7.5	35.8	13.685
2022-03-04 15:00	0.20	2.655	2.88	3.74	255	0	0	990.6	-6.8	34	13.656
2022-03-04 16:00	1.40	2.88	3.195	3.31	272.2	0	0	990.8	-6.4	32.8	13.651
2022-03-04 17:00	0.40	2.565	2.835	2.68	278.8	0	0	990.8	-6.6	32.4	13.454
2022-03-04 18:00	0.20	2.43	2.7	0.87	259.8	0	0	991	-8.5	34.6	12.492
2022-03-04 19:00	0.20	2.25	2.385	0.36	132.2	0	0	991.3	-13	44.6	12.436
2022-03-04 20:00	0.20	2.115	2.25	0.38	184.9	0	0	991.4	-16.5	50.8	12.374
2022-03-04 21:00	0.20	2.07	2.205	0.35	202.5	0	0	991.5	-18.9	52.1	12.329
2022-03-04 22:00	0.10	2.025	2.16	0.38	232.3	0	0	991.7	-19.9	51.5	12.278
2022-03-04 23:00	0.30	2.025	2.16	0.37	219.5	0	0	991.9	-21	56.4	12.232
2022-03-05 0:00	0.20	1.89	2.025	0.31	270.2	0	0	992.3	-20.6	53.6	12.191
2022-03-05 1:00	0.10	1.62	1.755	0.36	182.2	0	0	992.6	-22.4	54.3	12.147
2022-03-05 2:00	0.40	1.89	1.98	0.32	274.4	0	0	992.7	-22.5	57.6	12.101
2022-03-05 3:00	0.30	1.98	2.07	0.33	180.4	0	0	992.6	-22.3	57.2	12.063
2022-03-05 4:00	0.30	2.025	2.115	0.29	210.8	0	0	992.4	-22.6	57.6	12.014
2022-03-05 5:00	0.40	3.24	3.42	0.26	249.4	0	0	992.6	-21.7	57.9	11.971
2022-03-05 6:00	0.60	4.59	4.77	0.34	173.4	0	0	992.5	-20.4	60.1	11.922
2022-03-05 7:00	0.40	4.455	4.725	0.46	155.5	0	0	992	-19.1	62	11.909
2022-03-05 8:00	0.80	4.23	4.59	1.05	149.9	0	0	991.8	-16.3	62.7	12.236
2022-03-05 9:00	0.80	4.185	4.68	0.86	141.8	0	0	991.5	-12.7	55.8	12.845
2022-03-05 10:00	0.20	3.735	4.365	1.35	145.7	0	0	991.1	-9	50.6	13.202
2022-03-05 11:00	0.60	3.6	5.04	2.48	146.1	0	0	990	-6.3	41.1	13.225
2022-03-05 12:00	0.50	2.97	3.465	2.79	140	0	0	988.9	-4.9	37	13.385
2022-03-05 13:00	0.40	2.565	2.88	2.99	130.2	0	0	987.4	-4.2	35.4	13.513
2022-03-05 14:00	0.30	2.34	2.61	3.1	136.4	0	0	986.8	-3.5	34.6	13.02
2022-03-05 15:00	0.20	2.385	2.7	2.82	134.5	0	0	986.2	-3.3	37.9	12.596
2022-03-05 16:00	0.30	2.565	3.15	2.69	137.2	0	0	985.2	-4.5	61	12.427
2022-03-05 17:00	0.30	2.655	3.015	2.19	102.5	0	0	984.2	-5.6	82.4	12.311
2022-03-05 18:00	0.30	3.15	3.465	2.45	99.1	0	0	983	-6	85.1	12.23
2022-03-05 19:00	0.30	4.095	4.68	2.57	103.1	0	0	982.2	-6.2	86	12.169
2022-03-05 20:00	0.30	4.545	4.995	2.14	101.1	0	0	981.4	-6	86.5	12.102
2022-03-05 21:00	0.20	4.41	4.635	2.05	92	0	0	980.2	-6	86.4	12.029
2022-03-05 22:00	0.30	3.96	4.14	2.36	95.2	0	0	978.8	-5.8	85.3	11.974
2022-03-05 23:00	0.20	3.33	3.51	2.68	98.5	0	0	977.5	-5.3	83.4	11.942
2022-03-06 0:00	0.20	3.015	3.15	2.71	101.1	0	0	975.6	-5.2	82.9	11.919
2022-03-06 1:00	0.40	3.06	3.195	2.67	109.3	0	0	974.1	-5	82.8	11.899
2022-03-06 2:00	0.30	3.105	3.285	2.01	101.4	0	0	973	-5	83	11.881
2022-03-06 3:00	0.20	3.15	3.285	1.95	93.4	0	0	971.3	-5.1	83.3	11.862
2022-03-06 4:00	0.50	3.24	3.465	1.87	85.8	0	0	969.6	-5.2	85.8	11.844
2022-03-06 5:00	0.40	3.195	3.42	1.49	60.6	0.2	0	969	-5.4	86.9	11.822
2022-03-06 6:00	0.20	3.195	3.375	2.03	50.3	0	0	967.6	-5.5	87	11.806

2022-03-06 7:00	0.30	3.015	3.195	2.49	41.7	0	0	966.2	-5.6	86.7	11.783
2022-03-06 8:00	0.40	2.97	3.105	2.35	37.5	0	0	965.1	-5.5	86.6	11.767
2022-03-06 9:00	0.20	2.97	3.15	1.64	24	0	0	965	-5.2	86.6	11.742
2022-03-06 10:00	0.20	3.015	3.195	1.53	4.3	0	0	964.7	-4.9	86.3	11.717
2022-03-06 11:00	0.20	2.835	3.24	2.2	342.7	0	0	964.6	-4.7	85.8	11.703
2022-03-06 12:00	0.30	2.61	3.06	2.54	342.9	0	0	964.8	-4.6	85.3	11.679
2022-03-06 13:00	0.20	2.385	2.565	2.73	340.7	0	0	965.2	-3.8	83.8	11.672
2022-03-06 14:00	0.20	2.205	2.385	3.7	325.6	0	0	966.5	-3.6	81.6	11.721
2022-03-06 15:00	0.20	2.475	2.655	4.03	317.9	0	0	968.6	-4.2	81.3	11.646
2022-03-06 16:00	0.10	1.935	2.07	3.75	319.9	0	0	970.5	-5.2	81.5	11.615
2022-03-06 17:00	0.20	1.935	2.025	3.48	310.7	0	0	972.6	-5.8	81.8	11.587
2022-03-06 18:00	0.30	1.89	1.98	3.13	303.6	0	0	974.5	-6	81.7	11.563
2022-03-06 19:00	0.40	2.07	2.205	2.82	305.5	0	0	975.7	-6	83.1	11.536
2022-03-06 20:00	0.10	2.7	2.88	3.25	310.3	0	0	976.9	-6.4	79.1	11.511
2022-03-06 21:00	0.30	2.16	2.34	2.44	309.6	0	0	977.6	-6.8	76.3	11.487
2022-03-06 22:00	0.20	2.115	2.295	2.15	288.5	0	0	978.2	-7	77.4	11.459
2022-03-06 23:00	0.20	2.07	2.25	2.12	290.9	0	0	978.3	-7.4	76.6	11.429
2022-03-07 0:00	0.20	2.115	2.25	1.42	297.6	0	0	977.8	-7.8	77.4	11.398
2022-03-07 1:00	0.20	2.07	2.25	1.66	287.9	0	0	978.5	-8.1	75.6	11.371
2022-03-07 2:00	0.30	2.025	2.16	1.14	245.8	0	0	979.5	-8.2	75	11.342
2022-03-07 3:00	0.30	1.935	2.115	1.11	261.1	0	0	979.3	-8.4	73.6	11.31
2022-03-07 4:00	0.40	1.845	1.98	0.79	271.9	0	0	978.5	-9	73.3	11.28
2022-03-07 5:00	0.30	1.89	1.98	0.92	228.9	0	0	978.3	-9.6	76	11.246
2022-03-07 6:00	0.50	1.845	1.935	0.77	233	0	0	977.8	-9.8	75.5	11.212
2022-03-07 7:00	0.50	1.89	2.025	0.91	200.9	0	0	977.8	-10.1	77.2	11.18
2022-03-07 8:00	0.20	1.98	2.115	1.13	258.4	0	0	977.1	-9.1	74.1	11.207
2022-03-07 9:00	0.30	2.025	2.205	1.68	317.8	0	0	976.2	-7.6	66.8	11.392
2022-03-07 10:00	0.20	1.755	1.89	2.03	314.7	0	0	975.6	-7	59	11.419
2022-03-07 11:00	0.30	1.71	1.8	2.56	313.2	0	0	975.2	-6.5	55.4	11.593
2022-03-07 12:00	0.30	1.8	1.98	3	312.6	0	0	974.5	-5.8	52.9	12.08
2022-03-07 13:00	0.30	1.17	1.26	3.09	302.6	0	0	973.8	-5.1	51.1	12.545
2022-03-07 14:00	0.50	0.9	1.08	3.14	318.5	0	0	973.5	-5	49.8	12.568
2022-03-07 15:00	0.40	0.765	0.855	3.48	307.4	0	0	973.4	-4.5	46.8	12.694
2022-03-07 16:00	0.30	0.855	0.99	3.49	312.2	0	0	973.4	-4.8	50.6	12.082
2022-03-07 17:00	0.40	0.9	0.99	2.78	315.7	0	0	974	-5.3	54.3	11.843
2022-03-07 18:00	0.30	0.9	0.99	2.15	318.5	0	0	974.7	-6.2	54.7	11.702
2022-03-07 19:00	0.30	0.99	1.125	2.01	312.9	0	0	975.5	-7.9	53.5	11.645
2022-03-07 20:00	0.30	1.08	1.215	1.97	305.9	0	0	976.2	-9.8	58.8	11.594
2022-03-07 21:00	0.20	1.17	1.305	2.09	305	0	0	977	-10.8	60.3	11.548
2022-03-07 22:00	0.10	1.215	1.35	1.89	302.4	0	0	977.8	-12.2	63.4	11.502
2022-03-07 23:00	0.20	1.305	1.35	1.35	287.6	0	0	978.4	-13.6	65.8	11.453
2022-03-08 0:00	0.30	1.26	1.35	0.68	253.3	0	0	979.1	-15.1	66.9	11.407
2022-03-08 1:00	0.30	1.395	1.44	0.71	265.9	0	0	979.4	-16.4	68.5	11.36
2022-03-08 2:00	0.40	1.395	1.485	0.8	209.7	0	0	979.9	-16	71	11.307
2022-03-08 3:00	0.20	1.485	1.575	1.03	192.3	0	0	980.1	-14.9	70.3	11.256
2022-03-08 4:00	0.30	1.62	1.71	1.06	180.7	0	0	980.5	-14.2	70.5	11.201
2022-03-08 5:00	0.20	1.62	1.71	1.07	179.6	0	0	980.7	-13.9	70.9	11.164
2022-03-08 6:00	0.20	1.62	1.71	0.85	151.7	0	0	980.7	-14.4	72.6	11.14
2022-03-08 7:00	0.20	1.71	1.845	1.08	156.9	0	0	980.7	-14.6	73.3	11.229
2022-03-08 8:00	0.30	1.62	1.89	2.17	187.5	0	0	980.8	-11.9	66.8	12.075
2022-03-08 9:00	0.20	1.53	1.8	2.15	210.2	0	0	980.8	-8.2	59.7	12.859
2022-03-08 10:00	0.40	1.395	1.575	2.74	210.1	0	0	980.4	-5.1	52.2	12.908
2022-03-08 11:00	0.20	1.26	1.44	3.47	214.3	0	0	979.7	-2.8	47.1	12.892
2022-03-08 12:00	0.10	1.215	1.395	3.71	210.9	0	0	978.9	-1.6	43.7	12.889
2022-03-08 13:00	0.30	1.305	1.485	3.92	205.8	0	0	978.2	-0.8	46	12.938
2022-03-08 14:00	0.30	1.305	1.53	4.15	207.7	0	0	977.5	-0.4	45.9	12.838
2022-03-08 15:00	0.40	1.485	1.755	3.62	203.2	0	0	977.2	-0.7	49.3	12.602
2022-03-08 16:00	0.30	1.575	1.845	3.7	194.1	0	0	976.6	-0.6	51.2	12.506
2022-03-08 17:00	0.30	1.395	1.575	3.65	185.7	0	0	976.1	-0.8	53	12.203
2022-03-08 18:00	0.30	1.53	1.845	3.27	183.6	0	0	975.7	-1.5	57.1	11.988
2022-03-08 19:00	0.20	1.71	1.935	3.55	180.1	0	0	975.3	-1.7	59.3	11.929
2022-03-08 20:00	0.40	1.98	2.25	3.63	182.2	0	0	975.1	-1.6	59.8	11.882
2022-03-08 21:00	0.30	2.79	3.06	3.45	191.2	0	0	975.3	-1.6	57.9	11.84
2022-03-08 22:00	0.40	3.375	3.735	3.98	192	0	0	975.2	-1.9	57.8	11.799
2022-03-08 23:00	0.30	3.51	3.915	3.96	195.1	0	0	975	-2.5	59.9	11.758
2022-03-09 0:00	0.20	3.645	4.275	3.94	192.4	0	0	974.5	-3	61.8	11.724
2022-03-09 1:00	0.30	3.825	4.41	3.78	187.1	0	0	974.3	-3.4	66.6	11.687
2022-03-09 2:00	0.30	3.825	4.275	3.3	183.6	0	0	973.7	-3.8	66.9	11.652
2022-03-09 3:00	0.30	4.545	4.95	2.84	182.5	0	0	973.2	-4.1	68.4	11.619
2022-03-09 4:00	0.50	6.345	6.66	2.96	182.5	0	0	972.7	-4.5	71.3	11.585
2022-03-09 5:00	0.30	8.505	8.865	3.28	181.4	0	0	972.3	-4.4	72.9	11.553
2022-03-09 6:00	0.50	9.855	10.17	3.1	187.2	0	0	972.1	-4.5	73.8	11.523
2022-03-09 7:00	0.20	9.315	9.585	2.85	183.4	0	0	972	-4.4	74.4	11.522
2022-03-09 8:00	0.30	9.495	9.81	2.73	194.5	0	0	972.1	-3.6	73.3	11.523
2022-03-09 9:00	0.20	9.585	9.99	2.48	188.5	0	0	971.9	-3.2	75.8	11.647
2022-03-09 10:00	0.20	9.135	9.54	3.05	200.1	0	0	971.7	-2.3	70.7	12.111
2022-03-09 11:00	0.30	5.4	5.85	3.51	212	0	0	971.5	-1.7	65.2	12.347
2022-03-09 12:00	0.30	3.195	3.735	3.54	211.9	0	0	971.5	-2	65.6	12.308
2022-03-09 13:00	0.20	2.745	3.24	3.21	219.9	0	0	971.1	-1.6	64.5	12.274
2022-03-09 14:00	0.10	2.565	3.33	3.79	221.5	0	0	970.8	-1.5	60.3	12.291
2022-03-09 15:00	0.50	2.655	3.15	3.5	243.6	0	0	970.9	-1.4	58.1	12.18
2022-03-09 16:00	0.30	2.745	3.15	3.2	226.8	0	0	970.9	-1.8	59	11.958
2022-03-09 17:00	0.70	3.06	3.645	2.77	254.1	0	0	971.5	-2.7	64.2	11.785
2022-03-09 18:00	2.40	3.51	4.05	2.85	261.7	0	0	972.2	-3.6	71.2	11.686
2022-03-09 19:00	1.30	3.24	3.78	3.1	247.4	0	0	972.7	-4.3	75.2	11.617
2022-03-09 20:00	2.60	3.06	3.465	2.89	258.1	0	0	973.4	-4.7	79.1	11.56
2022-03-09 21:00	0.40	1.71	2.25	3.22	318.9	0	0	974.5	-6.5	82.6	11.514
2022-03-09 22:00	0.20	1.62	2.25	3.75	316.2	0	0	976.1	-8.5	78.8	11.478
2022-03-09 23:00	0.20	1.71	2.07	3.62	315.6	0	0	977.6	-10.8	73.7	11.446
2022-03-10 0:00	0.20	1.62	1.98	3.31	312.1	0	0	978.6	-12.4	71.1	11.415

2022-03-10 1:00	0.40	1.53	1.71	1.69	299.4	0	0	979.6	-13	72.4	11.381
2022-03-10 2:00	0.40	1.485	1.71	1.71	295	0	0	980.2	-13.2	72.4	11.345
2022-03-10 3:00	0.30	1.485	1.665	0.85	284.7	0	0	980.6	-13.5	71.2	11.315
2022-03-10 4:00	0.20	1.53	1.665	0.99	284.8	0	0	981.1	-13.8	71	11.28
2022-03-10 5:00	0.30	1.71	1.89	1.33	303.2	0	0	981.5	-14	72.4	11.243
2022-03-10 6:00	0.40	1.665	1.845	0.88	251.2	0	0	982.2	-14.3	72.9	11.207
2022-03-10 7:00	0.40	1.71	1.845	0.87	236.3	0	0	982.7	-14.1	70.1	11.186
2022-03-10 8:00	0.40	6.885	7.38	2.06	267.2	0	0	983.4	-13.8	71.3	11.19
2022-03-10 9:00	0.40	1.755	1.935	2.44	268.6	0	0	983.8	-13.1	65.9	12.01
2022-03-10 10:00	0.30	1.44	1.665	4.13	264.3	0	0	984	-12.1	54.3	12.54
2022-03-10 11:00	0.60	1.305	1.665	4.47	265	0	0	984.3	-11.7	47.5	12.683
2022-03-10 12:00	0.20	1.26	1.485	4.27	253.1	0	0	984.3	-11	45.4	12.891
2022-03-10 13:00	0.40	1.26	1.485	3.92	253.4	0	0	983.8	-10.3	42.8	13.035
2022-03-10 14:00	0.30	1.215	1.395	4.33	237.9	0	0	983.4	-9.8	41.3	12.854
2022-03-10 15:00	0.30	1.215	1.44	3.54	241.3	0	0	983.3	-9.3	41.3	12.788
2022-03-10 16:00	0.40	1.215	1.395	2.96	238.5	0	0	982.9	-8.9	40.8	12.578
2022-03-10 17:00	0.50	1.17	1.395	2.63	240	0	0	982.8	-9	41.7	12.053
2022-03-10 18:00	0.30	1.17	1.35	2.04	238.7	0	0	982.9	-9.2	44.3	11.898
2022-03-10 19:00	0.30	1.125	1.485	1.92	228.5	0	0	983.1	-9.6	48.5	11.833
2022-03-10 20:00	0.30	0.99	1.08	2.71	220.9	0	0	983.5	-10.1	46.1	11.779
2022-03-10 21:00	0.20	0.945	1.035	1.29	204.2	0	0	983.7	-11.9	47.8	11.729
2022-03-10 22:00	0.30	0.9	1.035	1.18	183.4	0	0	983.7	-12.7	52.2	11.688
2022-03-10 23:00	0.40	0.9	1.035	1.55	184.5	0	0	983.6	-12.6	53.9	11.646
2022-03-11 0:00	0.40	0.945	0.99	1.46	191.5	0	0	983.4	-12.6	55.8	11.607
2022-03-11 1:00	0.30	0.945	1.125	1.69	182.7	0	0	983.4	-12.9	59.7	11.567
2022-03-11 2:00	0.30	0.945	1.125	1.06	188.2	0	0	983	-13.1	62.1	11.529
2022-03-11 3:00	0.20	0.99	1.215	1.29	167.4	0	0	982.4	-14.4	66.4	11.492
2022-03-11 4:00	0.40	1.125	1.395	1.16	162.3	0	0	981.8	-15.9	72.4	11.455
2022-03-11 5:00	0.40	1.26	1.53	1.96	172.2	0	0	981.5	-17.9	74.6	11.415
2022-03-11 6:00	0.60	1.26	1.395	1.81	168	0	0	981.3	-19.2	76	11.376
2022-03-11 7:00	0.50	1.395	1.53	2.75	172.8	0	0	981	-18.2	72.9	11.47
2022-03-11 8:00	0.50	1.395	1.575	3.1	171.1	0	0	980.5	-15	65.4	12.318
2022-03-11 9:00	0.40	1.575	1.755	4.36	170.7	0	0	980	-10.4	51	13.173
2022-03-11 10:00	0.30	1.665	1.935	4.6	163.1	0	0	979.2	-8.6	42.6	13.456
2022-03-11 11:00	0.30	1.62	2.07	4.79	166	0	0	978	-7.5	38.5	13.546
2022-03-11 12:00	0.30	1.71	2.115	4	174	0	0	976.9	-6.6	35.8	13.491
2022-03-11 13:00	0.40	1.62	1.98	3.64	181.1	0	0	975.8	-6.3	34.9	13.489
2022-03-11 14:00	0.30	1.53	1.845	3.75	174.3	0	0	974.6	-6.1	36.7	13.596
2022-03-11 15:00	0.50	1.53	1.89	3.84	173.8	0	0	973.8	-5.9	37.6	13.76
2022-03-11 16:00	0.20	1.575	1.89	3.42	180.2	0	0	973.2	-5.7	39	13.868
2022-03-11 17:00	0.50	1.71	2.07	3.32	174.4	0	0	972.6	-6.1	39.7	13.317
2022-03-11 18:00	0.40	1.8	2.025	1.52	146.3	0	0	972	-7.3	41.3	12.392
2022-03-11 19:00	0.20	1.89	2.205	0.96	106.3	0	0	971.5	-9.3	45.8	12.27
2022-03-11 20:00	0.30	1.755	2.205	0.81	102	0	0	970.9	-11	50.6	12.211
2022-03-11 21:00	0.60	1.755	2.115	1.18	121.9	0	0	970.3	-11.7	54	12.162
2022-03-11 22:00	0.50	1.98	2.385	1.87	166.9	0	0	969.8	-10.5	53.4	12.118
2022-03-11 23:00	0.50	2.385	2.925	1.21	221.9	0	0	969.6	-11.8	63.4	12.081
2022-03-12 0:00	0.40	2.655	3.15	0.97	199.5	0	0	969.3	-12.6	72.5	12.043
2022-03-12 1:00	0.30	3.6	4.41	0.93	225	0	0	969.2	-11.9	70.8	12.008
2022-03-12 2:00	0.40	4.59	5.67	1.69	250.2	0	0	969	-11.5	67.4	11.971
2022-03-12 3:00	0.30	4.725	5.715	1.45	252.3	0	0	969	-11.9	66	11.941
2022-03-12 4:00	0.40	4.77	5.895	1.57	261.4	0	0	969.3	-12.6	68.2	11.909
2022-03-12 5:00	0.40	4.995	5.94	2.44	268.2	0	0	970	-13.4	71.1	11.879
2022-03-12 6:00	0.30	4.995	6.075	2.72	273.3	0	0	970.5	-14.2	73.3	11.848
2022-03-12 7:00	0.30	4.455	5.805	3.4	279.4	0	0	971.1	-15.1	73	11.866
2022-03-12 8:00	0.20	3.06	5.31	4.7	289.6	0	0	971.7	-15	70	12.062
2022-03-12 9:00	0.20	3.24	6.03	4.59	292.6	0	0	972.7	-15.7	67.8	12.345
2022-03-12 10:00	0.30	2.79	4.5	5.55	303.1	0	0	973.3	-15.8	61	13.4
2022-03-12 11:00	0.20	2.52	3.285	5.07	305.6	0	0	973.6	-14.6	59	14.506
2022-03-12 12:00	0.30	2.475	3.24	4.79	303.5	0	0	974	-13.9	55.8	14.645
2022-03-12 13:00	0.30	2.61	3.645	4.19	305.9	0	0	974	-12.8	51.1	14.619
2022-03-12 14:00	0.40	2.385	2.97	4.39	316	0	0	974	-12.2	49.7	14.605
2022-03-12 15:00	0.30	2.25	2.835	4.59	314.8	0	0	974.1	-12	50.7	13.976
2022-03-12 16:00	0.40	2.295	2.745	3.93	308.8	0	0	974.1	-11.7	51.2	13.656
2022-03-12 17:00	0.10	2.25	2.655	3.33	316.5	0	0	974.3	-12.3	51.9	13.207
2022-03-12 18:00	0.20	2.205	2.52	1.78	291.2	0	0	974.3	-13.2	53.4	12.399
2022-03-12 19:00	0.40	2.16	2.43	0.87	272.8	0	0	974.6	-14.7	55.5	12.306
2022-03-12 20:00	0.30	2.07	2.25	0.51	228.7	0	0	974.8	-16.9	58.5	12.252
2022-03-12 21:00	0.40	2.025	2.205	0.39	250.2	0	0	974.8	-19.1	62.6	12.205
2022-03-12 22:00	0.40	1.935	2.115	0.34	153.1	0	0	974.6	-21.4	64.4	12.159
2022-03-12 23:00	0.30	1.665	1.8	0.36	168.5	0	0	974.5	-23.8	61.5	12.11
2022-03-13 0:00	0.30	1.935	2.205	1.12	204.5	0	0	974.4	-22.8	72.2	12.069
2022-03-13 1:00	0.40	2.025	2.295	1.6	222.7	0	0	974.4	-21.5	71.4	12.025
2022-03-13 2:00	0.30	1.89	2.025	0.95	184.2	0	0	973.9	-21.6	70.8	11.981
2022-03-13 3:00	0.20	1.845	1.98	0.94	194.3	0	0	973.3	-21.1	70.8	11.937
2022-03-13 4:00	0.20	1.755	1.845	1.25	178	0	0	973.1	-21.1	72.2	11.899
2022-03-13 5:00	0.40	1.8	1.89	1.64	169.4	0	0	972.7	-20.8	73.7	11.861
2022-03-13 6:00	0.40	1.845	2.07	2.01	172.3	0	0	972.2	-18.9	74.6	11.829
2022-03-13 7:00	0.30	1.71	1.935	1.93	175	0	0	972.2	-17.4	75.2	11.856
2022-03-13 8:00	0.40	1.665	1.845	2.14	179.9	0	0	972.1	-15	75.9	12.007
2022-03-13 9:00	0.30	1.71	1.935	2.33	196.7	0	0	972.1	-12.4	74.2	12.277
2022-03-13 10:00	0.30	1.89	2.385	2.68	201.4	0	0	972	-10.3	69.9	12.889
2022-03-13 11:00	0.30	2.07	2.43	2.77	198.9	0	0	972	-8.8	62.9	14.047
2022-03-13 12:00	0.30	2.07	2.52	2.47	212.5	0	0	972.1	-7.6	58.6	14.61
2022-03-13 13:00	0.40	1.98	2.475	2.38	211.2	0	0	971.8	-6.7	56.5	14.603
2022-03-13 14:00	0.20	1.845	2.205	2.12	218.2	0	0	971.8	-6.2	57.1	14.239
2022-03-13 15:00	0.10	2.025	2.295	1.75	218.2	0	0	972.4	-6	60.6	13.176
2022-03-13 16:00	0.30	2.475	2.925	1.57	219.2	0	0	973.1	-5.9	63.2	12.726
2022-03-13 17:00	0.50	2.43	2.88	0.84	212.5	0	0	973.8	-5.7	60.5	12.472
2022-03-13 18:00	0.10	2.61	3.015	0.93	189.3	0	0	974.6	-6.4	62	12.334

2022-03-13 19:00	0.30	2.52	2.835	0.5	263.1	0	0	975.6	-7	65.5	12.293
2022-03-13 20:00	0.30	2.385	2.655	0.26	290.6	0	0	976.5	-7.4	68	12.245
2022-03-13 21:00	0.50	2.07	2.34	0.42	226.7	0	0	977.4	-8.4	71.4	12.196
2022-03-13 22:00	0.40	1.89	2.115	0.28	322.3	0	0	978.3	-8.4	72.2	12.159
2022-03-13 23:00	0.40	1.89	2.115	0.8	284.5	0	0	979.2	-8.9	73.2	12.1
2022-03-14 0:00	0.20	1.935	2.205	1.28	326.1	0	0	980	-8.8	78.2	12.048
2022-03-14 1:00	0.10	1.935	2.205	0.93	295.5	0	0	981.2	-9.5	71.8	12.003
2022-03-14 2:00	0.10	1.755	1.89	0.5	228.1	0	0	981.7	-12.5	70.5	11.954
2022-03-14 3:00	0.10	1.665	1.8	0.52	199.4	0	0	981.8	-15.9	71.9	11.912
2022-03-14 4:00	0.30	1.71	1.845	1.06	184.4	0	0	982	-16.6	75.6	11.881
2022-03-14 5:00	0.40	1.845	2.025	1.11	187.4	0	0	982.6	-15	79.4	11.848
2022-03-14 6:00	0.30	1.89	2.07	0.94	191.1	0	0	983.1	-15.5	76.7	11.824
2022-03-14 7:00	0.30	2.07	2.34	1.17	190.9	0	0	983.7	-14.6	77	11.854
2022-03-14 8:00	0.50	2.565	2.835	2.2	208.2	0	0	983.8	-11	74.7	12.202
2022-03-14 9:00	0.20	2.385	2.655	3.24	228.2	0	0	983.7	-8	64.1	13.014
2022-03-14 10:00	0.30	2.475	3.015	4.4	237.9	0	0	983.5	-6.4	58.6	12.987
2022-03-14 11:00	0.40	2.61	3.33	5.19	244.4	0	0	983.4	-5.6	55.7	13.814
2022-03-14 12:00	0.30	2.295	2.7	4.95	241.9	0	0	983.6	-4.4	51	14.568
2022-03-14 13:00	0.40	2.205	2.655	4.64	251.9	0	0	983.6	-3.8	47.5	14.611
2022-03-14 14:00	0.40	2.115	2.43	4.39	266.2	0	0	983.8	-3.6	45.6	14.583
2022-03-14 15:00	0.40	2.16	2.52	4.56	278.3	0	0	984.3	-3.6	44.5	14.34
2022-03-14 16:00	0.20	2.115	2.565	3.33	291.1	0	0	984.6	-3.7	44.9	13.694
2022-03-14 17:00	0.20	2.025	2.385	2.57	296.2	0	0	985.2	-3.8	44.7	12.947
2022-03-14 18:00	0.20	1.89	2.205	1.57	302.6	0	0	985.9	-4.5	45.1	12.444
2022-03-14 19:00	0.30	1.71	1.935	0.36	325.6	0	0	986.6	-6.7	49.4	12.375
2022-03-14 20:00	0.20	1.62	1.845	0.37	117.6	0	0	987.4	-11.3	63.4	12.322
2022-03-14 21:00	0.30	1.485	1.665	0.46	214.5	0	0	988.1	-14.1	62.9	12.266
2022-03-14 22:00	0.50	1.44	1.62	0.37	188.8	0	0	988.5	-16.4	69.4	12.224
2022-03-14 23:00	0.30	1.305	1.44	0.43	184.9	0	0	988.8	-18.4	66.4	12.179
2022-03-15 0:00	0.20	1.44	1.62	0.34	233.1	0	0	989	-18.8	64	12.138
2022-03-15 1:00	0.30	1.26	1.395	0.38	172.4	0	0	989.3	-20.7	63.7	12.096
2022-03-15 2:00	0.40	1.35	1.53	0.26	209.9	0	0	989.4	-21	61.5	12.055
2022-03-15 3:00	0.30	1.26	1.395	0.38	158.6	0	0	989.1	-22.6	62.3	12.011
2022-03-15 4:00	0.20	1.17	1.26	0.47	142.7	0	0	989.1	-23.7	65.8	11.966
2022-03-15 5:00	0.20	1.26	1.44	0.28	144	0	0	989.2	-22.4	67.1	11.923
2022-03-15 6:00	0.40	1.935	2.115	0.47	248.4	0	0	989.2	-20.9	66.7	11.881
2022-03-15 7:00	0.40	2.205	2.385	0.94	172.4	0	0	989.2	-17.8	74.2	12.008
2022-03-15 8:00	0.70	2.385	2.7	1.29	162.3	0	0	989.3	-12.6	73.4	13.02
2022-03-15 9:00	0.30	2.205	2.52	2.02	150.8	0	0	988.9	-8.6	61.6	14.422
2022-03-15 10:00	0.40	1.89	2.205	3.05	168.5	0	0	987.9	-4.5	42.7	14.63
2022-03-15 11:00	0.30	1.845	2.07	3.45	168.2	0	0	987	-2.1	35.1	14.603
2022-03-15 12:00	0.30	1.935	2.25	3.35	178.1	0	0	985.9	-1.3	36.5	14.305
2022-03-15 13:00	0.20	1.98	2.295	3.67	188.1	0	0	984.8	-1.2	42.6	13.436
2022-03-15 14:00	0.10	1.935	2.52	3.71	185.2	0	0	984.1	-2.4	64.4	13.61
2022-03-15 15:00	0.40	2.07	2.745	4.19	171.1	0	0	982.9	-3.4	80.2	12.633
2022-03-15 16:00	0.20	2.07	2.52	3.32	162	0	0	981.6	-3.6	86.8	12.413
2022-03-15 17:00	0.20	2.475	2.925	3.54	160.6	0	0	980.5	-3.2	85.6	12.353
2022-03-15 18:00	0.50	3.24	3.6	2.86	167.9	0	0	980.1	-2.9	84.1	12.298
2022-03-15 19:00	0.20	1.845	2.115	2.19	176.7	0	0	980	-2.6	83.1	12.254
2022-03-15 20:00	0.30	1.575	1.845	1.71	182.5	0	0	980	-2.3	81.2	12.217
2022-03-15 21:00	0.10	1.395	1.62	1.31	188.5	0	0	980.1	-2	76.9	12.18
2022-03-15 22:00	0.20	1.395	1.575	1.36	180	0	0	979.8	-3.1	75.3	12.129
2022-03-15 23:00	0.30	1.44	1.665	1.5	172.4	0	0	979.2	-3.7	74.5	12.091
2022-03-16 0:00	0.40	1.44	1.71	1.59	178.1	0	0	979	-4.1	73.4	12.033
2022-03-16 1:00	0.40	1.485	1.935	1.22	173.3	0	0	979.1	-5	74.1	11.994
2022-03-16 2:00	0.20	1.71	2.07	1.02	186.8	0	0	979.4	-6.5	77.2	11.951
2022-03-16 3:00	0.50	1.89	2.16	1.1	183.7	0	0	979.6	-7.2	79.3	11.919
2022-03-16 4:00	0.20	2.025	2.205	0.88	205.3	0	0	980	-6.9	79.1	11.894
2022-03-16 5:00	0.30	1.935	2.16	0.91	207.4	0	0	980.4	-7.3	80.8	11.876
2022-03-16 6:00	0.50	1.845	2.025	0.56	161.9	0	0	981	-8.4	80.5	11.863
2022-03-16 7:00	0.30	1.98	2.115	0.31	65.8	0	0	981.3	-7.9	81.2	11.87
2022-03-16 8:00	4.00	2.295	2.475	0.69	194.2	0	0	981.9	-5	78.8	11.856
2022-03-16 9:00	0.20	2.115	2.34	0.51	237.2	0	0	982	-2	69.9	11.886
2022-03-16 10:00	0.30	2.34	2.565	0.57	144.8	0	0	981.8	0.2	65.2	12.235
2022-03-16 11:00	0.10	2.52	2.88	1.87	161	0	0	981.7	0.5	66.3	12.741
2022-03-16 12:00	0.20	4.275	4.635	1.74	161.6	0	0	981.1	0.6	73.2	12.599
2022-03-16 13:00	0.10	3.06	3.375	1.7	154.6	0	0	980.4	0.4	81.5	12.611
2022-03-16 14:00	0.30	2.835	2.97	1.72	143.3	0	0	979.7	0.6	84.5	12.603
2022-03-16 15:00	0.60	2.34	2.475	1.43	124.7	0	0	979.2	0.6	86.3	12.345
2022-03-16 16:00	0.40	2.115	2.205	1.61	124.3	0	0	978.3	1	87.6	12.306
2022-03-16 17:00	0.20	2.565	2.7	1.37	138.8	0	0	977.7	1.7	88	12.125
2022-03-16 18:00	0.20	3.465	3.6	2.05	141.7	0.2	0	977.2	2.1	88.6	12.009
2022-03-16 19:00	0.40	3.78	3.96	2.51	147.4	1.3	0	976.7	2.6	87.9	11.926
2022-03-16 20:00	0.80	6.12	6.435	2.44	139.1	0.2	0	975.6	2.9	85.8	11.867
2022-03-16 21:00	0.40	6.885	7.2	2.72	152.2	0.7	0	975.1	2.6	86	11.834
2022-03-16 22:00	0.10	7.65	7.92	2.51	146	3.3	0	974.2	2.2	86.6	11.812
2022-03-16 23:00	0.20	12.33	12.645	2.96	157	1.1	0	973.7	2	86.5	11.788
2022-03-17 0:00	0.30	19.26	19.62	2.42	159.5	0	0	973.2	1.6	87.2	11.769
2022-03-17 1:00	0.30	26.19	26.595	2.29	164	0	0	972.6	1.3	87.4	11.744
2022-03-17 2:00	0.40	32.22	32.67	2.46	172.7	0	0	972	1.4	87.5	11.721
2022-03-17 3:00	0.30	37.26	37.71	2.24	176.3	0	0	971.6	1.6	87.9	11.698
2022-03-17 4:00	0.30	42.345	42.93	2.42	182.3	0	0	971.5	2	87.2	11.674
2022-03-17 5:00	0.40	43.335	43.965	1.74	188.6	0	0	971.7	1.6	87	11.652
2022-03-17 6:00	0.40	42.075	42.615	1.5	187.6	0	0	972.1	1.1	87	11.64
2022-03-17 7:00	0.20	39.33	39.915	1.32	215.1	0	0	972.6	1.7	85.9	11.69
2022-03-17 8:00	0.20	35.865	36.63	1.57	212.9	0	0	973	2.7	84.5	11.861
2022-03-17 9:00	0.30	30.015	31.05	1.85	261.3	0	0	973.7	4	81	12.231
2022-03-17 10:00	0.20	22.455	23.4	2.6	287.2	0	0	974.5	4.3	79.1	12.212
2022-03-17 11:00	0.10	24.075	25.2	2.75	292.4	0	0	975.1	4	80.2	12.152
2022-03-17 12:00	0.50	21.78	22.455	2.88	279.2	0	0	975.6	3.8	79.2	12.239

2022-03-17 13:00	0.40	18.945	19.575	2.38	297.1	0	0	975.9	3.8	79.9	12.218
2022-03-17 14:00	0.20	13.59	13.905	2.34	295.1	0	0	976.4	4	77.9	12.17
2022-03-17 15:00	0.30	8.55	8.73	2.19	312.6	0	0	977.1	3.9	76.7	12.073
2022-03-17 16:00	0.10	4.365	4.455	2.46	321.9	0	0	977.8	3.4	76.4	11.935
2022-03-17 17:00	0.20	2.925	3.015	2.76	335	0	0	978.7	1.9	82.2	11.822
2022-03-17 18:00	0.30	1.665	1.71	2.82	331.7	0	0	979.9	0.4	84.5	11.73
2022-03-17 19:00	0.30	1.575	1.62	2.36	343.4	0	0	980.8	-0.6	84.1	11.666
2022-03-17 20:00	0.40	1.08	1.125	1.76	350.9	0	0	981.4	-1.2	83.3	11.63
2022-03-17 21:00	0.20	0.63	0.63	1.76	348.4	0	0	982.1	-1.6	81.9	11.601
2022-03-17 22:00	0.30	0.99	0.99	1.94	344	0	0	982.5	-1.8	82.3	11.57
2022-03-17 23:00	0.10	1.755	1.8	1.93	339.7	0	0	983	-2.1	82.8	11.543
2022-03-18 0:00	0.10	1.845	1.935	2.24	340	0	0	983.5	-2.7	82.9	11.516
2022-03-18 1:00	0.30	1.575	1.665	1.78	350.7	0	0	984.1	-3	81.8	11.491
2022-03-18 2:00	0.20	1.845	1.935	1.67	356.7	0	0	984.6	-3.1	78.9	11.462
2022-03-18 3:00	0.10	2.16	2.295	1.67	12.5	0	0	985.1	-3.4	76.7	11.436
2022-03-18 4:00	0.20	2.43	2.52	1.53	21.1	0	0	985.5	-3.7	76.9	11.407
2022-03-18 5:00	0.50	2.43	2.565	1.4	1.8	0	0	986	-4	78.1	11.38
2022-03-18 6:00	0.30	2.115	2.25	1.62	38.4	0	0	986.8	-4.8	77.6	11.354
2022-03-18 7:00	0.40	1.8	1.935	1.13	5.3	0	0	987.6	-5.1	73.7	11.436
2022-03-18 8:00	0.40	1.665	1.845	1.2	29.8	0	0	988.5	-4.3	66.4	12.151
2022-03-18 9:00	0.30	1.44	1.575	0.84	84	0	0	989.3	-2.2	52.3	12.699
2022-03-18 10:00	0.20	1.395	1.575	1.11	98.8	0	0	989.5	-0.6	45.5	12.76
2022-03-18 11:00	0.50	1.35	1.485	1.43	50.5	0	0	988.8	0.7	39.3	12.837
2022-03-18 12:00	0.20	1.305	1.485	1.58	57.1	0	0	988.1	2.2	34.4	12.93
2022-03-18 13:00	0.20	1.305	1.575	1.78	80.7	0	0	987.3	3.6	31.3	13.047
2022-03-18 14:00	0.30	1.215	1.395	1.87	63.8	0	0	986.5	4.5	30	13.209
2022-03-18 15:00	0.10	1.035	1.215	1.65	60.6	0	0	986.2	5.2	29.9	13.506
2022-03-18 16:00	0.30	0.99	1.08	1.56	72.6	0	0	986.2	5.4	30.3	13.799
2022-03-18 17:00	0.20	0.99	1.125	1.34	98.4	0	0	986.2	4.8	31.8	12.828
2022-03-18 18:00	0.30	0.99	1.17	0.69	88.4	0	0	986	3.1	35.5	12.443
2022-03-18 19:00	0.40	1.08	1.305	0.63	60.4	0	0	985.6	0.7	41.6	12.358
2022-03-18 20:00	0.30	1.17	1.35	0.61	62	0	0	985.6	-0.6	46.6	12.312
2022-03-18 21:00	0.30	1.17	1.395	0.67	68.3	0	0	985.3	-1.1	49.6	12.263
2022-03-18 22:00	0.70	1.305	1.53	0.69	56.1	0	0	984.9	-1.7	52.2	12.22
2022-03-18 23:00	1.90	1.53	1.755	0.95	58.3	0	0	984.2	-2.1	54.2	12.172
2022-03-19 0:00	1.00	1.485	1.71	1.14	61	0	0	983.4	-2.3	54.9	12.128
2022-03-19 1:00	0.40	1.395	1.575	1.24	56.7	0	0	982.9	-2.4	55.2	12.09
2022-03-19 2:00	0.40	1.44	1.62	1.31	52.5	0	0	982.3	-2.9	56.8	12.052
2022-03-19 3:00	0.30	1.53	1.71	1.71	47.4	0	0	981.7	-2.9	57.1	12.01
2022-03-19 4:00	0.50	1.575	1.8	1.82	53	0	0	981.1	-2.8	56.9	11.982
2022-03-19 5:00	0.30	1.62	1.845	1.75	50.7	0	0	980.6	-2.7	56.3	11.956
2022-03-19 6:00	1.40	1.665	1.89	1.5	60.7	0	0	980	-2.8	56.6	11.932
2022-03-19 7:00	1.40	1.665	1.935	1.33	61.3	0	0	979.4	-2.6	55.8	11.953
2022-03-19 8:00	0.60	1.62	1.89	1.57	63.6	0	0	979.3	-1.4	52.6	12.092
2022-03-19 9:00	0.30	1.62	1.89	2	89.8	0	0	978.9	0.2	48.4	12.483
2022-03-19 10:00	0.40	1.62	1.89	1.7	44.5	0	0	978.1	1.9	46.9	12.931
2022-03-19 11:00	0.50	1.575	1.8	2.06	18.5	0	0	976.8	3.5	47.8	13.284
2022-03-19 12:00	0.20	1.485	1.71	2.37	25.3	0	0	975.6	4.8	47.6	13.1
2022-03-19 13:00	0.30	1.71	2.07	2.54	29	0	0	974.7	4.8	49.7	12.963
2022-03-19 14:00	0.10	1.845	2.43	2.53	39.1	0	0	974	4.5	51.7	12.685
2022-03-19 15:00	0.30	1.8	2.34	2.41	43.3	0	0	973.6	4.2	57	12.561
2022-03-19 16:00	0.30	1.755	2.16	2.34	59.9	0.1	0	973.7	2.9	68.1	12.386
2022-03-19 17:00	0.30	1.845	2.115	1.79	50.7	0.2	0	973.9	0.8	84.8	12.243
2022-03-19 18:00	0.40	1.845	1.98	1.32	30	0	0	974	0.1	87.3	12.176
2022-03-19 19:00	0.70	1.8	1.935	1.19	20.7	0	0	974.1	-0.2	88	12.123
2022-03-19 20:00	0.30	1.71	1.845	0.82	4.7	0	0	974.1	-0.2	87.6	12.074
2022-03-19 21:00	0.20	1.575	1.665	1.07	16.7	0	0	973.7	-0.2	87.8	12.017
2022-03-19 22:00	0.30	1.53	1.665	1.33	354.2	0	0	973.4	-0.2	87.7	11.968
2022-03-19 23:00	0.10	1.44	1.53	1.2	319.5	0	0	973.4	-0.1	86.1	11.936
2022-03-20 0:00	0.30	1.935	2.115	1.87	314.4	0	0	973.3	-0.3	87.2	11.906
2022-03-20 1:00	0.30	2.07	2.295	1.49	311.9	0	0	973.4	-0.4	86.8	11.888
2022-03-20 2:00	0.20	1.845	2.07	0.84	305.1	0	0	973.6	-0.6	84.9	11.88
2022-03-20 3:00	0.20	1.755	1.89	0.69	259.7	0	0	973.8	-1.5	83.2	11.858
2022-03-20 4:00	0.10	1.62	1.755	1.06	272.6	0	0	974.3	-2.8	81.8	11.821
2022-03-20 5:00	0.30	1.44	1.575	1.21	283.1	0	0	974.9	-3.6	77.4	11.79
2022-03-20 6:00	0.20	1.395	1.53	1.33	282.2	0	0	975.8	-4.5	76.3	11.769
2022-03-20 7:00	0.30	1.44	1.62	2.07	283.1	0	0	976.8	-4	75.2	11.768
2022-03-20 8:00	0.40	1.35	1.485	2.92	307.7	0	0	977.7	-1.6	74.8	11.911
2022-03-20 9:00	0.20	1.26	1.395	3.6	312.9	0	0	978.4	0.1	76.5	12.613
2022-03-20 10:00	0.20	1.035	1.125	3.45	315.1	0	0	978.9	1.9	70	13.019
2022-03-20 11:00	0.10	0.765	0.855	3.76	311.1	0	0	979.2	3.4	57.9	13.307
2022-03-20 12:00	0.20	0.72	0.81	4.68	303.1	0	0	979.2	4.6	48.1	13.977
2022-03-20 13:00	0.40	0.675	0.81	4.88	304.7	0	0	979.3	5.3	43.4	14.455
2022-03-20 14:00	0.40	0.675	0.81	4.52	296.8	0	0	979.2	6.3	39.8	14.574
2022-03-20 15:00	0.20	0.72	0.855	4.48	295.1	0	0	979.4	6.8	36.8	14.014
2022-03-20 16:00	0.20	0.72	0.81	3.61	296.1	0	0	979.7	6.5	36	13.112
2022-03-20 17:00	0.20	0.72	0.855	4.45	306.7	0	0	980.3	6.2	35.4	13.413
2022-03-20 18:00	0.40	0.855	1.08	3.84	319.4	0	0	981.2	4.3	42.2	12.615
2022-03-20 19:00	0.30	0.99	1.17	3.74	330.3	0	0	982.2	1.6	54.8	12.407
2022-03-20 20:00	0.20	1.17	1.305	1.66	315.1	0	0	982.7	-0.2	56.3	12.359
2022-03-20 21:00	0.20	1.17	1.26	1.09	275.6	0	0	983.1	-1.6	60	12.323
2022-03-20 22:00	0.40	1.53	1.62	2.4	323.9	0	0	983.7	-2.4	64.6	12.272
2022-03-20 23:00	0.20	1.845	1.935	1.57	296.6	0	0	984.1	-3.3	65.3	12.234
2022-03-21 0:00	0.30	1.755	1.845	2.52	297.5	0	0	984.7	-4.3	65.1	12.199
2022-03-21 1:00	0.30	1.575	1.755	3.8	306.9	0	0	985.2	-4.8	66	12.164
2022-03-21 2:00	0.30	1.035	1.17	3.91	306.1	0	0	985.7	-4.8	66.7	12.13
2022-03-21 3:00	0.10	1.125	1.26	3.39	301.4	0	0	986	-4.6	66.2	12.097
2022-03-21 4:00	0.30	1.485	1.665	3.8	299.7	0	0	986.5	-5.3	66.5	12.065
2022-03-21 5:00	0.30	1.935	2.115	2.87	302.1	0	0	987	-6.4	70	12.034
2022-03-21 6:00	0.20	2.115	2.34	2.74	299.9	0	0	987.6	-7.4	71.3	12.013

2022-03-21 7:00	0.40	2.34	2.925	3.83	301.1	0	0	988.3	-7.5	67.6	12.095
2022-03-21 8:00	0.30	2.16	2.655	3.79	310.5	0	0	989.1	-6.6	63.7	12.914
2022-03-21 9:00	0.20	2.115	2.745	4.08	314.2	0	0	989.5	-5.5	54.4	14.275
2022-03-21 10:00	0.20	2.565	3.285	4.1	317	0	0	989.8	-4.3	42.7	14.644
2022-03-21 11:00	0.40	3.375	4.14	4.27	314.7	0	0	990.1	-3.2	35.9	14.612
2022-03-21 12:00	0.50	2.925	3.6	4.31	320.2	0	0	990.3	-2.2	31.6	14.589
2022-03-21 13:00	0.50	2.34	2.88	4.3	316.5	0	0	990.5	-1.4	30.4	14.15
2022-03-21 14:00	0.30	1.665	2.16	3.57	322.4	0	0	990.4	-0.5	29.1	13.662
2022-03-21 15:00	0.30	1.665	2.07	3.83	320.9	0	0	990.3	-0.3	28.5	13.658
2022-03-21 16:00	0.30	1.665	1.935	3.71	317.6	0	0	990.6	-0.1	29.1	13.656
2022-03-21 17:00	0.20	1.665	1.98	3.46	316.5	0	0	990.9	-0.5	31.2	13.643
2022-03-21 18:00	0.30	1.485	1.755	2.72	321.7	0	0	991.2	-1.7	34.4	12.742
2022-03-21 19:00	0.30	1.665	1.98	2.12	322.5	0	0	991.6	-3.1	36.1	12.44
2022-03-21 20:00	0.20	1.53	1.755	2.04	330.4	0	0	992	-4.3	38.9	12.391
2022-03-21 21:00	0.10	1.395	1.575	1.75	330	0	0	992.3	-5.6	43	12.35
2022-03-21 22:00	0.30	1.305	1.44	1.38	327	0	0	992.6	-6.8	46.6	12.31
2022-03-21 23:00	0.30	1.35	1.485	1.01	328.3	0	0	992.9	-7.9	49.9	12.271
2022-03-22 0:00	0.10	1.35	1.44	0.71	285	0	0	993.4	-9.2	53.7	12.236
2022-03-22 1:00	0.10	1.35	1.44	0.79	250.3	0	0	994.1	-11.8	60	12.192
2022-03-22 2:00	0.30	1.62	1.845	1.11	257.5	0	0	994.9	-12.2	62.8	12.15
2022-03-22 3:00	0.20	1.8	2.025	1.11	327.8	0	0	994.7	-12.1	63	12.107
2022-03-22 4:00	0.30	2.025	2.25	1.09	347.5	0	0	994.4	-13.1	66.3	12.068
2022-03-22 5:00	0.40	2.16	2.385	0.74	299.3	0	0	994.9	-13.5	65.5	12.021
2022-03-22 6:00	0.20	2.115	2.295	0.54	287.6	0	0	995.3	-15	64.3	11.995
2022-03-22 7:00	0.30	2.43	2.61	0.78	348.2	0	0	994.9	-13.5	62.2	12.164
2022-03-22 8:00	0.30	3.105	3.555	1.48	355.6	0	0	995	-10.2	50.2	13.3
2022-03-22 9:00	0.40	3.105	3.6	1.15	39.5	0	0	995.3	-6.7	38	14.587
2022-03-22 10:00	0.20	2.79	3.285	1.46	69.5	0	0	995	-4.2	31.5	14.636
2022-03-22 11:00	0.50	2.475	3.015	1.13	188.1	0	0	995	-1.3	26.9	14.616
2022-03-22 12:00	0.40	2.205	2.88	1.25	340.3	0	0	994.9	0.8	23.2	14.6
2022-03-22 13:00	0.30	2.25	3.285	1.34	56.5	0	0	994.7	2.3	21.4	13.872
2022-03-22 14:00	0.30	1.98	2.745	1.54	45.5	0	0	994	3.2	20.7	13.674
2022-03-22 15:00	0.40	1.71	2.025	1.85	48.6	0	0	993.5	3.5	21.8	13.669
2022-03-22 16:00	0.40	1.485	1.71	1.96	67.1	0	0	993.3	3.3	25.1	13.647
2022-03-22 17:00	0.20	1.305	1.575	1.81	59.8	0	0	993	2.7	29.8	12.867
2022-03-22 18:00	0.40	1.485	1.89	0.73	41.4	0	0	993	1.4	33.2	12.561
2022-03-22 19:00	0.20	1.395	1.665	0.46	142.3	0	0	993.5	-1.2	45.6	12.494
2022-03-22 20:00	0.30	1.35	1.62	0.26	61.8	0	0	994	-2.1	51.7	12.454
2022-03-22 21:00	0.70	1.53	1.845	0.88	66.3	0	0	993.7	-2.7	49.7	12.399
2022-03-22 22:00	0.40	1.215	1.35	1.86	75.5	0	0	992.8	-2	50.1	12.343
2022-03-22 23:00	0.20	0.99	1.125	1.76	78.5	0	0	992.8	-2.3	54.5	12.308
2022-03-23 0:00	0.40	1.08	1.125	1.98	87.2	0	0	992.4	-2.8	56.9	12.268
2022-03-23 1:00	0.10	1.215	1.305	1.81	83.2	0	0	992.1	-3.4	58.7	12.231
2022-03-23 2:00	0.20	1.35	1.44	1.86	87.2	0	0	991.9	-3.9	59.6	12.189
2022-03-23 3:00	0.30	1.53	1.62	1.73	93.3	0	0	992	-4.2	60.6	12.158
2022-03-23 4:00	0.60	1.8	1.935	2.56	90.7	0	0	991.4	-4.8	62.2	12.101
2022-03-23 5:00	0.40	1.935	2.115	2.4	89.9	0	0	990.8	-5.3	63.2	12.069
2022-03-23 6:00	0.30	2.115	2.295	2.15	87.6	0	0	990.7	-5.7	63.7	12.043
2022-03-23 7:00	0.20	2.565	2.925	2.88	95.1	0	0	990.7	-5.1	60.3	12.096
2022-03-23 8:00	0.20	2.79	3.24	2.87	95.6	0	0	990.1	-4.1	55.4	12.453
2022-03-23 9:00	0.20	2.34	2.835	3.54	95.9	0	0	989.1	-2.7	50.7	12.787
2022-03-23 10:00	0.10	2.025	2.655	4.06	91.9	0	0	989.1	-1.7	47.6	13.079
2022-03-23 11:00	0.30	1.8	2.43	3.69	86.5	0	0	988.5	-0.7	44.9	13.444
2022-03-23 12:00	0.30	1.665	2.25	3.62	93.8	0	0	988	0.5	41.6	14.213
2022-03-23 13:00	0.50	1.575	2.115	4.65	94	0	0	986.5	1.3	38.3	14.498
2022-03-23 14:00	0.20	1.8	2.34	3.89	75.7	0	0	985.2	1.4	40.4	14.297
2022-03-23 15:00	0.20	2.025	2.79	3.89	75.5	0	0	984.4	1.1	41.7	13.652
2022-03-23 16:00	0.50	1.89	2.745	3.93	79.4	0	0	984.1	1.5	39.2	13.597
2022-03-23 17:00	0.30	1.71	2.34	3.17	85.1	0	0	983.9	1.4	38.4	12.834
2022-03-23 18:00	0.30	1.62	2.25	2.78	65.8	0	0	983.5	0.8	39.8	12.498
2022-03-23 19:00	0.30	1.44	1.98	2.66	72	0	0	983.4	0.4	41.2	12.425
2022-03-23 20:00	0.40	1.98	2.88	3.1	71	0	0	982.6	0.4	41.7	12.383
2022-03-23 21:00	0.40	1.8	2.295	2.84	66.3	0	0	981.8	0.2	43.1	12.34
2022-03-23 22:00	0.50	1.845	2.385	3.21	79.8	0	0	980.7	0.5	43.4	12.303
2022-03-23 23:00	0.40	1.89	2.34	2.88	89.8	0	0	979.5	0.4	44.9	12.261
2022-03-24 0:00	0.40	1.89	2.34	2.82	78.4	0	0	978	0.1	46.5	12.22
2022-03-24 1:00	0.40	1.845	2.25	2.51	80.1	0	0	977	0	48.1	12.178
2022-03-24 2:00	0.20	1.71	2.07	1.96	56.2	0	0	975.6	-0.2	49	12.125
2022-03-24 3:00	0.10	1.71	2.115	1.76	62.8	0	0	975	-0.1	49.4	12.086
2022-03-24 4:00	0.30	1.71	2.25	2	63.9	0	0	974.7	-0.1	52.6	12.055
2022-03-24 5:00	0.20	1.845	2.475	2.22	67.5	0	0	974	-0.2	58.5	12.028
2022-03-24 6:00	0.20	2.025	3.06	2.3	54.4	0	0	973.5	-1.2	72.5	12.011
2022-03-24 7:00	0.30	1.8	2.295	1.74	34.4	0	0	973	-2	88.2	11.999
2022-03-24 8:00	0.30	1.35	1.62	2.25	35.5	0	0	972.4	-1.6	89	12.01
2022-03-24 9:00	0.50	1.035	1.17	2.46	37.3	0	0	971.7	-1.2	88.5	12.263
2022-03-24 10:00	0.30	0.81	0.855	2.22	37.8	0	0	971	-0.9	88.3	12.684
2022-03-24 11:00	0.40	0.72	0.9	1.91	21	0	0	970.4	-0.7	87.6	12.838
2022-03-24 12:00	0.30	0.63	0.675	1.76	356	0	0	969.9	-0.2	85	13.069
2022-03-24 13:00	0.40	0.63	0.72	1.89	345.7	0	0	969.6	0.3	82.2	13.008
2022-03-24 14:00	0.30	0.63	0.72	2.45	337.4	0	0	969.1	0.4	82.4	13.265
2022-03-24 15:00	0.30	0.675	0.765	2.57	333.3	0	0	968.7	0.6	81.5	12.947
2022-03-24 16:00	0.20	0.675	0.765	1.95	337.5	0	0	968.9	1	78.7	12.633
2022-03-24 17:00	0.10	0.675	0.72	1.33	329.6	0	0	969.2	1.2	76.4	12.429
2022-03-24 18:00	0.20	0.675	0.81	1.26	308.7	0	0	969.3	0.9	75.8	12.334
2022-03-24 19:00	0.50	0.675	0.765	1.3	311	0	0	969.2	0.6	75.9	12.271
2022-03-24 20:00	0.30	0.675	0.765	1.22	301	0	0	969	0.4	75.3	12.223
2022-03-24 21:00	0.30	0.765	0.855	0.88	284.9	0	0	968.7	0.4	73.7	12.18
2022-03-24 22:00	0.20	0.765	0.855	0.72	286.5	0	0	968.3	0.4	73.4	12.135
2022-03-24 23:00	0.30	0.81	0.9	0.94	285.3	0	0	967.9	0.1	74.3	12.076
2022-03-25 0:00	0.20	0.855	0.99	0.94	301.3	0	0	967.5	-0.1	75.6	12.034

2022-03-25 1:00	0.30	0.9	1.035	0.94	287	0	0	967	-0.2	76.1	12.007
2022-03-25 2:00	0.10	0.945	1.08	1.27	309	0	0	966.2	-0.6	78.2	11.97
2022-03-25 3:00	0.30	0.945	1.08	1.02	307.2	0	0	965.6	-0.6	79	11.958
2022-03-25 4:00	0.20	0.945	1.08	0.96	288.3	0	0	965.4	-0.7	79.1	11.936
2022-03-25 5:00	0.30	0.9	0.99	1.25	282.3	0	0	965.2	-1	79.9	11.91
2022-03-25 6:00	0.30	1.035	1.17	1.11	284	0	0	965.2	-0.9	78.9	11.893
2022-03-25 7:00	0.20	1.125	1.26	1.41	302.2	0	0	965.1	-1.1	79.1	11.892
2022-03-25 8:00	0.30	1.035	1.125	1.27	299.7	0	0	964.6	-0.8	77	11.926
2022-03-25 9:00	0.20	1.035	1.125	1.35	313.2	0	0	964.1	-0.5	74.8	11.962
2022-03-25 10:00	0.30	1.89	2.16	1.59	308.4	0	0	963.6	-0.3	72.2	12.04
2022-03-25 11:00	0.40	1.26	1.395	1.58	290.1	0	0	963	0.1	69.7	12.216
2022-03-25 12:00	0.30	1.575	1.755	1.5	298	0	0	962.5	0.5	68.4	12.343
2022-03-25 13:00	0.30	1.71	1.89	1.45	314.2	0	0	962.1	0.5	71.4	12.422
2022-03-25 14:00	0.40	1.71	1.935	1.27	327.4	0	0	961.7	0.5	74.5	12.395
2022-03-25 15:00	0.40	1.62	1.8	1.04	328.9	0	0	961.8	0.5	74.9	12.321
2022-03-25 16:00	0.10	1.62	1.8	1.12	342.7	0	0	961.8	0.1	79.7	12.184
2022-03-25 17:00	0.30	1.755	1.89	0.86	320	0	0	962	0.2	78.6	12.011
2022-03-25 18:00	0.20	1.53	1.755	0.92	328.7	0	0	962.1	-0.1	80.3	11.886
2022-03-25 19:00	0.40	1.35	1.485	1.3	318.4	0	0	962.1	-0.7	83.2	11.842
2022-03-25 20:00	0.20	1.215	1.305	1.26	327	0	0	962.1	-1.3	83.6	11.814
2022-03-25 21:00	0.30	1.17	1.26	0.7	305.7	0	0	961.8	-1.1	81.5	11.815
2022-03-25 22:00	0.40	1.125	1.215	0.78	296.9	0	0	961.4	-1.3	81.5	11.796
2022-03-25 23:00	0.20	0.99	1.08	0.98	307.2	0	0	961.1	-1.6	82.6	11.765
2022-03-26 0:00	0.40	0.855	0.9	1.55	319	0	0	961	-1.9	84.5	11.73
2022-03-26 1:00	0.40	0.765	0.81	1.88	327.2	0	0	961.1	-2.2	85.4	11.706
2022-03-26 2:00	0.10	0.81	0.855	2.08	323.5	0	0	961.1	-2.5	85.3	11.682
2022-03-26 3:00	0.30	0.81	0.9	2.15	326	0	0	961.4	-2.5	85.5	11.661
2022-03-26 4:00	0.50	0.72	0.765	2.51	323.1	0	0	961.8	-2.5	84.9	11.636
2022-03-26 5:00	0.30	0.72	0.81	2.15	321.3	0	0	962.2	-2.6	84.9	11.609
2022-03-26 6:00	0.60	0.63	0.72	2.36	313.6	0	0	962.8	-2.6	85.2	11.587
2022-03-26 7:00	0.20	0.45	0.495	2.88	323.2	0	0	963.3	-2.4	84.4	11.568
2022-03-26 8:00	0.20	0.45	0.63	4.7	313.8	0	0	963.8	-3.1	83	11.572
2022-03-26 9:00	0.30	2.655	3.06	5.94	314.6	0	0	964.9	-5.4	79.6	11.602
2022-03-26 10:00	0.40	6.885	7.92	5.6	315.8	0	0	965.9	-6.5	73.6	11.9
2022-03-26 11:00	0.30	10.305	12.51	5.04	318.6	0	0	966.6	-7.1	73.9	12.183
2022-03-26 12:00	0.20	12.465	13.725	5.02	314.4	0	0	967.2	-7	69.2	12.186
2022-03-26 13:00	0.10	14.04	15.165	5.2	313.1	0	0	968	-8.1	67.2	12.058
2022-03-26 14:00	0.10	13.725	14.85	4.78	321.9	0	0	968.7	-8.7	65.7	12.045
2022-03-26 15:00	0.10	14.94	16.155	4.92	323.5	0	0	969.5	-9.5	64.6	11.959
2022-03-26 16:00	0.40	16.02	17.01	4.78	323.9	0	0	970.5	-10.4	63.7	11.814
2022-03-26 17:00	0.20	15.255	16.425	4.04	321	0	0	971.5	-10.7	65.4	11.682
2022-03-26 18:00	0.30	13.995	16.38	4.43	317.4	0	0	972.4	-11.6	70.2	11.552
2022-03-26 19:00	0.20	15.165	17.325	3.51	328	0	0	973.3	-12.7	75.3	11.499
2022-03-26 20:00	0.30	11.43	13.5	4.46	323.5	0	0	974.2	-13.9	69	11.465
2022-03-26 21:00	0.30	9.945	12.195	4.15	316.7	0	0	974.6	-14.6	70.1	11.434
2022-03-26 22:00	0.30	8.685	10.26	4.22	308	0	0	974.8	-15.6	67.5	11.401
2022-03-26 23:00	0.40	8.055	10.395	4.4	314.2	0	0	975.1	-16.6	67.1	11.368
2022-03-27 0:00	0.30	7.155	9.54	4.25	310.3	0	0	975.1	-17	69	11.334
2022-03-27 1:00	0.30	6.57	8.415	4.36	309.7	0	0	975.3	-17.7	68.4	11.3
2022-03-27 2:00	0.30	6.21	8.55	4.07	311.9	0	0	975.6	-18.4	68.3	11.265
2022-03-27 3:00	0.20	5.985	8.46	3.86	315.6	0	0	976	-19	68.1	11.251
2022-03-27 4:00	0.10	5.355	7.155	3.86	315.1	0	0	976.6	-19.3	67.4	11.25
2022-03-27 5:00	0.20	4.995	6.075	3.63	311.1	0	0	962.8	-19.2	67.1	11.227
2022-03-27 6:00	0.30	4.815	5.895	3.68	310.1	0	0	977.6	-19.6	67.3	11.203
2022-03-27 7:00	0.30	4.68	5.67	4.47	306.8	0	0	978	-19.4	64.8	11.235
2022-03-27 8:00	0.20	4.905	6.525	5.14	299.6	0	0	978.2	-19.1	63.2	11.422
2022-03-27 9:00	0.30	4.77	5.895	4.79	305.6	0	0	978.4	-18.7	60.1	12.014
2022-03-27 10:00	0.40	4.5	5.445	4.87	303.1	0	0	978.5	-17.6	57.4	12.797
2022-03-27 11:00	0.30	4.05	4.815	4.63	304.4	0	0	978.4	-16.5	55.2	13.148
2022-03-27 12:00	0.40	3.69	4.725	5.19	303.8	0	0	978.2	-15.4	53.8	13.431
2022-03-27 13:00	0.40	3.6	4.32	4.85	304.4	0	0	978.2	-14.5	52.1	13.465
2022-03-27 14:00	0.50	3.465	4.32	5.12	303	0	0	978.2	-13.9	50.8	13.402
2022-03-27 15:00	0.40	3.555	4.815	4.72	310.5	0	0	978.3	-13.6	53.4	13.39
2022-03-27 16:00	0.30	3.465	4.23	4.42	313	0	0	978.8	-13.4	50.7	12.76
2022-03-27 17:00	0.10	3.555	4.41	4.12	310.1	0	0	979.5	-13.6	53.9	12.308
2022-03-27 18:00	0.10	3.735	4.32	3.19	310.7	0	0	980.2	-14	55.2	12.061
2022-03-27 19:00	0.40	3.825	4.41	2.78	306.3	0	0	980.9	-14.6	61.3	11.97
2022-03-27 20:00	0.30	4.005	4.59	2.7	306.2	0	0	981.4	-15	66.6	11.908
2022-03-27 21:00	0.60	4.14	4.86	3.16	310.6	0	0	981.5	-15.3	67.2	11.858
2022-03-27 22:00	0.50	4.005	4.95	3.84	318.5	0	0	981.4	-15.8	65.6	11.807
2022-03-27 23:00	0.40	4.095	4.95	3.61	320	0	0	981.5	-16.3	64.8	11.761
2022-03-28 0:00	0.40	4.23	5.085	2.55	329.5	0	0	981.6	-16.8	69.9	11.716
2022-03-28 1:00	0.40	4.23	4.77	2.77	318.5	0	0	981.7	-17.1	68.7	11.676
2022-03-28 2:00	0.20	4.275	4.77	3.09	313.7	0	0	981.9	-17.5	68.5	11.637
2022-03-28 3:00	0.30	4.185	4.545	2.61	311.5	0	0	982.3	-18	69.5	11.599
2022-03-28 4:00	0.40	4.005	4.32	1.98	296.9	0	0	982.9	-18.6	71.4	11.558
2022-03-28 5:00	0.40	3.915	4.275	2.47	298.1	0	0	983.5	-18.6	72.1	11.519
2022-03-28 6:00	0.40	3.735	4.005	2.66	302.6	0	0	984.2	-18.4	70.9	11.497
2022-03-28 7:00	0.30	3.6	3.915	3.94	308.4	0	0	984.7	-17.8	65.4	11.555
2022-03-28 8:00	0.30	3.555	3.915	4.04	308.6	0	0	985.1	-16.9	59.5	11.86
2022-03-28 9:00	0.40	3.51	3.96	3.8	304.2	0	0	985.3	-15.2	55.1	12.563
2022-03-28 10:00	0.50	3.33	3.735	4.23	296.1	0	0	985.4	-13.4	50.9	13.246
2022-03-28 11:00	0.20	2.97	3.375	4.37	300.6	0	0	985.2	-11.8	44.7	13.511
2022-03-28 12:00	0.40	2.79	3.24	4.2	305.4	0	0	985	-10.3	38.3	13.599
2022-03-28 13:00	0.40	2.655	3.33	4.47	300.7	0	0	984.9	-9	34.8	13.67
2022-03-28 14:00	0.30	2.34	2.7	4.01	297.8	0	0	984.9	-7.9	31.4	13.837
2022-03-28 15:00	0.50	2.205	2.655	4.18	300.5	0	0	984.9	-7.3	29.2	14.498
2022-03-28 16:00	0.30	2.205	2.7	4.25	310.2	0	0	985.1	-7.1	27.8	14.648
2022-03-28 17:00	0.50	2.025	2.52	4.3	301.8	0	0	985.4	-7.1	28.4	14.189
2022-03-28 18:00	0.50	2.16	2.52	2.74	305.7	0	0	985.8	-7.8	29.2	12.673

2022-03-28 19:00	0.30	2.16	2.475	1.62	298.4	0	0	986.2	-9.7	32.4	12.381
2022-03-28 20:00	0.30	2.115	2.475	1.74	292.8	0	0	986.7	-11.3	36	12.313
2022-03-28 21:00	0.20	2.115	2.385	1.12	285.4	0	0	986.7	-12.6	38.4	12.257
2022-03-28 22:00	0.30	2.07	2.34	1.2	282.5	0	0	986.9	-13.7	40.2	12.213
2022-03-28 23:00	0.40	1.935	2.205	0.65	236.7	0	0	987	-15.5	42.7	12.169
2022-03-29 0:00	0.30	1.845	2.07	0.78	221	0	0	987.2	-17.8	48.2	12.126
2022-03-29 1:00	0.40	1.71	1.845	0.71	216.2	0	0	987.4	-19.2	52	12.086
2022-03-29 2:00	0.50	1.845	2.07	1.4	218.6	0	0	987.6	-18.7	52.1	12.045
2022-03-29 3:00	0.50	1.89	2.115	1.19	217.8	0	0	987.7	-19.1	52.7	12.007
2022-03-29 4:00	0.40	1.71	1.845	0.7	204.3	0	0	988.1	-21	56	11.971
2022-03-29 5:00	0.40	1.8	1.935	0.87	188.8	0	0	988.4	-21.6	57.9	11.935
2022-03-29 6:00	0.30	1.89	2.07	1.13	203.4	0	0	988.7	-20.7	55	11.925
2022-03-29 7:00	0.40	4.59	19.845	1.4	232.2	0	0	989	-16.9	47.6	12.116
2022-03-29 8:00	0.40	3.24	8.55	1.71	238.1	0	0	989.1	-11.8	36.1	13.175
2022-03-29 9:00	0.40	2.835	5.265	2.93	282.8	0	0	989.1	-8	30.3	14.568
2022-03-29 10:00	0.40	2.475	4.23	3.57	288.9	0	0	988.9	-6.1	29.5	14.637
2022-03-29 11:00	0.40	1.665	2.025	2.92	309.6	0	0	988.5	-4.5	26.9	14.61
2022-03-29 12:00	0.40	1.44	1.8	2.87	297.7	0	0	988.1	-3	25.1	14.596
2022-03-29 13:00	0.40	1.44	1.8	2.37	308.7	0	0	987.4	-1.5	22.9	13.944
2022-03-29 14:00	0.40	1.395	1.71	2.25	294.6	0	0	986.9	-0.3	22.2	13.68
2022-03-29 15:00	0.30	1.395	1.665	2.21	259.5	0	0	986.5	0.3	22.3	13.67
2022-03-29 16:00	0.10	1.35	1.62	2.17	250.7	0	0	986	0.8	21.8	13.661
2022-03-29 17:00	0.60	1.26	1.44	1.7	238.5	0	0	985.9	0.9	21.7	13.66
2022-03-29 18:00	0.30	1.17	1.395	0.9	272	0	0	985.9	0.3	23.1	12.811
2022-03-29 19:00	0.40	1.08	1.26	0.43	119.3	0	0	985.9	-3.8	32.3	12.471
2022-03-29 20:00	0.20	1.08	1.215	0.5	98.7	0	0	986	-5.9	37.5	12.412
2022-03-29 21:00	0.40	1.17	1.395	0.95	102.5	0	0	985.8	-5.8	34.3	12.345
2022-03-29 22:00	0.40	1.215	1.395	0.82	97.7	0	0	985.6	-6.5	35.2	12.303
2022-03-29 23:00	0.70	1.305	1.62	0.97	96.4	0	0	985.3	-7.5	37	12.253
2022-03-30 0:00	0.50	1.485	1.89	1.01	109.7	0	0	985	-8	37.6	12.212
2022-03-30 1:00	0.40	1.665	2.16	1.51	125.1	0	0	984.6	-7.6	37.5	12.169
2022-03-30 2:00	0.40	1.845	2.43	1.82	134.1	0	0	984.2	-7	37.3	12.137
2022-03-30 3:00	0.50	2.16	3.51	1.95	129.2	0	0	983.9	-6.1	38.4	12.098
2022-03-30 4:00	0.50	2.655	5.085	1.53	141.6	0	0	983.8	-5.8	41.4	12.068
2022-03-30 5:00	0.40	3.33	7.2	2.16	135.3	0	0	983.2	-5.9	44.3	12.044
2022-03-30 6:00	0.60	3.24	6.345	2.18	141.2	0	0	982.5	-5.8	44.9	12.023
2022-03-30 7:00	0.40	3.51	7.47	2.32	133.4	0	0	981.7	-5.4	43.5	12.053
2022-03-30 8:00	0.20	3.285	6.48	2.65	140.1	0	0	981.2	-4.6	40.7	12.187
2022-03-30 9:00	0.50	2.925	4.68	2.98	127.5	0	0	980	-3.3	37	12.53
2022-03-30 10:00	0.40	2.7	4.23	4.14	132.4	0	0	978.5	-1.3	31.6	12.901
2022-03-30 11:00	0.40	2.43	3.915	5.06	125.3	0	0	976.8	0	27.6	12.95
2022-03-30 12:00	0.30	2.475	3.69	4.39	122.3	0	0	975.7	-0.1	28.3	12.68
2022-03-30 13:00	0.40	2.925	7.65	5.19	128.6	0	0	975.1	-0.7	39.8	12.489
2022-03-30 14:00	0.40	2.745	4.905	3.79	124.8	0	0	974.3	-3.7	83.7	12.407
2022-03-30 15:00	0.30	2.7	4.14	4.06	105.9	0.1	0	972.4	-4.2	86.4	12.288
2022-03-30 16:00	0.20	2.34	3.51	4.41	107	0.2	0	970.3	-4.1	86.1	12.19
2022-03-30 17:00	0.40	2.025	2.565	3.15	120.4	0	0	970	-3.9	85.5	12.108
2022-03-30 18:00	0.50	1.755	2.07	3.38	123.6	0	0	969.5	-3.6	85.8	12.044
2022-03-30 19:00	0.50	1.26	1.485	3.53	127.8	0	0	968.7	-3.5	86.1	12.009
2022-03-30 20:00	0.30	1.08	1.26	2.87	127.2	0	0	967.8	-3.5	86.3	11.983
2022-03-30 21:00	0.40	1.08	1.215	2.74	129	0	0	967	-3.6	86.2	11.959
2022-03-30 22:00	0.50	1.035	1.17	1.74	125.9	0.2	0	966.9	-3.6	86.6	11.941
2022-03-30 23:00	0.50	1.125	1.215	1.41	98.2	0	0	965.6	-3.7	86.8	11.918
2022-03-31 0:00	0.40	1.305	1.485	1.57	86.2	0.1	0	964.3	-3.8	86.4	11.893
2022-03-31 1:00	0.60	1.395	1.53	1.21	63.3	2.2	0	963.4	-3.7	86.3	11.874
2022-03-31 2:00	0.40	1.305	1.44	1.21	43.3	1.6	0	962.2	-3.6	86.7	11.849
2022-03-31 3:00	0.20	1.17	1.35	1.06	33.6	1.9	0	961.3	-3.5	86.9	11.826
2022-03-31 4:00	0.20	1.08	1.305	1.21	9.1	2.1	0	960.3	-3.4	86.8	11.805
2022-03-31 5:00	0.30	0.855	0.99	1.74	15.5	3.8	0	959	-3.4	87.5	11.777
2022-03-31 6:00	0.40	0.765	0.9	2.1	19.6	6.1	0	958.4	-3.2	87.7	11.758
2022-03-31 7:00	0.20	0.675	0.855	2.05	14.4	6	0	957.6	-3.2	87.7	11.747
2022-03-31 8:00	0.30	0.765	0.945	2.21	8.1	4.2	0	956.4	-3.1	87.6	11.74
2022-03-31 9:00	0.30	0.81	1.035	2.56	7.3	1.5	0	954.9	-3.1	87.8	11.719
2022-03-31 10:00	0.30	0.81	1.035	2.52	359.7	0.2	0	953.9	-3	88.1	11.688
2022-03-31 11:00	0.30	0.72	1.125	3.37	348.2	0	0	952.7	-2.9	87.8	11.673
2022-03-31 12:00	0.40	0.585	1.305	3.99	350.4	0	0	951.8	-2.8	87.2	11.645
2022-03-31 13:00	0.50	0.63	1.485	4.41	344.8	0	0	951.4	-2.8	87.4	11.621
2022-03-31 14:00	0.50	0.54	1.8	5.34	336.7	0	0	951.9	-2.8	87.1	11.602
2022-03-31 15:00	0.30	0.315	1.125	5.69	328	0	0	953.3	-2.8	84.6	11.582
2022-03-31 16:00	0.30	0.18	0.45	5.04	318	0	0	955.4	-3.5	81.4	11.548
2022-03-31 17:00	0.50	0.18	0.36	4.94	317.5	0	0	957	-4	79.7	11.524
2022-03-31 18:00	0.20	0.27	0.585	4.64	311.5	0	0	959.1	-4.6	78.3	11.493
2022-03-31 19:00	0.60	0.36	0.675	4.48	313.2	0	0	961	-5.5	78	11.463
2022-03-31 20:00	0.60	0.45	0.63	4.24	312.2	0	0	962.4	-5.9	77.4	11.436
2022-03-31 21:00	0.30	0.36	0.495	3.61	314.1	0	0	963.1	-6	78.4	11.407
2022-03-31 22:00	0.50	0.27	0.45	3.42	310.4	0	0	964.4	-5.9	78.3	11.377
2022-03-31 23:00	0.30	0.45	0.495	3.78	309.1	0	0	965.9	-6.1	79.7	11.344
2022-04-01 0:00	0.40	0.495	0.63	3.41	310.7	0	0	966.4	-6.5	80.8	11.313
2022-04-01 1:00	0.50	0.63	0.72	3.63	312.4	0	0	967.1	-6.7	79.4	11.283
2022-04-01 2:00	0.30	0.945	1.08	3.7	309.8	0	0	967.7	-7.1	78.8	11.249
2022-04-01 3:00	0.30	0.765	0.9	3.77	312	0	0	968.2	-7.3	77.6	11.214
2022-04-01 4:00	0.40	0.81	1.035	3.62	314.8	0	0	969	-7.5	77.6	11.176
2022-04-01 5:00	0.40	1.17	1.395	3.68	308.7	0	0	969.9	-7.8	78.1	11.138
2022-04-01 6:00	0.40	1.215	1.485	3.7	313.6	0	0	971.1	-8.2	77.9	11.1
2022-04-01 7:00	0.60	1.665	2.025	3.94	310.1	0	0	972.2	-8.5	76.9	11.065
2022-04-01 8:00	0.70	1.89	2.385	3.99	306.5	0	0	973.1	-8.3	71.3	11.063
2022-04-01 9:00	0.40	1.845	2.565	4.49	309.6	0	0	973.9	-7.3	59.3	11.113
2022-04-01 10:00	0.70	1.665	2.34	4.55	308.2	0	0	974.5	-6	52.7	11.406
2022-04-01 11:00	0.30	1.26	1.71	4.53	311.3	0	0	975	-5.2	51.1	11.869
2022-04-01 12:00	0.60	1.17	1.71	4.65	321.7	0	0	975.3	-4.2	48.5	12.402

2022-04-01 13:00	0.70	1.125	1.575	4.33	312.1	0	0	975.8	-3.3	47.3	12.512
2022-04-01 14:00	0.50	1.215	1.575	4.44	318.8	0	0	976.2	-2.4	46.5	12.602
2022-04-01 15:00	0.70	1.08	1.53	4.06	310.5	0	0	977	-1.4	46.4	12.757
2022-04-01 16:00	0.40	1.035	1.44	3.9	305.6	0	0	977.7	-1.4	44.5	12.825
2022-04-01 17:00	0.50	1.215	1.62	3.82	301.4	0	0	978.4	-1.4	44.8	12.649
2022-04-01 18:00	0.30	1.17	1.485	1.85	294	0	0	978.8	-1.9	49.1	12.101
2022-04-01 19:00	0.50	1.17	1.485	1.06	247.5	0	0	979.5	-3.2	56.7	11.881
2022-04-01 20:00	0.40	1.17	1.395	0.85	223.9	0	0	980.2	-4.6	61.6	11.826
2022-04-01 21:00	0.50	1.215	1.44	1.03	226.5	0	0	980.6	-5.6	66.4	11.779
2022-04-01 22:00	0.40	1.17	1.395	0.95	206.3	0	0	980.9	-6.5	69.7	11.732
2022-04-01 23:00	0.40	1.215	1.44	1.35	203.1	0	0	981.2	-7.2	73.6	11.687
2022-04-02 0:00	0.50	1.17	1.395	1.22	194.9	0	0	981.2	-7.5	76	11.647
2022-04-02 1:00	0.40	1.17	1.395	1.08	196.8	0	0	981.3	-7.9	77.2	11.61
2022-04-02 2:00	0.50	1.17	1.305	1.23	193.2	0	0	981.5	-8.5	79.7	11.572
2022-04-02 3:00	0.40	1.17	1.35	1.27	183	0	0	981.6	-8.9	80.7	11.533
2022-04-02 4:00	0.50	1.17	1.35	1.42	176.7	0	0	981.6	-9.4	81.9	11.495
2022-04-02 5:00	0.40	1.395	1.575	1.47	173.1	0	0	981.4	-10.4	82.2	11.461
2022-04-02 6:00	0.40	1.44	1.575	1.58	175	0	0	981.4	-10.3	81.7	11.464
2022-04-02 7:00	0.50	1.35	1.62	1.83	180.3	0	0	981.6	-8.2	77.3	11.665
2022-04-02 8:00	0.60	1.44	1.89	2.35	198.6	0	0	981.5	-4.5	65.7	12.408
2022-04-02 9:00	0.60	1.395	1.755	2.54	206.1	0	0	981.4	-1	56.6	13.018
2022-04-02 10:00	0.50	1.485	1.8	2.75	204.4	0	0	980.8	1.8	50	13.041
2022-04-02 11:00	0.60	1.53	1.935	2.92	189.3	0	0	980.2	3.7	46.2	13.079
2022-04-02 12:00	0.40	1.62	2.16	3.22	198.3	0	0	979.8	4.6	44	13.143
2022-04-02 13:00	0.40	1.62	2.295	3.37	185.8	0	0	979.2	5	44.1	13.252
2022-04-02 14:00	0.30	1.665	2.565	3.83	196.5	0	0	979	5.1	43.9	13.169
2022-04-02 15:00	0.30	1.845	2.655	3.58	192.7	0	0	978.9	4.3	46.8	12.989
2022-04-02 16:00	0.30	1.98	2.475	3.74	176	0	0	979	3.1	60.7	12.716
2022-04-02 17:00	0.40	2.07	2.475	2.9	170	0	0	979.2	1.7	73.7	12.402
2022-04-02 18:00	0.30	2.115	2.475	1.94	171.9	0	0	979.2	0.7	82.4	12.251
2022-04-02 19:00	0.50	1.98	2.16	1.01	150.5	0	0	979.3	-0.1	86.4	12.178
2022-04-02 20:00	0.50	2.43	2.61	1.43	150.8	0	0	979.5	-0.2	87.5	12.134
2022-04-02 21:00	0.20	2.295	2.475	1.53	164.2	0	0	979.6	-0.2	87.5	12.092
2022-04-02 22:00	0.30	1.71	1.845	1.51	167.5	0	0	979.6	-0.4	87.8	12.058
2022-04-02 23:00	0.30	1.665	1.845	1.56	164.5	0	0	979.5	-0.5	88	12.022
2022-04-03 0:00	0.30	1.62	1.755	1.28	164	0	0	979.3	-0.5	87	11.991
2022-04-03 1:00	0.40	1.71	1.845	0.74	148.9	0	0	979.2	-0.3	84.6	11.965
2022-04-03 2:00	0.30	2.025	2.16	0.49	109.5	0	0	979.1	-0.5	84	11.95
2022-04-03 3:00	0.40	2.205	2.34	0.53	78.7	0	0	979.1	-0.8	85.2	11.925
2022-04-03 4:00	0.30	2.295	2.52	0.54	72.7	0	0	979.3	-1	86.3	11.899
2022-04-03 5:00	0.40	2.16	2.34	0.31	13.3	0	0	979.7	-0.9	85.4	11.879
2022-04-03 6:00	0.50	2.16	2.34	0.53	11	0	0	980.4	-1.1	86.2	11.844
2022-04-03 7:00	0.60	2.115	2.25	0.67	16.7	0	0	980.9	-0.6	85.6	11.84
2022-04-03 8:00	0.30	1.44	1.53	1.12	37.6	0	0	981.3	0	82.8	11.995
2022-04-03 9:00	0.30	0.765	0.855	1.55	55.9	0	0	981.7	0.4	79.2	12.384
2022-04-03 10:00	0.20	0.63	0.675	0.79	42.6	0	0	982	1.3	75.1	12.503
2022-04-03 11:00	0.50	0.81	0.9	0.98	109.3	0	0	982.3	2.7	69.2	12.984
2022-04-03 12:00	0.50	0.945	1.125	1.49	324	0	0	982.5	3.3	66.7	13.134
2022-04-03 13:00	0.40	1.125	1.215	1.46	336	0	0	982.3	3.9	62.9	13.352
2022-04-03 14:00	0.20	1.305	1.44	0.99	307.8	0	0	982.2	4.8	58.1	13.227
2022-04-03 15:00	0.20	1.305	1.44	1.04	178	0	0	982.3	4.9	56.8	12.897
2022-04-03 16:00	0.20	1.35	1.575	0.81	261.7	0	0	982.5	5.2	54.9	12.534
2022-04-03 17:00	0.50	1.485	1.755	1.42	325.5	0	0	982.7	4.6	59.4	12.347
2022-04-03 18:00	0.20	1.44	1.62	1.42	342.5	0	0	983.1	3.7	67.4	12.231
2022-04-03 19:00	0.20	1.395	1.53	0.91	8.1	0	0	983.6	2.4	73.8	12.179
2022-04-03 20:00	0.20	1.575	1.755	1.27	12.5	0	0	983.9	1.7	76.3	12.127
2022-04-03 21:00	0.30	1.53	1.665	1.42	350.9	0	0	984.1	0.7	76.2	12.084
2022-04-03 22:00	0.30	1.575	1.8	1.07	345.4	0	0	984.2	0.5	74.3	12.052
2022-04-03 23:00	0.20	1.53	1.71	0.66	304.4	0	0	984.2	0.1	73	12.023
2022-04-04 0:00	0.30	1.485	1.665	0.45	14	0	0	984.1	-2.2	81.3	11.987
2022-04-04 1:00	0.80	1.62	1.8	0.69	23.1	0	0	984.2	-2.7	81.6	11.936
2022-04-04 2:00	1.40	1.62	1.71	0.32	26.4	0	0	984.3	-3.1	78.9	11.911
2022-04-04 3:00	1.90	1.575	1.665	0.29	23.2	0	0	984.4	-4.6	81.2	11.88
2022-04-04 4:00	0.90	1.53	1.665	0.34	173.5	0	0	984.4	-5.9	79.8	11.845
2022-04-04 5:00	0.50	1.8	1.98	0.69	64.8	0	0	984.4	-6.3	83.7	11.812
2022-04-04 6:00	0.50	1.845	2.16	0.63	76.3	0	0	984.2	-6.1	80	11.823
2022-04-04 7:00	0.60	1.98	2.295	0.98	76.2	0	0	984.2	-4.9	75.9	11.987
2022-04-04 8:00	0.60	1.89	2.25	0.65	63.4	0	0	984.3	-2.5	66	12.212
2022-04-04 9:00	0.40	1.935	2.43	0.92	65	0	0	984.3	0	56.2	12.952
2022-04-04 10:00	0.20	1.8	2.16	1.28	109	0	0	983.9	3.2	45.8	13.842
2022-04-04 11:00	0.10	1.71	2.025	1.64	98.7	0	0	983.3	5.2	42.5	14.707
2022-04-04 12:00	0.20	1.62	1.935	2.49	66.3	0	0	982.6	5.3	42.7	14.654
2022-04-04 13:00	0.30	1.575	1.845	2.25	89.3	0	0	982	6.3	40.5	14.665
2022-04-04 14:00	0.20	1.395	1.665	1.78	138.7	0	0	981.6	6.8	37.8	14.435
2022-04-04 15:00	0.30	1.26	1.44	1.73	163.2	0	0	981	6.8	36.8	13.518
2022-04-04 16:00	0.10	1.26	1.485	1.88	162.2	0	0	980.7	6.7	37.4	13.457
2022-04-04 17:00	0.20	1.35	1.71	1.84	146.6	0	0	980.5	6.5	38.2	13.079
2022-04-04 18:00	0.40	1.35	1.575	1.08	124.1	0	0	980.3	5.8	40	12.611
2022-04-04 19:00	0.30	1.305	1.575	0.43	108.2	0	0	980.4	3.7	45.1	12.485
2022-04-04 20:00	0.20	1.35	1.71	0.75	99.7	0	0	980.5	2.1	49.5	12.427
2022-04-04 21:00	0.60	1.395	1.665	0.68	83.3	0	0	980.4	0.5	54.6	12.389
2022-04-04 22:00	0.20	1.35	1.62	0.61	84.9	0	0	980.4	-0.3	59.3	12.351
2022-04-04 23:00	0.20	1.44	1.8	0.82	97.7	0	0	980.4	-0.3	58.7	12.312
2022-04-05 0:00	0.40	1.62	1.845	0.64	92.4	0	0	980.5	-0.2	57.8	12.285
2022-04-05 1:00	0.40	1.755	2.025	0.68	66.3	0	0	980.5	-0.8	59.3	12.254
2022-04-05 2:00	0.60	1.665	1.98	0.89	90.5	0	0	980.6	-1.3	62.1	12.209
2022-04-05 3:00	0.20	1.755	2.07	0.76	79	0	0	980.6	-1.3	62.2	12.184
2022-04-05 4:00	0.30	1.935	2.295	0.89	94.2	0	0	980.6	-1.4	62.5	12.153
2022-04-05 5:00	0.30	1.845	2.16	0.78	96.3	0	0	980.8	-1.3	62.2	12.131
2022-04-05 6:00	0.50	1.8	2.16	0.71	62.4	0	0	981.2	-1.1	61.7	12.147

2022-04-05 7:00	0.50	1.935	2.385	1.09	145.9	0	0	981.4	0.6	55.2	12.364
2022-04-05 8:00	0.40	2.07	2.655	2.18	145.6	0	0	981.4	2.7	48.9	12.912
2022-04-05 9:00	0.30	1.8	2.295	3.16	148.9	0	0	981.4	5.1	46	14.132
2022-04-05 10:00	0.30	2.34	2.835	3.62	156.2	0	0	981.3	6.4	43.2	14.485
2022-04-05 11:00	0.30	2.43	2.97	3.45	151.7	0	0	980.9	6.9	40.8	14.306
2022-04-05 12:00	0.40	1.935	2.475	3.29	154.2	0	0	980.7	7.2	39.2	13.672
2022-04-05 13:00	0.40	1.665	2.16	3.19	157.2	0	0	980.4	7.7	37.9	13.665
2022-04-05 14:00	0.30	1.575	1.98	2.79	154.6	0	0	980.2	8.2	36.8	13.669
2022-04-05 15:00	0.10	1.485	1.8	2.7	114.5	0	0	979.7	8.9	34	13.672
2022-04-05 16:00	0.30	1.575	1.935	2.53	109.8	0	0	979.6	8.6	33.6	13.555
2022-04-05 17:00	0.20	1.53	1.845	2.36	111	0	0	979.8	8.5	33.3	12.872
2022-04-05 18:00	0.10	1.485	1.8	1.55	91.8	0	0	980.1	7.7	34.6	12.558
2022-04-05 19:00	0.20	1.485	1.755	1.08	75	0	0	980.4	6.2	37.2	12.472
2022-04-05 20:00	0.30	1.485	1.8	0.97	81	0	0	980.7	3.8	41.9	12.429
2022-04-05 21:00	0.50	1.53	1.89	1.03	76.3	0	0	980.7	2.1	46.8	12.388
2022-04-05 22:00	0.40	1.485	1.8	1.45	79.8	0	0	980.7	1.1	49.2	12.339
2022-04-05 23:00	0.10	1.53	1.845	1.57	82.3	0	0	980.5	0.6	49.9	12.298
2022-04-06 0:00	0.20	1.53	1.935	1.46	78.8	0	0	980	0	51.4	12.257
2022-04-06 1:00	0.30	1.485	1.89	1.22	72.8	0	0	980.1	-0.3	52	12.225
2022-04-06 2:00	0.60	1.44	1.71	1.32	68.1	0	0	980	-1.1	53.6	12.183
2022-04-06 3:00	0.30	1.485	1.8	1.37	74.1	0	0	979.9	-1.6	54.4	12.146
2022-04-06 4:00	0.40	1.575	1.89	1.31	68.7	0	0	980	-2.2	56	12.115
2022-04-06 5:00	0.50	1.53	1.89	1.89	72.6	0	0	979.4	-2.4	55.9	12.086
2022-04-06 6:00	0.30	1.44	1.8	2.06	82.2	0	0	980.3	-1.3	51.3	12.104
2022-04-06 7:00	0.20	1.485	3.69	3.03	90.4	0	0	980	1.5	41.1	12.288
2022-04-06 8:00	0.50	1.215	1.62	4.75	95.6	0	0	979.5	4.5	33	13.015
2022-04-06 9:00	0.40	1.215	1.62	4.89	95.9	0	0	979.9	6.6	28.9	14.162
2022-04-06 10:00	0.40	1.08	1.575	5.35	89.3	0	0	978.2	8.1	26	14.638
2022-04-06 11:00	0.30	1.125	1.665	5.16	92.2	0	0	977.8	9.1	25.5	14.268
2022-04-06 12:00	0.20	1.125	1.665	5.09	82.8	0	0	977	9.2	25.8	13.677
2022-04-06 13:00	0.40	1.125	1.71	4.64	86.2	0	0	977.2	9.4	25.5	13.665
2022-04-06 14:00	0.20	1.17	1.755	4.44	79.7	0	0	976.1	9.5	25.4	13.662
2022-04-06 15:00	0.30	1.215	1.89	4.3	73.5	0	0	974.9	8.9	26.6	13.43
2022-04-06 16:00	0.30	1.215	1.8	4.49	73.5	0	0	974.4	8.5	26.9	12.991
2022-04-06 17:00	0.40	1.395	2.025	4.06	73.3	0	0	973.7	7.8	27.8	12.619
2022-04-06 18:00	0.30	1.485	2.25	4.21	68.9	0	0	973.5	7.2	27.8	12.487
2022-04-06 19:00	0.30	1.53	2.205	4.32	71.2	0	0	973.3	6.8	27.4	12.433
2022-04-06 20:00	0.20	1.485	2.025	4.5	72	0	0	972.5	6.5	26	12.394
2022-04-06 21:00	0.30	1.35	1.935	4.49	77.6	0	0	971.7	6.1	25.2	12.357
2022-04-06 22:00	0.20	1.215	1.71	3.74	88.5	0	0	971.2	5.6	26.5	12.323
2022-04-06 23:00	0.30	1.35	2.25	4.47	91.2	1.1	0	970.9	2.3	61.6	12.276
2022-04-07 0:00	0.40	1.395	2.025	3.49	69.9	2.9	0	969.7	-0.1	87	12.234
2022-04-07 1:00	0.20	1.17	1.53	4.12	56.8	3.1	0	968.2	-0.2	88.5	12.189
2022-04-07 2:00	0.30	0.99	1.17	3.72	66	0.2	0	967.3	-0.2	90	12.148
2022-04-07 3:00	0.30	1.215	1.395	3.51	73.4	0	0	966.7	-0.1	90.2	12.114
2022-04-07 4:00	0.20	1.35	1.53	3.33	82.5	0	0	966.4	0	90.1	12.089
2022-04-07 5:00	0.30	1.215	1.395	2.96	84	0	0	966.4	0.1	90.2	12.062
2022-04-07 6:00	0.30	1.035	1.17	2.91	85.9	0	0	966.6	0.4	90.3	12.055
2022-04-07 7:00	0.20	1.08	1.215	3	91.9	0	0	967	0.9	90.3	12.078
2022-04-07 8:00	0.30	1.215	1.35	2.47	92.8	0	0	967.3	1.4	90.1	12.173
2022-04-07 9:00	0.50	1.44	1.62	2.65	92.5	0	0	967.5	2	89.7	12.357
2022-04-07 10:00	0.40	1.935	2.43	2.53	92.1	0	0	967.7	2.6	89.3	12.434
2022-04-07 11:00	0.30	2.25	2.88	2.06	90.2	0.1	0	967.9	3.1	88.9	12.49
2022-04-07 12:00	0.40	2.295	3.105	1.85	66.7	0	0	968.3	3.4	88.8	12.569
2022-04-07 13:00	0.10	2.79	3.735	1.82	80	0.9	0	968.3	3.8	88.8	12.525
2022-04-07 14:00	0.40	1.71	2.07	1.95	56.6	0.5	0	968.1	4.1	87.9	12.641
2022-04-07 15:00	0.30	1.845	2.295	1.8	54.4	0.9	0	968.4	3.6	89.2	12.426
2022-04-07 16:00	0.30	1.89	2.385	1.77	54	0.3	0	968.7	3.8	89.1	12.353
2022-04-07 17:00	0.30	2.43	3.06	1.7	54.1	0.3	0	969.1	3.5	88.9	12.191
2022-04-07 18:00	0.10	2.925	3.87	1.52	43.3	0.7	0	969.2	3.3	89.5	12.065
2022-04-07 19:00	0.10	2.565	3.33	1.05	39.8	1.5	0	969.4	3.1	89.5	12.02
2022-04-07 20:00	0.40	1.485	1.8	1.02	30.7	1.2	0	969.4	2.8	89.3	11.99
2022-04-07 21:00	0.30	1.125	1.395	0.96	5.3	3.9	0	969.1	2.7	88.8	11.97
2022-04-07 22:00	0.30	0.99	1.305	0.77	348.6	0.3	0	968.6	2.8	87.9	11.97
2022-04-07 23:00	0.30	0.99	2.025	0.7	348.3	0	0	968.2	2.7	88.2	11.96
2022-04-08 0:00	0.40	0.63	1.35	0.49	330.4	0	0	968.1	2.5	87.9	11.954
2022-04-08 1:00	0.20	0.45	0.585	0.35	328.2	0	0	967.9	2.3	87.3	11.93
2022-04-08 2:00	0.20	0.63	0.9	0.75	353	0	0	967.3	1.8	87.7	11.902
2022-04-08 3:00	0.20	0.675	0.945	0.42	328.9	0	0	967	1.7	87.9	11.89
2022-04-08 4:00	0.30	0.945	1.215	0.62	311.8	0	0	966.8	1.5	87.8	11.871
2022-04-08 5:00	0.10	0.9	1.125	0.56	306.3	0	0	966.7	1.4	87.3	11.847
2022-04-08 6:00	0.30	0.855	1.08	0.95	295.6	0	0	966.6	1	88.5	11.821
2022-04-08 7:00	0.10	0.225	0.315	1.48	300.2	0.4	0	966.6	0.6	88.3	11.827
2022-04-08 8:00	0.40	0.09	0.135	1.6	311.5	0	0	966.5	0.2	88.1	11.913
2022-04-08 9:00	0.40	0.09	0.135	1.81	314.1	0	0	966.4	0.4	86.9	12.143
2022-04-08 10:00	0.10	0.045	0.09	2.37	310.2	0	0	966.2	0.7	85.1	12.624
2022-04-08 11:00	0.30	0.045	0.09	3.19	306.6	0	0	966	0.9	82.9	12.809
2022-04-08 12:00	0.30	0.09	0.135	2.85	310.2	0	0	965.9	1.2	81.7	12.771
2022-04-08 13:00	0.20	0.27	0.27	3.25	294.3	0	0	965.9	0.8	81.5	12.719
2022-04-08 14:00	0.20	0.45	0.495	3.07	302.2	0	0	966.1	0.2	83.1	12.598
2022-04-08 15:00	0.20	0.63	0.675	2.96	310.6	0	0	966.4	0	81.5	12.724
2022-04-08 16:00	0.20	0.45	0.495	3.48	303.8	0	0	966.6	-0.6	82.8	12.551
2022-04-08 17:00	0.40	0.495	0.54	3.14	303.5	0	0	967.1	-1	82.5	12.413
2022-04-08 18:00	0.10	0.585	0.63	3.12	306.1	0	0	967.4	-1.8	81.7	12.193
2022-04-08 19:00	0.30	0.63	0.72	2.67	304.9	0	0	967.8	-2.5	82.5	12.106
2022-04-08 20:00	0.40	0.63	0.72	2.58	309.7	0	0	968.1	-3	82.6	12.058
2022-04-08 21:00	0.50	0.63	0.72	2.09	303.9	0	0	968	-3.3	82.4	12.005
2022-04-08 22:00	0.20	0.72	0.765	2.42	299.6	0	0	968	-3.6	82	11.953
2022-04-08 23:00	0.40	0.72	0.81	2.18	288.9	0	0	967.8	-3.9	82	11.905
2022-04-09 0:00	0.30	0.675	0.765	1.78	282.2	0	0	967.6	-3.8	82.2	11.86

2022-04-09 1:00	0.30	0.63	0.72	2.1	282.7	0	0	967.5	-4	82.9	11.82
2022-04-09 2:00	0.30	0.72	0.765	2.09	279.2	0	0	967.5	-4.2	82.3	11.789
2022-04-09 3:00	0.50	0.765	0.855	2.4	281	0	0	967.4	-4.3	82.1	11.761
2022-04-09 4:00	0.20	0.9	0.99	1.83	286.6	0	0	967.5	-4.4	82.3	11.738
2022-04-09 5:00	0.40	0.765	0.81	2.13	295.6	0	0	967.8	-4.4	81.9	11.711
2022-04-09 6:00	0.30	0.675	0.765	2.5	301.8	0	0	968.3	-4.7	79.8	11.704
2022-04-09 7:00	0.40	0.72	0.81	2.52	313.2	0	0	968.9	-4.8	80.2	11.718
2022-04-09 8:00	0.40	0.54	0.63	2.49	307.7	0	0	969.1	-4.2	76.6	11.751
2022-04-09 9:00	0.60	0.27	0.36	2.81	310.7	0	0	969.2	-3.6	74.3	12.104
2022-04-09 10:00	0.20	0.225	0.315	3.35	313.8	0	0	969.3	-3.5	74.3	12.565
2022-04-09 11:00	0.30	0.27	0.45	3.51	302.4	0	0	969.5	-3.4	71.6	13.002
2022-04-09 12:00	0.50	0.225	0.315	3.11	300.1	0	0	969.7	-2.9	69.4	13.013
2022-04-09 13:00	0.40	0.36	0.405	3.24	292.8	0	0	969.9	-2.7	69.4	12.911
2022-04-09 14:00	0.40	0.495	0.63	3.33	291.2	0	0	970.1	-2.8	69.3	12.898
2022-04-09 15:00	0.40	0.495	0.585	3.16	289.8	0	0	970.5	-2.6	70.8	12.814
2022-04-09 16:00	0.30	0.36	0.405	3.47	295.5	0	0	971.2	-2.7	70.5	12.76
2022-04-09 17:00	0.60	0.27	0.36	3.21	294.3	0	0	971.7	-2.9	69.9	12.55
2022-04-09 18:00	0.40	0.36	0.405	2.46	303.1	0	0	972.4	-3.2	72.5	12.207
2022-04-09 19:00	0.20	0.45	0.54	2.05	298.1	0	0	972.9	-3.4	74.2	12.133
2022-04-09 20:00	0.40	0.585	0.72	1.7	280.8	0	0	973.4	-3.5	77.8	12.083
2022-04-09 21:00	0.30	0.63	0.72	1.74	280.7	0	0	973.8	-3.7	80.6	12.039
2022-04-09 22:00	0.40	0.72	0.81	1.99	290.5	0	0	974.2	-3.6	80.9	11.995
2022-04-09 23:00	0.40	1.17	1.305	2.02	283.9	0	0	974.4	-3.6	81.6	11.957
2022-04-10 0:00	0.20	1.89	2.07	2.11	275.6	0	0	974.6	-3.6	84	11.918
2022-04-10 1:00	0.30	1.71	1.845	2.49	278.3	0	0	974.7	-3.3	84.2	11.88
2022-04-10 2:00	0.40	1.575	1.665	2.21	289.1	0	0	975	-3.1	84.4	11.842
2022-04-10 3:00	0.30	1.35	1.44	1.88	282.9	0	0	975.4	-2.9	83.3	11.805
2022-04-10 4:00	0.20	1.26	1.35	1.73	277.6	0	0	975.9	-2.9	82.7	11.764
2022-04-10 5:00	0.50	1.125	1.215	1.7	278.4	0	0	976.3	-2.8	81.8	11.73
2022-04-10 6:00	0.40	0.945	1.08	1.89	284.9	0	0	976.9	-2.7	79.2	11.738
2022-04-10 7:00	0.70	0.855	0.9	2.49	295.3	0	0	977.5	-2	73.1	11.902
2022-04-10 8:00	0.20	0.675	0.765	2.94	294.4	0	0	977.9	-0.7	65.3	12.713
2022-04-10 9:00	0.20	0.585	0.675	3.35	307	0	0	978.1	0.6	58.1	13.132
2022-04-10 10:00	0.40	0.495	0.54	3.99	295.2	0	0	978.4	1.3	57	13.267
2022-04-10 11:00	0.20	0.54	0.63	3.63	295.3	0	0	978.8	2.3	54.7	13.534
2022-04-10 12:00	0.40	0.585	0.945	3.03	307.8	0	0	978.6	3.2	51.6	14.357
2022-04-10 13:00	0.30	0.63	0.9	2.41	315	0	0	978.4	4.2	48	14.677
2022-04-10 14:00	0.50	0.675	1.08	1.94	328.9	0	0	978.3	5.6	42.6	14.642
2022-04-10 15:00	0.30	0.765	1.035	1.81	315.2	0	0	978.5	6.4	39.2	14.609
2022-04-10 16:00	0.40	0.81	1.035	1.5	336.6	0	0	978.3	6.9	39.5	14.131
2022-04-10 17:00	0.70	0.81	0.99	0.9	201.5	0	0	978.3	7.7	37.3	13.677
2022-04-10 18:00	0.40	0.81	0.99	0.58	115	0	0	978.5	6.8	37.9	12.949
2022-04-10 19:00	0.30	0.765	0.9	0.27	11.4	0	0	978.8	3.1	51.3	12.554
2022-04-10 20:00	0.40	0.81	0.99	0.87	84	0	0	979.1	0	58.2	12.478
2022-04-10 21:00	0.20	0.72	0.855	0.55	86	0	0	979.3	-0.2	60.3	12.446
2022-04-10 22:00	0.30	0.72	0.9	0.74	89.3	0	0	979.3	-0.9	63.5	12.401
2022-04-10 23:00	0.30	0.9	1.035	1.53	103.4	0	0	978.7	-0.9	64.6	12.344
2022-04-11 0:00	0.30	0.99	1.125	1.82	142.3	0	0	979.3	-0.4	62.2	12.311
2022-04-11 1:00	0.40	1.215	1.44	1.91	130.5	0	0	979.8	-0.7	64.3	12.272
2022-04-11 2:00	0.20	1.08	1.35	2.23	131.5	0	0	979.4	-0.7	65.2	12.246
2022-04-11 3:00	0.20	0.945	1.215	1.98	119.8	0	0	978.4	-0.2	64.1	12.222
2022-04-11 4:00	0.30	1.215	1.485	2.07	134.8	0	0	977.9	-0.5	65.4	12.195
2022-04-11 5:00	0.30	1.17	1.485	2.3	130.3	0	0	977.3	-0.7	66.8	12.165
2022-04-11 6:00	0.30	1.125	1.71	2.52	138.1	0	0	977	-0.1	63	12.191
2022-04-11 7:00	0.40	1.215	2.25	3.42	134.6	0	0	975.5	1	56.6	12.359
2022-04-11 8:00	0.40	1.26	2.745	4.05	140.3	0	0	973.9	2.3	53.2	12.645
2022-04-11 9:00	0.30	1.26	2.61	4.89	138.6	0	0	972.4	3.1	51.6	12.83
2022-04-11 10:00	0.50	1.26	2.385	5.56	140.7	0	0	971.3	4.7	46.4	13.524
2022-04-11 11:00	0.20	1.305	2.52	5.93	148.6	0	0	969.7	7.2	37.9	14.232
2022-04-11 12:00	0.40	1.71	3.105	6.24	153.7	0.1	0	968.7	8.3	34.5	13.946
2022-04-11 13:00	0.50	2.16	3.735	6.21	159.6	0	0	967.9	8.5	36	13.832
2022-04-11 14:00	0.40	3.06	5.805	7.24	167.2	0	0	967.2	9.3	39.5	14.126
2022-04-11 15:00	0.40	3.645	6.93	6.66	176.3	0	0	967.1	9.9	40.7	13.659
2022-04-11 16:00	0.20	3.555	5.76	5.6	183.6	0	0	967.2	10.1	42.2	13.577
2022-04-11 17:00	0.20	3.15	4.5	5.01	183.1	0	0	967.4	9.7	43.4	13.227
2022-04-11 18:00	0.20	2.34	3.33	4.94	213.1	0	0	968.4	9	43.7	12.632
2022-04-11 19:00	0.20	1.485	2.385	6.33	228.7	0	0	970.1	6.5	48.6	12.456
2022-04-11 20:00	0.30	1.35	1.845	5.14	223.9	0	0	971.8	4.7	54.2	12.41
2022-04-11 21:00	0.20	1.26	1.62	3.72	197.6	0	0	972.1	3.7	58.4	12.37
2022-04-11 22:00	0.20	1.08	1.35	4.18	204.1	0	0	972.7	3.3	61.2	12.329
2022-04-11 23:00	0.30	1.035	1.26	4.32	218.4	0	0	973.3	3.2	62.4	12.286
2022-04-12 0:00	0.30	1.125	1.44	4.19	226.7	0	0	973.8	3	62.2	12.245
2022-04-12 1:00	0.20	1.17	1.485	3.26	225.1	0	0	974.1	2.3	64.1	12.206
2022-04-12 2:00	0.30	1.215	1.53	2.84	219.8	0	0	974.4	1.5	66.5	12.175
2022-04-12 3:00	0.40	1.26	1.485	2.45	220.6	0	0	975	1	67.2	12.151
2022-04-12 4:00	0.30	1.305	1.575	1.88	202.9	0	0	975.6	0.1	69.1	12.132
2022-04-12 5:00	0.30	1.305	1.53	2.23	206	0	0	976.3	-0.2	70.2	12.107
2022-04-12 6:00	0.40	1.44	1.71	3.2	226.3	0	0	977.3	0.7	65.8	12.121
2022-04-12 7:00	0.30	1.44	1.935	4.03	248.5	0	0	978.4	2.8	56.2	12.219
2022-04-12 8:00	0.30	1.44	2.16	4.29	257.2	0	0	978.6	4.8	44.8	12.958
2022-04-12 9:00	0.30	1.395	2.205	4.77	231.2	0	0	978.6	6.4	37.8	13.818
2022-04-12 10:00	0.30	1.62	2.79	5.98	243.7	0	0	978.7	7.5	34.9	14.534
2022-04-12 11:00	0.30	1.71	3.105	6.92	253.5	0	0	978.9	8.2	33.4	14.376
2022-04-12 12:00	0.40	1.485	2.475	6.8	257.6	0	0	979.3	8.8	30.4	13.983
2022-04-12 13:00	0.20	1.395	2.43	6.15	251.4	0	0	979.6	9.6	27.2	13.667
2022-04-12 14:00	0.20	1.08	1.89	5.88	272	0	0	979.8	10.3	24.6	13.669
2022-04-12 15:00	0.30	1.08	1.62	5.32	274.4	0.1	0	980	10.7	22.8	13.664
2022-04-12 16:00	0.30	1.35	1.935	4.48	271.6	0	0	980	11	21.6	13.659
2022-04-12 17:00	0.20	1.53	2.475	4.19	271.3	0	0	979.9	10.8	21.2	13.653
2022-04-12 18:00	0.10	1.62	2.88	2.54	271.5	0	0	979.7	9.4	22.5	12.75

2022-04-12 19:00	0.20	1.53	2.475	0.88	240.7	0	0	980.4	7.1	24.9	12.532
2022-04-12 20:00	0.30	1.44	2.25	0.8	236.4	0	0	981.1	4.8	30.4	12.484
2022-04-12 21:00	0.20	1.35	2.07	1	199.9	0	0	981	2.5	40.1	12.436
2022-04-12 22:00	0.10	1.44	2.34	0.77	225.2	0	0	981.5	2.6	37.7	12.408
2022-04-12 23:00	0.30	1.53	2.34	0.89	221.6	0	0	981.9	1.3	42	12.366
2022-04-13 0:00	0.30	1.44	2.07	0.42	195.4	0	0	982.1	0.8	45	12.348
2022-04-13 1:00	0.30	1.35	1.845	0.35	58.9	0	0	981.8	-0.9	56.3	12.316
2022-04-13 2:00	0.30	1.35	1.8	0.65	305.5	0	0	981.8	-2	63	12.27
2022-04-13 3:00	0.30	1.26	1.98	1.17	8	0	0	981.6	-2.1	57	12.215
2022-04-13 4:00	0.50	1.035	1.26	1.58	24.1	0	0	981.4	-1.8	59.2	12.172
2022-04-13 5:00	0.60	0.9	1.125	1.91	35.7	0	0	981.1	-1.3	60.4	12.136
2022-04-13 6:00	0.30	0.855	1.17	1.77	49.4	0	0	980.8	-0.6	60.3	12.139
2022-04-13 7:00	0.20	0.765	1.035	1.64	51.3	0	0	980.7	0	58.4	12.158
2022-04-13 8:00	0.20	0.765	0.99	2.13	57.2	0	0	980.4	0.6	56.7	12.206
2022-04-13 9:00	0.40	0.765	1.035	2.54	58.7	0	0	980	1.4	54.7	12.415
2022-04-13 10:00	0.20	0.765	1.17	2.36	95.7	0	0	980.3	2.8	50.3	12.687
2022-04-13 11:00	0.20	0.9	1.35	1.98	106.4	0	0	980.1	3.5	47.4	12.897
2022-04-13 12:00	0.00	0.945	1.44	1.94	79	0	0	979.6	4.2	45.2	13.159
2022-04-13 13:00	0.40	0.945	1.395	2.28	76.1	0	0	979.3	5	43.6	13.137
2022-04-13 14:00	0.20	0.945	1.44	1.98	63.1	0	0	978.7	5.8	41.5	13.193
2022-04-13 15:00	0.30	0.945	1.485	2.21	77.2	0	0	978.2	6.3	40.5	13.055
2022-04-13 16:00	0.40	0.99	1.53	2.29	101	0	0	977.8	6.2	41.1	12.954
2022-04-13 17:00	0.10	1.08	1.71	2.42	96.5	0	0	977.2	6	42.2	12.712
2022-04-13 18:00	0.20	1.26	1.935	1.61	86.7	0	0	977	5	46.1	12.456
2022-04-13 19:00	0.20	1.62	2.295	1.48	90.4	0	0	976.6	3.8	57.7	12.379
2022-04-13 20:00	0.50	1.755	2.565	2.04	58.9	0	0	976.5	3.5	59	12.316
2022-04-13 21:00	0.30	1.845	2.745	2.93	55.9	0	0	975.6	3.4	57.8	12.244
2022-04-13 22:00	0.30	1.26	1.8	3.16	50.9	0	0	974.7	2.6	61.5	12.179
2022-04-13 23:00	0.40	0.63	0.9	3.76	45	0	0	973.6	1.9	62	12.14
2022-04-14 0:00	0.20	0.675	0.9	3.43	46.7	0	0	972.5	1.4	64.3	12.105
2022-04-14 1:00	0.30	0.72	0.945	3.69	49.4	0	0	971.1	0.9	66.2	12.085
2022-04-14 2:00	0.20	0.81	1.035	3.56	52.3	0.1	0	968.9	0.2	75.6	12.061
2022-04-14 3:00	0.40	1.125	1.35	3.2	52.2	0.9	0	966.6	0.1	86	12.044
2022-04-14 4:00	0.30	1.125	1.305	3.56	72.4	0.1	0	964.4	1.1	88.3	12.022
2022-04-14 5:00	0.20	0.855	0.945	4.06	84.2	0	0	962.9	1.6	88.6	11.998
2022-04-14 6:00	0.20	0.63	0.675	4.28	92.8	2.8	0	961.3	2	89.1	11.983
2022-04-14 7:00	0.30	0.495	0.63	3.62	101.1	5.6	0	960.3	2.4	89.3	11.968
2022-04-14 8:00	0.20	0.27	0.36	2.8	123.1	1.6	0	960.3	2.9	89.1	12
2022-04-14 9:00	0.20	0.18	0.27	2.83	126.9	0.1	0	959.7	3.8	88.7	12.254
2022-04-14 10:00	0.40	0.225	0.315	3.5	171.6	0	0	960.5	4.7	87.6	12.455
2022-04-14 11:00	0.10	0.18	0.27	4.13	195.6	0	0	961.3	5.3	81.9	12.662
2022-04-14 12:00	0.20	0.405	0.495	4.41	211.2	0	0	962.5	4.6	74.8	12.946
2022-04-14 13:00	0.10	0.72	1.035	4.89	214.5	0.1	0	963.4	4.8	66	13.16
2022-04-14 14:00	0.30	1.035	1.395	4.65	211.3	0	0	964	5.8	52.9	13.186
2022-04-14 15:00	0.20	0.63	0.9	5.1	203.3	1.3	0	965.1	4.5	65.2	13.066
2022-04-14 16:00	0.10	1.935	3.24	4.77	209	0	0	966.5	3.9	54.5	13.053
2022-04-14 17:00	0.10	3.195	6.255	3.44	211.3	0	0	967.2	4	45	12.656
2022-04-14 18:00	0.20	2.52	4.77	3.7	205.4	0	0	967.5	3.7	41.1	12.47
2022-04-14 19:00	0.10	2.07	3.87	2.15	187.5	0	0	968	2.8	40.8	12.35
2022-04-14 20:00	0.20	2.295	4.59	3.16	206.9	0	0	968.8	2.5	41.6	12.29
2022-04-14 21:00	0.20	2.25	4.275	2.61	193.5	0	0	969.2	1.4	45	12.245
2022-04-14 22:00	0.20	2.205	4.05	2.95	176.8	0	0	969.2	0.2	48.7	12.201
2022-04-14 23:00	0.50	2.925	5.67	3.33	178	0	0	969.1	0.1	51.6	12.157
2022-04-15 0:00	0.40	2.61	4.815	3.5	177.1	0	0	969.1	-0.4	54.2	12.115
2022-04-15 1:00	0.10	2.295	4.32	3.05	171.1	0	0	968.7	-1.3	62.3	12.072
2022-04-15 2:00	0.20	2.52	4.635	3.15	160.9	0	0	968.3	-1.7	66.3	12.027
2022-04-15 3:00	0.40	2.565	4.725	3.48	162.1	0	0	968	-1.7	68.5	11.985
2022-04-15 4:00	0.20	2.43	4.86	3.47	163.1	0	0	967.6	-2	72	11.955
2022-04-15 5:00	0.30	2.61	5.22	3.44	167.1	0	0	967.6	-2	73.2	11.93
2022-04-15 6:00	0.20	2.79	5.85	3.82	166.2	0	0	967.6	-1.6	71.9	11.968
2022-04-15 7:00	0.40	2.745	5.715	4.63	172.7	0	0	967.5	-0.5	68.2	12.171
2022-04-15 8:00	0.20	2.34	4.5	4.64	184.7	0	0	967	0.5	61.1	12.579
2022-04-15 9:00	0.30	1.8	3.42	4.23	185.3	0	0	966.9	0.9	57.8	12.669
2022-04-15 10:00	0.30	1.35	2.385	4.38	192.2	0	0	966.5	2.2	48.7	13.305
2022-04-15 11:00	0.20	1.26	2.385	5.19	179.1	0	0	966.1	1.8	52.1	13.656
2022-04-15 12:00	0.60	0.9	2.025	4.83	185.4	0.3	0	966.5	0.2	69.6	13.393
2022-04-15 13:00	0.30	0.36	0.9	3.81	212.7	0.1	0	966.9	-0.3	76.4	14.068
2022-04-15 14:00	0.40	0.45	1.035	4.54	203.4	0.1	0	967.1	-0.6	73.1	14.052
2022-04-15 15:00	0.30	0.36	0.855	3.65	217.7	0	0	967.2	0.4	63.8	14.574
2022-04-15 16:00	0.40	0.315	0.54	4.93	210.8	0	0	967.3	1.8	42.4	14.544
2022-04-15 17:00	0.30	0.315	0.63	4.29	202.5	0	0	967.7	1.1	46	13.655
2022-04-15 18:00	0.30	0.36	0.765	3.46	211.4	0	0	968.3	0.7	43.9	12.589
2022-04-15 19:00	0.40	0.405	0.675	3.89	236.2	0	0	969.2	0.1	38.9	12.441
2022-04-15 20:00	0.20	0.45	0.765	3.58	236.1	0	0	970.2	-1.1	48.2	12.39
2022-04-15 21:00	0.30	0.405	0.72	3.29	238.5	0	0	970.7	-1.4	54.4	12.351
2022-04-15 22:00	0.30	0.36	0.765	3.66	242.3	0	0	971.2	-1.6	57.1	12.315
2022-04-15 23:00	0.20	0.405	0.81	3.43	244.2	0	0	971.7	-2	55.5	12.28
2022-04-16 0:00	0.20	0.495	0.945	4.08	234.4	0	0	972	-2.5	58.4	12.245
2022-04-16 1:00	0.30	0.585	1.035	3.95	235.5	0	0	972.3	-3	61.4	12.216
2022-04-16 2:00	0.40	0.675	1.17	3.07	235	0	0	972.7	-3.6	66.8	12.181
2022-04-16 3:00	0.40	0.63	1.035	1.98	215.6	0	0	973	-4.1	69.4	12.147
2022-04-16 4:00	0.30	0.63	0.945	1.32	200.5	0	0	973.4	-4.9	71.4	12.11
2022-04-16 5:00	0.30	0.72	0.945	3.59	260	0	0	974	-4.1	67	12.069
2022-04-16 6:00	0.30	0.855	1.125	2.99	262.8	0	0	974.9	-4.4	65	12.117
2022-04-16 7:00	0.30	0.9	1.35	3.93	270.4	0	0	975.5	-4.3	66.3	12.391
2022-04-16 8:00	0.30	0.72	0.99	3.53	265	0	0	975.9	-3.6	58.7	12.937
2022-04-16 9:00	0.30	0.72	1.035	3.43	283.3	0.1	0	976.3	-3.5	58.6	13.085
2022-04-16 10:00	0.30	0.72	1.035	3.08	256.9	0	0	976.8	-3	55.1	13.267
2022-04-16 11:00	0.30	0.675	0.9	3.38	259.1	0	0	977.1	-2.3	50.1	13.661
2022-04-16 12:00	0.10	0.72	0.9	3.52	241	0	0	977.6	-2.1	50.4	14.401

2022-04-16 13:00	0.20	0.675	0.855	3.09	257.3	0	0	978.1	-1.6	46.7	14.575
2022-04-16 14:00	0.20	0.585	0.72	2.44	293.3	0	0	978.4	-1.3	43.9	13.88
2022-04-16 15:00	0.30	0.54	0.675	2.6	280.7	0	0	978.9	-0.9	43.1	13.638
2022-04-16 16:00	0.20	0.765	0.945	3.25	294	0	0	979.8	-1	44.1	13.224
2022-04-16 17:00	0.60	0.9	1.08	2.68	318.5	0	0	980.7	-1.5	48.6	12.627
2022-04-16 18:00	0.30	0.855	1.035	2.42	327.3	0	0	981.6	-1.8	49	12.464
2022-04-16 19:00	0.20	1.035	1.215	2.8	327.9	0	0	982.6	-2.2	53.4	12.392
2022-04-16 20:00	0.30	1.305	1.575	2.16	319	0	0	983.6	-3	58.9	12.355
2022-04-16 21:00	0.20	1.575	1.8	2.11	311.5	0	0	984.6	-3.9	62.1	12.313
2022-04-16 22:00	0.20	1.98	2.16	1.99	315	0	0	985.3	-4.6	65.9	12.273
2022-04-16 23:00	0.30	1.53	1.89	2.22	311.6	0	0	985.9	-4.8	72.3	12.234
2022-04-17 0:00	0.20	1.395	1.575	2.19	303.3	0	0	986.3	-5	79.8	12.191
2022-04-17 1:00	0.30	1.305	1.44	1.95	298.9	0	0	986.6	-5	81.6	12.148
2022-04-17 2:00	0.30	1.665	1.935	2.66	307.4	0	0	987.3	-4.8	83	12.094
2022-04-17 3:00	0.30	2.97	3.285	3.44	315.4	0	0	988.2	-4.9	85.2	12.043
2022-04-17 4:00	0.50	3.33	3.6	3.09	310.2	0	0	989.3	-5.1	85.1	12.01
2022-04-17 5:00	0.30	2.925	3.195	2.73	308.3	0	0	990.3	-5.3	83.2	11.984
2022-04-17 6:00	0.40	2.835	3.105	2.56	309.6	0	0	991.4	-5.4	82.4	11.972
2022-04-17 7:00	0.40	3.645	3.915	2.67	315.7	0	0	992.3	-5.4	82.7	11.989
2022-04-17 8:00	0.20	3.555	3.825	2.87	311.2	0	0	993	-5.3	81	12.031
2022-04-17 9:00	0.40	3.42	3.735	2.55	304.9	0	0	993.4	-4.9	78.2	12.24
2022-04-17 10:00	0.20	3.375	3.735	2.27	316.4	0	0	993.7	-4.1	74	12.749
2022-04-17 11:00	0.40	3.195	3.555	2.31	302	0	0	993.8	-3.4	69.2	13.138
2022-04-17 12:00	0.40	2.34	2.655	1.86	307.8	0	0	993.7	-2.4	61.9	13.265
2022-04-17 13:00	0.40	2.205	2.475	1.7	309.4	0	0	993.6	-1	56.1	14.188
2022-04-17 14:00	0.30	1.755	1.935	1.79	296	0	0	993.2	0.6	49.4	14.637
2022-04-17 15:00	0.40	1.575	1.845	1.89	322.9	0	0	993	1.3	45.6	14.591
2022-04-17 16:00	0.30	1.44	1.665	1.94	336	0	0	993	1.8	43.5	14.562
2022-04-17 17:00	0.30	1.53	1.755	1.69	2.3	0	0	993	1.9	43.6	14.116
2022-04-17 18:00	0.20	1.755	1.98	2.07	23.3	0	0	993.1	0.7	47.1	12.86
2022-04-17 19:00	0.50	1.8	2.07	1.76	31.9	0	0	993.3	-0.9	51.5	12.474
2022-04-17 20:00	0.50	1.71	2.295	1.77	48.1	0	0	993.6	-2.7	58.7	12.421
2022-04-17 21:00	0.30	1.575	1.755	1.2	62.6	0	0	993.9	-3.7	61.9	12.382
2022-04-17 22:00	0.40	1.395	1.575	1.1	78.1	0	0	993.7	-4.9	66.3	12.341
2022-04-17 23:00	0.20	1.125	1.305	1.02	79.6	0	0	993.6	-5.9	69.7	12.301
2022-04-18 0:00	0.40	0.99	1.08	0.68	67	0	0	993.1	-6.8	72.9	12.279
2022-04-18 1:00	0.30	0.9	0.99	0.27	86.5	0	0	993	-7.5	74.8	12.255
2022-04-18 2:00	0.40	0.855	0.945	0.45	88	0	0	992.9	-8.5	77	12.214
2022-04-18 3:00	0.30	0.945	1.035	0.53	71.5	0	0	992.1	-8.9	78.4	12.169
2022-04-18 4:00	0.30	1.035	1.125	0.66	66.7	0	0	991.4	-9	79.4	12.121
2022-04-18 5:00	0.40	1.125	1.215	0.58	72.7	0	0	991.5	-8.9	78.7	12.087
2022-04-18 6:00	0.30	1.44	1.665	1.19	103.1	0	0	991.3	-6.9	75.4	12.093
2022-04-18 7:00	0.30	1.62	1.89	2.63	141.8	0	0	991	-3.2	64.4	12.435
2022-04-18 8:00	0.50	1.485	1.98	2.66	149.5	0	0	990.3	-1.3	57.8	13.072
2022-04-18 9:00	0.30	1.53	2.385	2.07	137.4	0	0	989.4	0.8	50.7	13.711
2022-04-18 10:00	0.20	1.305	2.115	1.88	137.2	0	0	988.6	3.8	40.9	14.559
2022-04-18 11:00	0.50	0.855	1.35	2.89	171.2	0	0	988	4.8	35.2	14.603
2022-04-18 12:00	0.10	0.855	1.53	2.81	151.8	0	0	987.3	5	34.2	13.868
2022-04-18 13:00	0.10	0.765	1.17	2.67	150.8	0	0	986.5	5.1	34.3	13.655
2022-04-18 14:00	0.30	0.72	0.99	2.45	139.9	0	0	986.1	5	33.3	13.416
2022-04-18 15:00	0.50	0.72	0.99	1.74	130.9	0	0	985.3	5.1	32.8	13.442
2022-04-18 16:00	0.20	0.765	0.99	2.45	84.1	0	0	984.7	5.1	34.1	13.149
2022-04-18 17:00	0.20	0.9	1.26	2.04	98.5	0	0	984.4	4.2	38.2	12.602
2022-04-18 18:00	0.10	0.9	1.44	2.07	321.5	0	0	984.1	3.6	42.3	12.486
2022-04-18 19:00	0.30	0.855	1.485	1.77	344.1	0	0	984.2	2.7	49.8	12.438
2022-04-18 20:00	0.30	1.035	1.44	3.12	124.7	0	0	984.6	1.5	61	12.387
2022-04-18 21:00	0.30	1.08	1.485	0.87	272	0	0	984.1	0.7	71.2	12.374
2022-04-18 22:00	0.40	1.035	1.44	0.87	343.8	0	0	983.5	0	72.4	12.338
2022-04-18 23:00	0.30	1.215	1.8	1.29	5.4	0	0	982.5	-0.6	71.7	12.292
2022-04-19 0:00	0.10	1.35	1.98	1.43	6	0	0	981.8	-1.1	76.7	12.25
2022-04-19 1:00	0.30	1.215	1.665	1.54	7.1	0	0	981.1	-1.4	79.7	12.209
2022-04-19 2:00	0.30	1.215	1.53	1.98	8.3	0	0	980.5	-1.3	79.2	12.163
2022-04-19 3:00	0.20	1.215	1.575	2.2	9.6	0	0	980.1	-1.6	82.6	12.109
2022-04-19 4:00	0.30	1.305	1.53	2.25	1.8	0	0	979.9	-1.9	87.8	12.066
2022-04-19 5:00	0.30	1.485	1.755	2.51	5.4	0	0	979.7	-1.9	87.6	12.031
2022-04-19 6:00	0.40	1.665	2.025	3.06	1	0	0	979.7	-2.3	84.6	12.016
2022-04-19 7:00	0.20	1.575	1.8	2.94	2.4	0	0	979.7	-2.2	79.6	12.073
2022-04-19 8:00	0.30	0.855	1.17	3.78	5.2	0	0	979.2	-0.9	74.3	12.535
2022-04-19 9:00	0.50	1.215	1.575	4.44	4.8	0	0	979.1	-0.4	65.7	12.941
2022-04-19 10:00	0.50	1.44	1.845	4.89	357.6	0	0	978.9	0.3	50.8	13.117
2022-04-19 11:00	0.30	1.44	1.755	5.04	351.7	0	0	978.7	1.2	44.3	14.008
2022-04-19 12:00	0.30	1.53	1.89	5.62	348.2	0	0	978.3	2.1	41.5	14.626
2022-04-19 13:00	0.40	1.485	1.935	6.13	339.4	0	0	978.1	2.5	42.9	14.316
2022-04-19 14:00	0.40	1.575	2.025	6.39	335.7	0	0	978.2	2.3	44.6	13.656
2022-04-19 15:00	0.30	1.8	2.34	6.36	329.4	0	0	978.5	2	45.9	13.647
2022-04-19 16:00	0.40	1.8	2.25	5.98	329.3	0	0	979.3	1.3	47.4	13.504
2022-04-19 17:00	0.40	1.935	2.43	5.68	327.9	0	0	980	0.5	50.9	12.863
2022-04-19 18:00	0.30	2.07	2.43	5.08	321	0	0	980.9	-0.2	52.8	12.562
2022-04-19 19:00	0.50	2.115	2.43	4.88	318.1	0	0	981.7	-1.3	57.4	12.45
2022-04-19 20:00	0.40	2.025	2.295	4.81	326.3	0	0	982.6	-2.5	61.2	12.404
2022-04-19 21:00	0.30	2.25	2.655	5	318.9	0	0	983.1	-3	60.5	12.366
2022-04-19 22:00	0.50	2.61	3.195	4.52	325.3	0	0	983.6	-3.3	59.2	12.327
2022-04-19 23:00	0.20	2.97	3.555	4.22	313.5	0	0	984.2	-3.7	58.4	12.29
2022-04-20 0:00	0.50	3.15	3.78	3.95	314.7	0	0	985.1	-4	57.7	12.253
2022-04-20 1:00	0.40	3.15	3.735	3.71	310.5	0	0	985.7	-4.5	59.1	12.217
2022-04-20 2:00	0.30	3.015	3.465	2.89	306.7	0	0	986.3	-5.3	61.4	12.177
2022-04-20 3:00	0.30	2.88	3.285	2.14	274.4	0	0	987.3	-6.3	66	12.13
2022-04-20 4:00	0.50	2.88	3.33	2.24	272.5	0	0	988.5	-7.2	67.5	12.078
2022-04-20 5:00	0.50	2.88	3.33	1.42	259.1	0	0	989.5	-7.9	68.8	12.035
2022-04-20 6:00	0.50	2.835	3.285	1.83	270.8	0	0	990.5	-7	64.4	12.046

2022-04-20 7:00	0.40	3.24	8.1	1.86	292.3	0	0	991.1	-5.1	53.5	12.169
2022-04-20 8:00	0.40	2.88	4.365	1.86	311.3	0	0	991.3	-3.2	42.7	13.087
2022-04-20 9:00	0.50	2.565	3.15	1.43	339.7	0	0	991.5	-1.3	35.4	14.094
2022-04-20 10:00	0.50	2.475	2.97	1.59	206.8	0	0	991.7	0.4	31	14.662
2022-04-20 11:00	0.70	2.34	2.79	1.42	222	0	0	991.5	2.2	25.3	14.511
2022-04-20 12:00	0.20	2.385	2.88	2.4	149.7	0	0	990.9	3.6	23.9	13.675
2022-04-20 13:00	0.60	2.34	2.97	3.05	148.2	0	0	990.9	4.6	22.9	13.671
2022-04-20 14:00	0.40	2.745	4.275	3.99	154.6	0	0	990.4	5	22.3	13.659
2022-04-20 15:00	0.30	2.835	4.635	3.91	154.6	0	0	989.7	5.8	22.6	13.651
2022-04-20 16:00	0.40	2.43	3.645	4.29	163	0	0	989	6.3	21.5	13.642
2022-04-20 17:00	0.40	2.34	3.06	4	159.8	0	0	988.1	6	21.4	13.438
2022-04-20 18:00	0.40	2.34	3.15	2.18	142.1	0	0	987.6	5.4	24	12.635
2022-04-20 19:00	0.20	2.475	2.925	2.31	117.5	0	0	986.7	4.7	26.7	12.503
2022-04-20 20:00	0.20	2.7	3.195	3.62	129.8	0	0	985.9	4.1	30.2	12.443
2022-04-20 21:00	0.40	2.7	3.51	3.51	136.5	0	0	985.3	3.7	32	12.409
2022-04-20 22:00	0.30	2.79	3.69	3.17	132.7	0	0	984.8	3.4	34.9	12.377
2022-04-20 23:00	0.20	2.7	3.285	2.68	143.2	0	0	984.3	2.8	38	12.346
2022-04-21 0:00	0.10	2.7	4.05	4.85	169.3	0	0	983.7	2.2	51.4	12.306
2022-04-21 1:00	0.20	2.835	3.87	4.68	155.4	0	0	981.9	0.5	76.2	12.277
2022-04-21 2:00	0.20	2.115	2.745	4.31	141.7	0	0	980	-0.4	87.6	12.245
2022-04-21 3:00	0.20	2.115	2.385	4.55	150.8	0	0	978.4	-0.3	89.2	12.204
2022-04-21 4:00	0.20	2.16	2.34	4.45	151.2	0	0	977	-0.2	89.7	12.162
2022-04-21 5:00	0.50	1.98	2.115	3.73	150.7	0	0	975.9	-0.1	89.5	12.115
2022-04-21 6:00	0.30	1.44	1.53	2.95	156.9	0	0	975.3	0	89.5	12.074
2022-04-21 7:00	0.70	1.035	1.125	2.47	161.9	0	0	974.9	0	89.5	12.056
2022-04-21 8:00	0.60	0.765	0.855	2.49	166	0	0	974.5	0	89.1	12.076
2022-04-21 9:00	0.50	0.585	0.675	2.63	171.4	0	0	973.9	0.4	88.7	12.246
2022-04-21 10:00	0.30	0.45	0.54	3.27	188.1	0	0	973.6	1.5	87.3	12.743
2022-04-21 11:00	0.20	0.36	0.405	2.92	227.9	0	0	973.6	2.8	83.2	12.862
2022-04-21 12:00	0.20	0.315	0.405	3.35	244.8	0	0	974.2	3.5	79.8	12.817
2022-04-21 13:00	0.20	0.45	0.54	3.94	266.7	0	0	975.3	3.4	79.7	12.802
2022-04-21 14:00	0.50	0.9	1.08	3.97	265.8	0	0	976.7	3.1	79	12.612
2022-04-21 15:00	0.20	1.26	1.665	3.93	274.5	0	0	977.8	3.3	76.9	12.813
2022-04-21 16:00	0.30	1.755	2.475	3.53	279.1	0	0	979.3	3.6	74.3	12.64
2022-04-21 17:00	0.30	2.25	3.06	2.74	267.9	0	0	980.8	3.5	75.4	12.579
2022-04-21 18:00	0.50	2.16	2.79	1.72	246.7	0	0	982	3.3	78.2	12.333
2022-04-21 19:00	0.40	2.295	2.925	2.39	258.5	0	0	983.2	3	79	12.228
2022-04-21 20:00	0.60	1.98	2.34	2.34	258.6	0.2	0	984.6	2.5	80.6	12.146
2022-04-21 21:00	0.30	1.98	2.25	2.85	274.7	0	0	985.9	1.9	82.7	12.07
2022-04-21 22:00	0.30	1.53	1.665	3.99	291.8	0	0	987.4	1.7	80	12.026
2022-04-21 23:00	0.30	0.675	0.81	4.07	298.7	0	0	989	0.9	80	12.001
2022-04-22 0:00	0.30	0.36	0.45	4.14	309.2	0	0	991	-0.3	76.5	11.984
2022-04-22 1:00	0.70	0.585	0.675	3.49	310.9	0	0	992.3	-0.8	74.5	11.961
2022-04-22 2:00	0.40	0.99	1.125	4.08	314	0	0	993.5	-1.2	73.8	11.944
2022-04-22 3:00	0.30	1.575	1.8	3.79	319.2	0	0	994.8	-1.7	72.3	11.919
2022-04-22 4:00	0.40	2.115	2.43	3.3	311.5	0	0	996.2	-2.4	67.3	11.902
2022-04-22 5:00	0.60	2.07	2.475	3.1	302.2	0	0	997.9	-3.7	60.3	11.883
2022-04-22 6:00	0.50	2.07	2.43	3.1	308.3	0	0	999.3	-3.9	56.3	11.908
2022-04-22 7:00	0.30	1.98	2.34	3.37	312.8	0	0	1000.6	-3.1	50.1	12.02
2022-04-22 8:00	0.40	2.025	2.385	3.55	314.9	0	0	1001	-2.1	47.8	12.777
2022-04-22 9:00	0.40	2.115	2.475	3.37	310.4	0	0	1000.8	-0.9	44.9	13.302
2022-04-22 10:00	0.60	2.16	2.475	2.59	301.2	0	0	1000.8	0.3	40.5	13.513
2022-04-22 11:00	0.10	2.115	2.475	2.34	344.5	0	0	1000.5	1.6	34.5	14.157
2022-04-22 12:00	0.60	2.07	2.34	1.65	304	0	0	1000.3	3.2	30.4	14.664
2022-04-22 13:00	0.30	2.025	2.295	1.88	217.7	0	0	1000.1	4.5	27.7	14.619
2022-04-22 14:00	0.20	1.98	2.295	1.24	195.7	0	0	999.9	5.8	25.9	14.601
2022-04-22 15:00	0.20	1.98	2.295	1.54	186.8	0	0	999.4	6.6	25.1	14.326
2022-04-22 16:00	0.30	1.935	2.25	1.94	179.9	0	0	998.7	7	24.3	13.671
2022-04-22 17:00	0.60	1.845	2.25	1.16	174	0	0	998.4	7.4	24	13.665
2022-04-22 18:00	0.20	1.845	2.115	0.62	115.1	0	0	998	7.3	23.2	13.106
2022-04-22 19:00	0.40	1.89	2.205	0.84	81.5	0	0	997.8	4.4	27.9	12.565
2022-04-22 20:00	0.30	2.25	2.925	0.99	77.7	0	0	998.2	2.4	32.8	12.503
2022-04-22 21:00	0.40	2.115	2.565	0.8	83.4	0	0	998.2	1	36.8	12.467
2022-04-22 22:00	0.40	2.07	2.565	0.76	85.2	0	0	997.7	-0.1	40.7	12.431
2022-04-22 23:00	0.20	2.16	2.61	0.82	81.5	0	0	997.3	-0.9	44.4	12.397
2022-04-23 0:00	0.20	2.205	2.7	1.02	68.4	0	0	997.1	-1	44.2	12.358
2022-04-23 1:00	0.20	2.295	2.745	1.59	68.7	0	0	996.7	-1.3	46.4	12.309
2022-04-23 2:00	0.40	2.295	2.655	1.78	83.3	0	0	996.1	-1.3	46.5	12.281
2022-04-23 3:00	0.20	2.205	2.52	1.86	73.2	0	0	995.7	-1.4	46.3	12.256
2022-04-23 4:00	0.30	2.25	2.655	1.94	93.6	0	0	995.6	-1.3	45.8	12.232
2022-04-23 5:00	0.30	2.34	2.655	1.69	97.2	0	0	996.3	-1.2	45.2	12.205
2022-04-23 6:00	0.20	2.385	2.79	2.3	104	0	0	996.2	-0.6	43.9	12.253
2022-04-23 7:00	0.40	2.43	2.79	2.93	104.7	0	0	995.7	0.5	40.1	12.423
2022-04-23 8:00	0.30	2.34	2.745	3.56	99.5	0	0	994.6	1.4	38.1	12.689
2022-04-23 9:00	0.30	2.34	2.745	3.76	107.5	0	0	994	2.7	35	13.022
2022-04-23 10:00	0.30	2.295	2.7	3.61	112.8	0	0	994.3	3.7	33.1	13.392
2022-04-23 11:00	0.30	2.34	2.79	4.21	113	0	0	993.2	5.6	31	14.639
2022-04-23 12:00	0.20	2.295	2.7	4.16	125.4	0	0	992.6	7.1	27.9	14.595
2022-04-23 13:00	0.40	2.295	2.745	4.23	138.1	0	0	992	7.2	27	13.708
2022-04-23 14:00	0.20	2.475	3.24	4.75	132.9	0	0	991.4	7.6	27.2	13.656
2022-04-23 15:00	0.20	2.835	3.87	4.18	135.3	0	0	990.3	7.6	30.2	13.414
2022-04-23 16:00	0.60	2.565	3.555	3.47	118.2	0.1	0	989.5	7	29	12.681
2022-04-23 17:00	0.20	2.295	3.15	2.94	104.6	0	0	988.9	6.6	29.9	12.572
2022-04-23 18:00	0.20	2.16	3.15	3.24	87.2	0	0	988.3	5	35.4	12.479
2022-04-23 19:00	0.20	2.205	3.015	3.04	99.1	0	0	988.3	4.5	35.4	12.428
2022-04-23 20:00	0.30	2.25	3.015	2.65	98.9	0	0	988.2	4.2	37.2	12.39
2022-04-23 21:00	0.30	2.385	3.195	3.21	98.4	0	0	987.3	4	37.8	12.34
2022-04-23 22:00	0.10	2.475	3.285	2.96	100.4	0.2	0	987.3	3.9	37.1	12.296
2022-04-23 23:00	0.30	2.475	3.24	3.83	104	0	0	985.6	3.7	38.4	12.253
2022-04-24 0:00	0.40	2.565	3.24	3.93	101.6	0	0	985.1	3.7	37.6	12.216

2022-04-24 1:00	0.40	2.565	3.195	4.15	99.9	0	0	984.2	3.5	38.9	12.196
2022-04-24 2:00	0.40	2.655	3.33	4.08	108.3	0	0	983	3.2	40.8	12.172
2022-04-24 3:00	0.30	2.475	3.105	4.03	109.8	0	0	982.3	3.4	41	12.153
2022-04-24 4:00	0.20	2.43	3.06	3.61	118.1	0	0	981.7	3.8	41.1	12.131
2022-04-24 5:00	0.40	2.745	3.6	4.64	128.3	0	0	980.6	4.1	42.3	12.115
2022-04-24 6:00	0.40	3.105	4.14	5.08	132.8	0	0	980	4.2	44.1	12.142
2022-04-24 7:00	0.30	3.24	4.275	4.84	137.4	0	0	979.5	4.8	44.6	12.311
2022-04-24 8:00	0.50	3.645	4.905	5.3	145.9	0	0	978.6	6.1	45.2	12.659
2022-04-24 9:00	0.20	4.05	5.49	5.19	145.3	0	0	977.8	7.3	45.1	13.012
2022-04-24 10:00	0.20	4.455	5.985	5.17	142.8	0	0	977	9.3	42.8	13.65
2022-04-24 11:00	0.40	4.86	6.57	4.4	143.4	0	0	976.3	10.8	42.3	13.619
2022-04-24 12:00	0.30	5.175	6.975	4.36	145.3	0	0	975.6	12.4	41.6	14.485
2022-04-24 13:00	0.30	5.355	6.975	2.21	132.8	0.7	0	975.3	11.2	56.8	13.46
2022-04-24 14:00	0.10	5.175	6.075	0.91	142.7	1	0	975.1	10.2	75.2	12.672
2022-04-24 15:00	0.30	6.93	8.46	2.72	138.7	0.1	0	974.6	10.8	76	13.607
2022-04-24 16:00	0.20	8.055	9.81	5.29	149.6	0	0	973.9	13.8	60.7	14.032
2022-04-24 17:00	0.10	7.965	9.72	3.66	147.4	0	0	973.3	13.6	61.3	12.943
2022-04-24 18:00	0.20	7.965	9.72	2.96	145.6	0	0	973.1	13.3	61.7	12.579
2022-04-24 19:00	0.30	8.505	9.54	4.5	150.5	4.9	0	973.2	11.1	82.2	12.453
2022-04-24 20:00	0.40	6.03	6.705	2.63	124.3	0.2	0	972.4	10.9	89	12.448
2022-04-24 21:00	0.30	9.27	9.99	2.74	135.2	0	0	971.9	10.9	89	12.424
2022-04-24 22:00	0.20	8.82	9.45	2.49	159.8	0	0	971.3	10.7	89.3	12.395
2022-04-24 23:00	0.30	7.695	8.325	2.31	147.2	0	0	971.2	10.8	89.6	12.365
2022-04-25 0:00	0.30	6.165	6.975	2.56	142.3	0	0	970.8	10.2	89.9	12.335
2022-04-25 1:00	0.70	5.22	5.805	2.65	146.4	0	0	970.8	9.8	90.2	12.305
2022-04-25 2:00	0.30	4.32	4.905	2.03	148.9	0	0	970.9	9.4	90.3	12.275
2022-04-25 3:00	0.20	4.275	5.265	2.92	241.2	0	0	972.2	8.4	82.9	12.223
2022-04-25 4:00	0.30	3.51	4.635	1.19	200.3	0	0	973	6.4	83.9	12.204
2022-04-25 5:00	0.40	3.735	4.86	2.11	181.3	0	0	973.5	5.8	86.1	12.164
2022-04-25 6:00	0.10	2.925	3.96	1.97	183.9	0	0	974.2	5.9	84.8	12.193
2022-04-25 7:00	0.30	1.98	3.195	2.4	192.3	0	0	974.5	7.3	78	12.286
2022-04-25 8:00	0.20	1.215	2.34	2.91	204.8	0	0	974.8	9.1	64.6	12.901
2022-04-25 9:00	0.30	0.99	1.935	3.53	208.3	0	0	975.2	10.4	55.2	13.287
2022-04-25 10:00	0.40	1.17	2.205	3.31	200.4	0	0	975.5	9.8	55.1	12.953
2022-04-25 11:00	0.50	1.35	2.34	2.65	205.8	0	0	975.7	9.6	55	13.045
2022-04-25 12:00	0.40	1.44	2.61	3.23	189.1	0	0	975.6	10.6	56.1	14.258
2022-04-25 13:00	0.40	1.62	2.835	3.64	201.3	0	0	975.5	11	53.4	14.145
2022-04-25 14:00	0.10	1.575	2.655	3.28	203.9	0	0	975.6	10.8	52.4	13.326
2022-04-25 15:00	0.10	1.485	2.34	3.13	226.1	0	0	975.8	10.2	53	12.876
2022-04-25 16:00	0.30	0.81	1.26	2.98	220.7	0	0	976	9.7	54.7	13.536
2022-04-25 17:00	0.20	0.54	0.72	2.42	243.2	0	0	976.6	8.2	62.5	12.772
2022-04-25 18:00	0.20	0.45	0.585	2.19	234.3	0	0	976.8	7.3	64.9	12.556
2022-04-25 19:00	0.40	0.405	0.495	3.18	325.4	0.1	0	978	4.1	76	12.43
2022-04-25 20:00	0.50	0.45	0.54	2.79	329.1	0.7	0	978.8	2.2	82.6	12.385
2022-04-25 21:00	0.10	0.765	0.9	3.68	330.2	0	0	980	0.2	81.6	12.344
2022-04-25 22:00	0.20	0.99	1.125	3.3	322.5	0	0	980.4	-1	80.6	12.302
2022-04-25 23:00	0.10	1.35	1.575	3.03	326.5	0	0	980.6	-2.3	81.9	12.262
2022-04-26 0:00	0.20	2.97	3.195	3.31	326.8	0	0	981.4	-2.9	80.4	12.222
2022-04-26 1:00	0.30	5.085	5.58	3.23	324.9	0	0	981.8	-3.7	79.2	12.18
2022-04-26 2:00	0.20	7.56	8.19	3.43	319	0	0	982.4	-4.8	79	12.138
2022-04-26 3:00	0.20	6.48	7.155	3.03	308.5	0	0	983.2	-5.7	76.5	12.102
2022-04-26 4:00	0.20	7.38	8.145	3.16	314.7	0	0	983.7	-6.3	77.1	12.075
2022-04-26 5:00	0.20	7.245	8.055	3.24	314.1	0	0	984.1	-7	72.3	12.057
2022-04-26 6:00	0.50	7.335	8.055	3	310.8	0	0	984.8	-7.4	70.2	12.062
2022-04-26 7:00	0.20	6.66	8.1	3.47	300.6	0	0	985.7	-7.7	66.7	12.143
2022-04-26 8:00	0.30	6.93	9	3.37	305.4	0	0	986	-7.7	64.6	12.451
2022-04-26 9:00	0.30	6.255	6.795	3.4	306.2	0	0	986.1	-7.3	61.5	12.927
2022-04-26 10:00	0.30	6.615	7.245	3.49	313.4	0	0	986.1	-7	59.8	13.248
2022-04-26 11:00	0.30	5.805	6.39	3.29	323	0	0	985.9	-6.4	57.6	13.435
2022-04-26 12:00	0.20	6.165	6.84	3.16	316.3	0	0	986	-6.1	56.4	13.641
2022-04-26 13:00	0.10	5.4	6.03	3.03	315.9	0	0	986.3	-6	55.2	14.384
2022-04-26 14:00	0.20	4.23	4.815	3.37	327	0	0	986.6	-6.1	55.4	13.842
2022-04-26 15:00	0.20	2.88	3.285	3.04	323.6	0	0	986.9	-6.5	57.3	12.938
2022-04-26 16:00	0.40	2.835	3.285	3.06	330.1	0	0	987.2	-6.9	60	12.616
2022-04-26 17:00	0.20	3.15	3.555	2.98	339.6	0	0	987.7	-7.4	60.7	12.478
2022-04-26 18:00	0.20	3.42	4.59	3.14	322.2	0	0	987.9	-8.2	67.2	12.408
2022-04-26 19:00	0.20	2.52	3.555	2.51	324.9	0	0	988.3	-8.9	78.4	12.344
2022-04-26 20:00	0.20	2.475	3.195	2.32	322.6	0	0	988.4	-9.4	79.6	12.294
2022-04-26 21:00	0.20	2.745	3.24	2.03	319.8	0	0	988.5	-9.4	79.1	12.254
2022-04-26 22:00	0.20	3.105	3.51	2.2	309.8	0	0	988.4	-9.5	79.5	12.21
2022-04-26 23:00	0.40	3.015	3.375	2	304.9	0	0	988.3	-9.4	80	12.158
2022-04-27 0:00	0.30	3.06	3.375	1.9	308.2	0	0	988.1	-9.2	80.1	12.092
2022-04-27 1:00	0.40	3.195	3.6	1.99	304.9	0	0	988	-9.1	80.2	12.024
2022-04-27 2:00	0.50	3.06	3.375	2.12	305.7	0	0	988.1	-8.9	80.9	11.983
2022-04-27 3:00	0.30	3.06	3.6	3.05	320.4	0	0	988.4	-8.9	79.9	11.957
2022-04-27 4:00	0.30	3.06	3.42	3.19	333.1	0	0	988.9	-9.5	77.7	11.947
2022-04-27 5:00	0.40	2.565	2.88	3.37	328.4	0	0	989.4	-10.4	76.6	11.922
2022-04-27 6:00	0.30	2.52	2.88	3.56	329.2	0	0	990.1	-11.1	75.1	11.914
2022-04-27 7:00	0.50	2.61	2.925	3.52	328.8	0	0	990.6	-10.8	73.1	11.91
2022-04-27 8:00	0.40	2.565	2.835	3.74	328.9	0	0	991.1	-9.5	67.9	11.92
2022-04-27 9:00	0.40	2.475	2.835	3.76	327	0	0	991.5	-7.3	61	11.983
2022-04-27 10:00	0.50	2.52	3.015	4.18	333.6	0	0	991.3	-4.8	50.8	12.326
2022-04-27 11:00	0.50	2.475	3.015	4.13	340.6	0	0	991.1	-2.5	38.6	13.418
2022-04-27 12:00	0.30	2.16	2.475	4.18	344	0	0	990.9	-0.7	30.3	13.657
2022-04-27 13:00	0.20	2.25	2.61	4.19	341.9	0	0	991	0.7	25.2	14.26
2022-04-27 14:00	0.30	2.295	2.61	3.86	330.9	0	0	991	1.8	23.6	14.631
2022-04-27 15:00	0.30	2.115	2.43	4.61	320.9	0	0	991.1	2.1	21.9	14.576
2022-04-27 16:00	0.20	2.295	2.655	3.84	331.1	0	0	991.3	2.4	20.9	14.557
2022-04-27 17:00	0.20	2.52	3.015	3.76	332.3	0	0	991.5	2.3	24.7	14.226
2022-04-27 18:00	0.30	2.295	2.7	3.16	325.4	0	0	991.8	1.7	26.5	13.035

2022-04-27 19:00	0.30	2.25	2.655	1.96	326.1	0	0	992	0.2	28.1	12.519
2022-04-27 20:00	0.30	2.205	2.61	1.41	330.7	0	0	992.2	-1.5	30.9	12.459
2022-04-27 21:00	0.30	2.16	2.61	1.14	332.3	0	0	992.5	-2.6	33.9	12.417
2022-04-27 22:00	0.40	2.16	2.565	1.28	307.4	0	0	992.7	-3.7	35.2	12.375
2022-04-27 23:00	0.40	2.07	2.43	0.91	327.1	0	0	992.9	-4.5	38.9	12.342
2022-04-28 0:00	0.20	1.89	2.205	0.42	258.5	0	0	993	-5.9	46.1	12.312
2022-04-28 1:00	0.20	1.845	2.295	0.41	244.2	0	0	993	-7.7	51.2	12.277
2022-04-28 2:00	0.20	1.755	2.025	0.36	232.3	0	0	993.2	-9	58	12.246
2022-04-28 3:00	0.30	1.755	2.025	0.31	219.8	0	0	993.4	-9.9	63.3	12.218
2022-04-28 4:00	0.30	1.8	2.025	0.26	217	0	0	993.7	-10.1	61.2	12.186
2022-04-28 5:00	0.20	1.71	1.935	0.39	194	0	0	993.8	-10.2	63.1	12.172
2022-04-28 6:00	0.50	2.07	2.43	0.9	221.3	0	0	994.3	-7	51	12.197
2022-04-28 7:00	0.20	2.34	2.745	1.69	256.6	0	0	994.5	-2.6	37.7	12.333
2022-04-28 8:00	0.30	2.295	2.88	2.05	297	0	0	994.4	0.7	31.8	13.184
2022-04-28 9:00	0.40	2.115	2.52	2.19	316.5	0	0	994.2	2.5	30	14.36
2022-04-28 10:00	0.30	2.115	2.61	2.42	304.3	0	0	993.8	3.9	28	14.648
2022-04-28 11:00	0.30	2.205	2.7	2.6	317.7	0	0	993.4	5.4	26	14.263
2022-04-28 12:00	0.20	2.43	2.97	2.81	313.2	0	0	993	6.4	23.9	13.679
2022-04-28 13:00	0.40	2.745	3.555	2.54	301.5	0	0	992.4	7.7	22.4	13.682
2022-04-28 14:00	0.20	3.15	4.23	2.55	303.4	0	0	992	8.6	20.1	13.671
2022-04-28 15:00	0.10	3.42	4.5	2.64	324.4	0	0	991.7	9.1	18.2	13.664
2022-04-28 16:00	0.30	3.6	4.635	2.35	317.8	0	0	991.4	9.5	17.8	13.665
2022-04-28 17:00	0.40	3.69	4.815	2.29	333	0	0	991.2	9.6	17.2	13.663
2022-04-28 18:00	0.20	3.51	4.365	1.56	337.8	0	0	991	9.2	17.6	13.168
2022-04-28 19:00	0.40	3.015	3.645	0.3	312.6	0	0	990.8	6.5	29.4	12.594
2022-04-28 20:00	0.30	2.88	3.465	0.34	324.6	0	0	991	1.2	42.9	12.519
2022-04-28 21:00	0.50	2.79	3.24	0.31	72.8	0	0	991.2	-1.7	55.5	12.476
2022-04-28 22:00	0.30	2.655	3.105	0.3	232.8	0	0	991.4	-2.3	60	12.433
2022-04-28 23:00	0.30	2.565	2.925	0.37	82.9	0	0	991.5	-3.7	67.4	12.401
2022-04-29 0:00	0.30	2.52	3.015	0.5	88	0	0	991.4	-4.5	68.3	12.356
2022-04-29 1:00	0.30	2.34	2.7	0.32	148.7	0	0	991.5	-4.9	71.2	12.324
2022-04-29 2:00	0.30	2.25	2.655	0.46	122	0	0	992	-6	75.2	12.287
2022-04-29 3:00	0.30	2.115	2.43	0.41	203.9	0	0	992.3	-6.3	75.7	12.249
2022-04-29 4:00	0.40	2.16	2.52	0.47	96.5	0	0	992.6	-7.3	75.9	12.218
2022-04-29 5:00	0.60	2.205	2.565	0.53	113.1	0	0	993	-6.9	73.6	12.207
2022-04-29 6:00	0.30	2.655	3.195	0.56	109.4	0	0	993.4	-3.7	61.5	12.26
2022-04-29 7:00	0.90	3.645	4.77	1.02	147.5	0	0	993.8	1.5	41.3	12.53
2022-04-29 8:00	0.30	3.51	4.275	1.6	171.8	0	0	993.7	6.2	29.3	13.268
2022-04-29 9:00	0.40	3.33	4.185	1.57	154.2	0	0	993.5	8.4	22.6	14.196
2022-04-29 10:00	0.30	3.465	4.185	1.63	178.5	0	0	993.1	9.9	20.2	14.626
2022-04-29 11:00	0.30	3.51	4.32	1.93	170.3	0	0	992.6	10.9	19.2	14.167
2022-04-29 12:00	0.30	3.735	4.59	1.74	79.6	0	0	992	11.6	17.9	13.678
2022-04-29 13:00	0.20	3.69	4.545	1.89	148	0	0	991.5	12.4	18	13.676
2022-04-29 14:00	0.20	3.78	4.59	2.3	170	0	0	991.4	13	17	13.667
2022-04-29 15:00	0.40	3.69	4.5	2.06	164.7	0	0	991.6	12.9	17	13.661
2022-04-29 16:00	0.30	3.825	4.635	1.71	123.4	0	0	991.5	13.2	15.8	13.663
2022-04-29 17:00	0.40	3.96	4.86	1.71	94.1	0	0	991	13.1	15.5	13.663
2022-04-29 18:00	0.40	3.96	4.905	1.31	116.1	0	0	990.9	12.6	16.1	13.214
2022-04-29 19:00	0.40	3.96	4.77	0.91	107.8	0	0	991	10.2	17.6	12.609
2022-04-29 20:00	0.40	4.005	4.86	0.8	94.7	0	0	991.5	6.8	21.8	12.54
2022-04-29 21:00	0.30	4.365	5.31	0.84	93.6	0	0	991.5	4.7	26	12.49
2022-04-29 22:00	0.40	4.23	5.085	0.9	84.3	0	0	991.4	3.3	30.6	12.449
2022-04-29 23:00	0.30	4.005	4.77	0.73	62.2	0	0	991.6	1.5	34.5	12.417
2022-04-30 0:00	0.30	3.96	4.635	0.68	81.3	0	0	991.9	0.2	39	12.379
2022-04-30 1:00	0.40	3.69	4.365	0.56	75.8	0	0	992.1	-0.6	49	12.346
2022-04-30 2:00	0.20	3.555	4.14	0.39	26.9	0	0	992.1	-2	53.9	12.313
2022-04-30 3:00	0.30	3.15	3.555	0.19	332.2	0	0	992.2	-2.8	65.1	12.278
2022-04-30 4:00	0.20	3.105	3.465	0.46	139	0	0	992.5	-4.1	67.6	12.234
2022-04-30 5:00	0.50	3.465	3.96	0.6	77.8	0	0	992.5	-3.1	52.3	12.23
2022-04-30 6:00	0.20	3.105	3.555	0.69	96.6	0	0	992.9	-0.5	48.2	12.269
2022-04-30 7:00	0.30	2.925	3.465	1.13	137.6	0	0	992.9	3.8	37.9	12.41
2022-04-30 8:00	0.40	2.88	3.42	2.13	154	0	0	992.6	7.6	29.6	13.221
2022-04-30 9:00	0.30	2.7	3.24	2.03	138.1	0	0	992.4	9.9	25.2	14.401
2022-04-30 10:00	0.40	2.97	3.555	2.06	125.1	0	0	992	11.4	21.1	14.621
2022-04-30 11:00	0.20	3.285	3.915	2.08	84.4	0	0	991.7	12.6	18.9	14.099
2022-04-30 12:00	0.30	3.555	4.275	2.53	88.8	0	0	991.1	13.6	15.8	13.677
2022-04-30 13:00	0.40	3.24	3.825	2.52	106.5	0	0	990.5	14.2	15.5	13.675
2022-04-30 14:00	0.50	3.24	4.005	2.85	73.2	0	0	989.5	14.7	14.8	13.664
2022-04-30 15:00	0.30	3.78	4.59	2.9	77.7	0	0	988.7	15	14.6	13.664
2022-04-30 16:00	0.20	3.645	4.5	2.64	93.2	0	0	988.2	15	14.6	13.664
2022-04-30 17:00	0.10	3.105	4.005	2.86	100.3	0	0	987.9	14.3	15	13.663
2022-04-30 18:00	0.10	3.15	3.96	2.98	94.2	0	0	987.7	13.7	16.1	13.292
2022-04-30 19:00	0.30	3.06	3.555	1.28	78.4	0	0	987.7	11.4	18.7	12.618
2022-04-30 20:00	0.20	3.105	3.645	0.96	74.1	0	0	987.6	8.2	22.4	12.548
2022-04-30 21:00	0.30	3.33	3.96	1.09	76.7	0	0	987.4	6.2	26	12.5
2022-04-30 22:00	0.30	3.555	4.41	1.1	88	0	0	987.1	4.7	29.3	12.462
2022-04-30 23:00	0.10	3.825	4.905	1.16	73.6	0	0	986.9	3.2	32.6	12.424
2022-05-01 0:00	0.30	3.735	4.59	1.26	78.2	0	0	986.7	2.2	36.4	12.385
2022-05-01 1:00	0.30	3.51	4.185	0.97	86.1	0	0	986.4	0.9	40.8	12.35
2022-05-01 2:00	0.20	3.6	4.32	1.16	83.7	0	0	986	-0.1	44.3	12.301
2022-05-01 3:00	0.10	3.915	4.815	1.58	91.3	0	0	985.3	0	44	12.25
2022-05-01 4:00	0.40	4.32	5.22	1.46	94.5	0	0	985.2	-0.2	44.3	12.219
2022-05-01 5:00	0.30	4.23	5.085	1.06	94.8	0	0	985.3	-0.4	45.4	12.226
2022-05-01 6:00	0.20	4.23	5.085	1.9	83.2	0	0	984.9	1.4	40.9	12.303
2022-05-01 7:00	0.20	3.555	4.23	2.88	106.9	0	0	984	5.8	30.1	12.469
2022-05-01 8:00	0.30	3.06	3.915	4.47	120.7	0	0	983.4	10	22.5	13.281
2022-05-01 9:00	0.20	2.97	3.735	4.69	131.7	0	0	983	11.7	21	14.223
2022-05-01 10:00	0.20	3.195	4.005	5.2	132.2	0	0	982.2	12.9	20.2	14.607
2022-05-01 11:00	0.50	3.69	4.68	4.78	117.3	0	0	981.4	14.6	17.3	14.329
2022-05-01 12:00	0.40	3.87	4.815	4.56	115.5	0	0	980.7	15.9	16	13.671

2022-05-01 13:00	0.20	4.32	5.445	4.4	116.9	0	0	980	16.9	14.8	13.664
2022-05-01 14:00	0.50	4.59	5.625	3.7	119.4	0	0	979.2	16.9	14.8	13.663
2022-05-01 15:00	0.10	4.41	5.49	3.51	103.5	0	0	978.6	17.4	14.4	13.66
2022-05-01 16:00	0.30	4.32	5.31	1.83	128.5	0	0	978.4	16.9	16	13.01
2022-05-01 17:00	0.30	4.5	5.58	1.28	134.7	0.2	0	978.1	14.7	26.3	12.684
2022-05-01 18:00	0.20	4.365	5.625	1.39	152.5	0.5	0	978.3	13.4	31.5	12.587
2022-05-01 19:00	0.20	4.59	6.255	2.53	136.8	0.2	0	978.5	11.9	42.3	12.534
2022-05-01 20:00	0.20	4.23	5.355	1.11	104	0.1	0	978.2	11.6	43.4	12.505
2022-05-01 21:00	0.10	4.275	5.49	1.24	151.9	0	0	978.4	10.2	46.6	12.472
2022-05-01 22:00	0.20	4.545	5.76	1.05	121.3	0	0	978.2	9.8	46.9	12.442
2022-05-01 23:00	0.30	4.59	5.67	0.7	112.5	0	0	978.1	9	49.1	12.409
2022-05-02 0:00	0.40	4.815	6.21	2.21	124.1	0	0	977.8	8.9	53.4	12.356
2022-05-02 1:00	0.40	4.86	5.895	2.2	126	0	0	977.4	9	60.9	12.319
2022-05-02 2:00	0.20	4.365	5.175	2	117.2	0	0	977.4	8.6	64.9	12.287
2022-05-02 3:00	0.20	4.365	5.22	1.84	134.3	0	0	977.4	8.2	67.8	12.262
2022-05-02 4:00	0.20	4.5	5.4	1.47	139.5	0	0	977.5	7.8	70.6	12.242
2022-05-02 5:00	0.20	4.68	5.355	1.66	116.9	0	0	977.7	7.3	74.4	12.225
2022-05-02 6:00	0.30	4.365	5.04	1.7	106.8	0	0	977.9	7.1	78.4	12.229
2022-05-02 7:00	0.20	4.545	5.22	1.73	115.1	0	0	978	7.5	79.6	12.238
2022-05-02 8:00	0.40	4.68	5.31	1.59	138.8	0	0	978.1	8	78.5	12.298
2022-05-02 9:00	0.20	5.94	6.93	2.21	149.4	0	0	978.2	8.7	76	12.518
2022-05-02 10:00	0.20	8.055	9.36	2.27	149	0	0	978.2	9.3	73.4	12.584
2022-05-02 11:00	0.40	16.2	17.775	2.05	158.3	0	0	978.4	9.6	73.2	12.594
2022-05-02 12:00	0.30	12.78	14.49	1.43	143.9	0	0	978.3	10.1	72.8	12.805
2022-05-02 13:00	0.20	9.765	11.43	1.65	154.2	0	0	978.5	10.1	73.7	12.666
2022-05-02 14:00	0.30	8.82	10.485	1.35	161.7	0.6	0	978.8	9.7	78.3	12.569
2022-05-02 15:00	0.10	8.19	9.225	1.48	172.7	1.7	0	979.1	9.3	84.4	12.493
2022-05-02 16:00	0.40	9.27	9.9	1.39	183.5	1.2	0	979.3	9.1	85.6	12.427
2022-05-02 17:00	0.40	8.595	9	0.96	186.4	0.1	0	979.5	9.2	86	12.334
2022-05-02 18:00	0.10	8.28	8.685	0.9	210	0.1	0	979.7	9	86	12.226
2022-05-02 19:00	0.30	7.335	7.605	0.83	194.4	0	0	979.9	8.4	86.6	12.193
2022-05-02 20:00	0.40	6.75	6.975	1.05	178.1	0	0	980.2	7.8	88	12.172
2022-05-02 21:00	0.20	5.31	5.625	1.37	187	0	0	980.6	7.4	88.6	12.15
2022-05-02 22:00	0.10	2.52	2.79	1.34	186.6	0	0	980.8	7.4	88.4	12.132
2022-05-02 23:00	0.20	1.575	1.845	1.26	183	0	0	980.8	7.3	88.4	12.12
2022-05-03 0:00	0.30	1.125	1.53	1.68	216.6	0	0	980.8	7.1	87.9	12.091
2022-05-03 1:00	0.10	1.08	1.44	1.85	225.3	0	0	980.9	6.7	87.1	12.073
2022-05-03 2:00	0.20	0.9	1.215	1.72	227.1	0	0	981	6	86.4	12.051
2022-05-03 3:00	0.20	1.395	1.845	2.29	213.6	0	0	981.2	5.2	87.7	12.022
2022-05-03 4:00	0.30	0.81	1.08	2.18	209.8	0	0	981.6	3.9	86.4	11.998
2022-05-03 5:00	0.10	0.99	1.215	1.85	202.5	0	0	981.7	3.3	86.6	11.989
2022-05-03 6:00	0.30	1.575	1.89	2.06	199.2	0	0	982.4	3.2	87.6	11.985
2022-05-03 7:00	0.30	1.935	2.25	1.89	205.3	0	0	982.6	3.4	88.2	12.042
2022-05-03 8:00	0.20	1.26	1.44	2.18	224.4	0	0	982.6	4	85.2	12.135
2022-05-03 9:00	0.20	1.035	1.125	1.97	225.6	0	0	982.5	4.2	84.5	12.15
2022-05-03 10:00	0.20	0.9	0.99	2.05	214.9	0	0	982.6	4.4	85.2	12.267
2022-05-03 11:00	0.20	0.585	0.675	2.14	235.2	0	0	982.6	4.6	84.7	12.273
2022-05-03 12:00	0.10	0.405	0.495	2.25	278	0	0	982.7	4.5	84.9	12.325
2022-05-03 13:00	0.20	0.585	0.72	2.36	307.4	0	0	983	3.8	85.2	12.369
2022-05-03 14:00	0.40	0.45	0.54	2.72	303.9	0	0	983.3	3.5	84.4	12.384
2022-05-03 15:00	0.20	0.18	0.315	2.67	294.9	0	0	983.7	3.4	80.4	12.447
2022-05-03 16:00	0.20	0.225	0.315	2.33	309.7	0	0	984.1	3.6	78.7	12.419
2022-05-03 17:00	0.20	0.315	0.45	2.68	314.3	0	0	984.4	3.3	78	12.36
2022-05-03 18:00	0.10	0.315	0.405	2.08	326.7	0	0	984.8	3.3	77.7	12.183
2022-05-03 19:00	0.20	0.315	0.36	2.25	332.1	0	0	985.4	2.3	82	12.011
2022-05-03 20:00	0.10	0.45	0.54	1.89	326.8	0	0	986.1	1.4	80.7	11.94
2022-05-03 21:00	0.20	0.54	0.675	1.14	287.8	0	0	986.6	1.4	78.9	11.932
2022-05-03 22:00	0.30	0.675	0.855	2.19	302.7	0	0	987	1.2	78.5	11.887
2022-05-03 23:00	0.30	0.765	0.99	1.87	321.9	0	0	987	1	77.7	11.871
2022-05-04 0:00	0.30	0.765	0.9	1.96	331.5	0	0	987.2	0.6	76.4	11.848
2022-05-04 1:00	0.30	0.72	0.81	2.68	331.6	0	0	987.3	-0.1	73	11.82
2022-05-04 2:00	0.20	0.765	0.9	1.52	335.6	0	0	987.6	-0.7	74.5	11.809
2022-05-04 3:00	0.20	0.765	0.9	0.52	288.9	0	0	988.2	-1.2	76.4	11.807
2022-05-04 4:00	0.30	0.765	0.945	0.78	279.4	0	0	988.4	-2	79.8	11.772
2022-05-04 5:00	0.30	0.9	1.125	1.1	291.4	0	0	988.9	-2.2	80	11.763
2022-05-04 6:00	0.40	1.215	1.395	1.87	330.5	0	0	989.4	-2.1	80.6	11.816
2022-05-04 7:00	0.20	1.485	1.62	1.77	317.5	0	0	989.9	-1.2	76.8	12.065
2022-05-04 8:00	0.20	1.8	1.98	2.07	312.9	0	0	989.9	0.9	66.6	12.651
2022-05-04 9:00	0.20	2.025	2.295	3.23	308.1	0	0	989.9	2.9	57.2	13.09
2022-05-04 10:00	0.30	1.935	2.205	3.4	307.1	0	0	989.9	4.5	53.1	13.184
2022-05-04 11:00	0.20	1.98	2.205	3.56	307.7	0	0	989.9	5.8	49.6	13.284
2022-05-04 12:00	0.30	1.89	2.205	3.47	298	0	0	989.8	6.9	46.4	13.431
2022-05-04 13:00	0.30	1.89	2.115	3.51	301.6	0	0	989.7	8.2	42.5	13.861
2022-05-04 14:00	0.20	1.845	2.295	3.45	313.5	0	0	989.6	9.3	39.6	14.677
2022-05-04 15:00	0.20	1.89	2.205	3.57	302.4	0	0	989.3	10	37.6	14.618
2022-05-04 16:00	0.20	1.935	2.16	3.31	313.7	0	0	989.2	10.3	35.9	14.598
2022-05-04 17:00	0.40	2.025	2.385	3.15	312.1	0	0	989.1	10.4	35.1	14.517
2022-05-04 18:00	0.30	2.07	2.475	2.25	318.9	0	0	989.1	9.8	36.1	13.103
2022-05-04 19:00	0.30	2.16	2.475	1.37	334.4	0	0	989.4	7.9	40.2	12.608
2022-05-04 20:00	0.30	2.16	2.43	0.82	346.3	0	0	989.8	5.5	48	12.538
2022-05-04 21:00	0.10	2.115	2.385	0.39	0.9	0	0	990.1	2.9	63.1	12.503
2022-05-04 22:00	0.30	2.16	2.475	0.54	347.9	0	0	990.1	1.3	67.2	12.461
2022-05-04 23:00	0.30	2.205	2.565	0.39	65	0	0	990.3	-0.1	69.5	12.426
2022-05-05 0:00	0.20	2.115	2.475	0.31	114.1	0	0	990.2	-1.8	76	12.398
2022-05-05 1:00	0.20	2.115	2.52	0.39	298.1	0	0	990	-1.9	79.1	12.37
2022-05-05 2:00	0.10	2.07	2.295	0.28	29	0	0	989.8	-2.2	79	12.343
2022-05-05 3:00	0.30	1.98	2.25	0.41	95	0	0	989.4	-3.5	80.5	12.312
2022-05-05 4:00	0.30	2.025	2.16	0.46	192.2	0	0	989.5	-3.6	81.2	12.281
2022-05-05 5:00	0.10	1.935	2.115	0.31	169.7	0	0	989.8	-2.6	81.2	12.297
2022-05-05 6:00	0.40	2.97	3.33	0.66	138.4	0	0	989.8	-0.2	71.7	12.334

2022-05-05 7:00	0.40	3.555	3.96	0.94	160.4	0	0	990	3.5	54.3	12.633
2022-05-05 8:00	0.20	2.79	3.42	1.21	147.4	0	0	990.3	6.6	41.3	13.205
2022-05-05 9:00	0.30	2.61	3.42	1.39	173.2	0	0	990.4	8.3	39.8	13.647
2022-05-05 10:00	0.10	2.295	2.61	1.45	18.7	0	0	990	9.7	37.3	14.565
2022-05-05 11:00	0.40	2.205	2.475	1.97	333.7	0	0	989.5	10.5	35.8	14.6
2022-05-05 12:00	0.20	2.25	3.06	1.95	335.7	0	0	988.8	11.4	33.9	13.811
2022-05-05 13:00	0.30	2.205	2.52	1.83	357.2	0	0	988.4	11.9	33.2	13.672
2022-05-05 14:00	0.20	2.115	2.43	1.54	345.9	0	0	987.8	12.6	31.4	13.666
2022-05-05 15:00	0.20	2.07	2.385	2.51	22.5	0	0	987.2	12.9	31.4	13.665
2022-05-05 16:00	0.20	2.07	2.475	2.46	11	0	0	987	13.1	30.9	13.639
2022-05-05 17:00	0.30	2.025	2.34	2.2	0.8	0	0	986.8	12.8	30.9	13.661
2022-05-05 18:00	0.30	2.07	2.475	2.49	11.2	0	0	986.8	12	32.6	13.231
2022-05-05 19:00	0.30	2.07	2.475	1.82	27.4	0	0	986.9	9.6	37.9	12.609
2022-05-05 20:00	0.30	2.115	2.565	1.75	26.2	0	0	987.3	6.7	44.6	12.523
2022-05-05 21:00	0.20	2.205	2.655	2.44	26.3	0	0	987.5	5.2	48.3	12.471
2022-05-05 22:00	0.40	2.295	2.97	1.79	31.6	0	0	987.3	4.5	50.4	12.44
2022-05-05 23:00	0.10	2.43	3.015	1.31	25.7	0	0	987.4	2.7	55.1	12.402
2022-05-06 0:00	0.30	2.43	2.88	0.73	21.7	0	0	987.9	1	60	12.379
2022-05-06 1:00	0.30	2.205	2.52	0.38	17.1	0	0	988.1	-1.1	70.6	12.351
2022-05-06 2:00	0.30	2.34	2.79	1.28	40.1	0	0	988.2	-1.5	62	12.29
2022-05-06 3:00	0.60	2.07	2.385	1.38	39.5	0	0	988.3	-2.2	62	12.263
2022-05-06 4:00	0.20	1.98	2.34	1.42	43.3	0	0	988.4	-2.9	64.1	12.233
2022-05-06 5:00	0.50	1.845	2.16	1.61	50.3	0	0	988.7	-3.2	65.2	12.233
2022-05-06 6:00	0.40	1.665	1.98	1.88	68.3	0	0	989	-2.2	61.9	12.252
2022-05-06 7:00	0.30	1.8	2.025	1.87	59.7	0	0	989.1	-0.3	52.2	12.367
2022-05-06 8:00	0.40	2.07	2.385	2.31	33.2	0	0	988.9	1.8	40.7	13.217
2022-05-06 9:00	0.50	2.475	2.88	2.51	48.6	0	0	988.8	4	32	14.357
2022-05-06 10:00	0.20	2.475	2.79	2.05	49.9	0	0	988.7	5.9	27.6	14.637
2022-05-06 11:00	0.40	2.52	2.835	2.53	28.5	0	0	988.3	7.5	22.8	14.212
2022-05-06 12:00	0.20	2.88	6.75	2.33	34	0	0	988.1	8.6	20.7	13.681
2022-05-06 13:00	0.30	2.475	2.97	2.18	45.3	0	0	987.7	9.5	20.7	13.669
2022-05-06 14:00	0.20	2.475	3.015	1.97	27.1	0	0	987.2	10.7	19.3	13.668
2022-05-06 15:00	0.20	2.88	3.87	2.27	43.3	0	0	986.6	11.4	18.3	13.664
2022-05-06 16:00	0.20	3.24	4.59	2.3	21.3	0	0	986.2	11.8	17.6	13.66
2022-05-06 17:00	0.20	3.33	4.545	2.47	21	0	0	985.9	11.6	17.8	13.655
2022-05-06 18:00	0.30	2.88	3.825	2.45	10.8	0	0	986	10.8	18.6	13.268
2022-05-06 19:00	0.30	2.745	3.33	1.55	21.5	0	0	986.5	8.7	20	12.618
2022-05-06 20:00	0.20	2.835	3.42	1.2	26.7	0	0	986.8	5.6	27.9	12.535
2022-05-06 21:00	0.30	3.87	4.95	1.28	37.3	0	0	987.1	3.6	30.8	12.49
2022-05-06 22:00	0.50	4.32	5.85	1.43	48.6	0	0	987.1	2.4	34.7	12.446
2022-05-06 23:00	0.40	5.76	7.065	0.75	81.2	0	0	987	0.7	40.8	12.422
2022-05-07 0:00	0.40	5.265	5.985	0.82	56.9	0	0	987.2	-0.6	46.9	12.385
2022-05-07 1:00	0.70	3.735	4.365	0.78	49.7	0	0	987.2	-1.3	50.9	12.345
2022-05-07 2:00	0.90	3.33	3.735	0.79	69.1	0	0	987.4	-2.2	54.9	12.302
2022-05-07 3:00	0.60	3.06	3.375	0.47	8.2	0	0	987.9	-2.7	62.2	12.275
2022-05-07 4:00	0.30	2.835	3.105	0.36	52.2	0	0	988	-4.3	71.8	12.246
2022-05-07 5:00	0.40	2.7	2.925	0.38	23.9	0	0	988.4	-4	70.2	12.248
2022-05-07 6:00	0.20	2.835	3.195	1.02	66.2	0	0	988.9	-1.6	59.9	12.265
2022-05-07 7:00	0.20	2.79	3.195	1.72	117.7	0	0	989.3	1.6	47.8	12.368
2022-05-07 8:00	0.20	2.61	3.015	2.55	136.5	0	0	989.4	5.6	34.1	13.296
2022-05-07 9:00	0.30	2.7	3.285	2.39	170.3	0	0	989.1	7.7	27.6	14.296
2022-05-07 10:00	0.20	3.015	3.42	2.08	135.7	0	0	988.9	9.5	23.6	14.635
2022-05-07 11:00	0.40	3.15	3.69	1.95	75.1	0	0	988.7	10.8	20.9	14.276
2022-05-07 12:00	0.20	3.285	3.87	2.25	101.9	0	0	988.2	11.9	19.9	13.675
2022-05-07 13:00	0.60	3.555	4.185	2.33	137	0	0	987.8	12.9	18.1	13.665
2022-05-07 14:00	0.40	3.735	4.545	2.32	100.6	0	0	987	13.6	17.8	13.662
2022-05-07 15:00	0.10	4.275	5.265	2.88	128.8	0	0	986.5	14.2	15.9	13.662
2022-05-07 16:00	0.40	4.545	5.805	2.45	110.9	0	0	986.2	14.5	16.5	13.657
2022-05-07 17:00	0.20	4.455	5.76	2.39	106.1	0	0	986	14.6	17.6	13.652
2022-05-07 18:00	0.20	4.455	5.805	1.93	96.8	0	0	986.1	14.2	18.6	13.277
2022-05-07 19:00	0.30	4.095	5.31	0.77	65.7	0	0	986.2	12.3	25.2	12.66
2022-05-07 20:00	0.20	3.96	4.995	0.99	76.9	0	0	986.4	8.4	28.6	12.571
2022-05-07 21:00	0.30	3.87	4.5	1.06	91.5	0	0	986.6	5.5	35.1	12.522
2022-05-07 22:00	0.30	4.005	4.95	0.95	82.4	0	0	986.6	4.3	37.5	12.48
2022-05-07 23:00	0.30	4.185	5.4	1.12	98.8	0	0	986.7	3.9	38.7	12.436
2022-05-08 0:00	0.40	4.68	6.12	1.58	131.3	0	0	986.5	4.7	36.8	12.397
2022-05-08 1:00	0.20	4.86	6.48	1.83	141.6	0	0	986.8	4.4	37.6	12.354
2022-05-08 2:00	0.40	4.815	6.66	1.21	127	0	0	987.1	2.4	43	12.322
2022-05-08 3:00	0.50	4.815	6.39	0.68	104.4	0	0	987.5	0.9	48.2	12.295
2022-05-08 4:00	0.40	5.04	6.84	1.38	114.9	0	0	987.8	0.2	50.8	12.238
2022-05-08 5:00	0.30	4.86	6.345	0.66	136.2	0	0	988.4	0.4	51.8	12.265
2022-05-08 6:00	0.30	4.995	6.57	1.18	147.1	0	0	988.8	4.1	43.2	12.291
2022-05-08 7:00	0.30	4.86	6.21	2.9	161.9	0	0	988.6	8.4	30.8	12.396
2022-05-08 8:00	0.20	4.41	5.49	3.19	172.8	0	0	988.7	11.6	25.7	13.226
2022-05-08 9:00	0.00	4.365	5.49	3.43	165.5	0	0	988	14.2	21.7	14.254
2022-05-08 10:00	0.10	4.725	6.48	3.68	158.1	0	0	987.4	15.9	19.3	14.625
2022-05-08 11:00	0.10	5.13	6.93	3.9	156.7	0	0	987.2	17.2	17.7	14.256
2022-05-08 12:00	0.30	5.31	7.56	4	152.7	0	0	986.6	18.4	15.8	13.668
2022-05-08 13:00	0.20	5.625	9	4.6	159.6	0	0	986	19.2	15	13.662
2022-05-08 14:00	0.50	5.67	8.82	4.46	160	0	0	985.3	20.1	14.5	13.663
2022-05-08 15:00	0.10	5.715	8.775	4.67	155.6	0	0	984.9	20.5	14.2	13.66
2022-05-08 16:00	0.20	5.805	8.865	4.15	165.4	0	0	984.9	20.9	14	13.656
2022-05-08 17:00	0.40	5.49	7.65	3.88	167.1	0	0	984.8	20.9	14.1	13.653
2022-05-08 18:00	0.50	5.58	7.785	3.07	159.4	0	0	984.8	20.1	15.4	13.263
2022-05-08 19:00	0.40	5.805	7.965	1.29	142.9	0	0	985.1	17.2	19.2	12.662
2022-05-08 20:00	0.20	6.075	8.82	1.02	122	0	0	985.6	13.7	24.9	12.6
2022-05-08 21:00	0.40	6.57	10.305	1.38	140.6	0	0	986.1	12.3	27.6	12.557
2022-05-08 22:00	0.70	7.155	10.935	2.64	168	0	0	986.7	12.6	27.4	12.519
2022-05-08 23:00	0.30	6.66	9.225	2.26	166.5	0	0	986.8	11	28.2	12.478
2022-05-09 0:00	0.10	6.48	8.64	1.47	172.4	0	0	987.1	9.3	31.2	12.451

2022-05-09 1:00	0.20	6.615	8.955	1.73	172.1	0	0	987.5	7.6	35	12.407
2022-05-09 2:00	0.40	6.615	8.91	1.39	170.1	0	0	987.8	7.1	35.5	12.378
2022-05-09 3:00	0.40	6.3	8.505	0.69	153.4	0	0	988.3	5.7	39.2	12.354
2022-05-09 4:00	0.50	5.805	7.875	0.65	63.8	0	0	988.7	4	50.8	12.322
2022-05-09 5:00	0.20	6.21	8.955	1.31	124.1	0	0	989.4	5.5	43.3	12.319
2022-05-09 6:00	0.20	6.57	10.8	2.46	159.2	0	0	990.2	9.4	36.4	12.475
2022-05-09 7:00	0.20	6.21	10.8	2.82	164.4	0	0	990.3	12.3	31.6	12.782
2022-05-09 8:00	0.10	6.975	15.525	3.92	165.7	0	0	990.1	14.6	27.2	13.253
2022-05-09 9:00	0.40	5.895	10.62	5.45	160.2	0	0	989.4	16.3	24.1	14.243
2022-05-09 10:00	0.30	6.21	12.6	5.21	161.8	0	0	989	18.5	20.3	14.603
2022-05-09 11:00	0.30	6.795	13.635	5.42	162.3	0	0	988.1	20	18.7	14.148
2022-05-09 12:00	0.20	7.92	17.595	5.52	151.5	0	0	987.5	20.8	18.3	13.663
2022-05-09 13:00	0.30	8.235	18.315	5.12	146.8	0	0	987.2	21.9	17.1	13.664
2022-05-09 14:00	0.30	6.75	12.15	5.3	150	0	0	987	22.8	15.5	13.66
2022-05-09 15:00	0.20	6.345	11.25	5.35	157.5	0	0	986.8	22.8	15.5	13.66
2022-05-09 16:00	0.30	7.245	14.175	5.11	144.3	0	0	985.9	22.7	15.4	13.658
2022-05-09 17:00	0.20	7.245	14.22	4.58	146.4	0	0	985.6	21.9	16.2	13.654
2022-05-09 18:00	0.10	8.64	21.195	4.8	150.1	0	0	985.2	21.2	17	12.976
2022-05-09 19:00	0.20	6.525	11.655	3.25	144.7	0	0	984.6	19.4	20.1	12.649
2022-05-09 20:00	0.30	6.12	10.035	4.08	153.9	0	0	984.5	18.6	20.1	12.597
2022-05-09 21:00	0.30	6.3	10.125	3.08	155.7	0	0	984.6	17.3	20.7	12.563
2022-05-09 22:00	0.40	6.525	11.07	3.08	162.3	0	0	985	15.9	24	12.532
2022-05-09 23:00	0.60	7.515	13.815	3.67	164.1	0	0	985.2	15.1	25.9	12.507
2022-05-10 0:00	0.20	7.515	12.285	3.95	163.2	0	0	985.4	14.6	27	12.477
2022-05-10 1:00	0.20	7.92	13.41	4.47	162.7	0	0	984.9	14.5	26.9	12.449
2022-05-10 2:00	0.30	9.675	14.985	4.57	162.6	0	0	985	14.8	25.9	12.42
2022-05-10 3:00	0.40	12.51	17.235	4.66	167.5	0	0	985.7	15	25.7	12.393
2022-05-10 4:00	0.40	10.62	14.67	4.69	166.7	0	0	985.7	15	26	12.373
2022-05-10 5:00	0.20	7.92	11.7	5.24	163.3	0	0	985.3	15	27.1	12.375
2022-05-10 6:00	0.20	8.1	12.915	4.68	168.6	0	0	985.5	15.3	28.5	12.447
2022-05-10 7:00	0.10	7.785	13.275	5.24	169.1	0	0	985.2	16.4	28.7	12.748
2022-05-10 8:00	0.30	7.875	13.725	5.87	170.8	0	0	985.5	17.6	28.4	13.111
2022-05-10 9:00	0.10	7.83	14.895	6.38	172	0	0	985.4	19.4	28.4	13.663
2022-05-10 10:00	0.30	7.47	12.15	5.83	173	0	0	985.7	21	29.6	14.339
2022-05-10 11:00	0.10	7.515	12.42	6.35	173.5	0	0	985.6	22.8	29.9	14.578
2022-05-10 12:00	0.10	8.415	13.77	6.11	176.5	0	0	985.1	24.7	31.2	13.9
2022-05-10 13:00	0.10	9.63	14.985	6.41	180	0	0	985	25.6	32.8	13.661
2022-05-10 14:00	0.30	10.845	16.65	5.94	179.6	0	0	984.6	26.7	32.6	13.66
2022-05-10 15:00	0.10	11.745	17.235	5.8	177.8	0	0	984.5	26.9	34.2	13.658
2022-05-10 16:00	0.10	12.42	16.875	5.69	178.7	0	0	984.7	26.5	36.5	13.658
2022-05-10 17:00	0.30	12.645	16.875	5.95	177.4	0	0	985	24.9	41.3	13.325
2022-05-10 18:00	0.40	12.06	20.295	4.96	177.4	0	0	985.2	23.2	43.3	12.691
2022-05-10 19:00	0.20	9	12.915	4.83	180.6	0	0	985.5	22.3	42	12.639
2022-05-10 20:00	0.10	7.155	10.395	3.7	189.6	0	0	986.9	20.7	41.2	12.58
2022-05-10 21:00	0.10	7.245	11.385	3.98	194.5	0	0	987.7	19.7	40.1	12.549
2022-05-10 22:00	0.20	7.56	12.6	3.89	198	0	0	988.1	18.6	39.2	12.517
2022-05-10 23:00	0.30	9	13.14	2.4	201.5	0	0	988.3	17.2	45.2	12.492
2022-05-11 0:00	0.20	9.9	13.05	2.14	187.5	0	0	988.7	16.3	51.6	12.468
2022-05-11 1:00	0.30	9.45	12.15	1.99	178.6	0	0	989.2	15.4	56.4	12.44
2022-05-11 2:00	0.20	9.675	12.06	1.7	169	0	0	989.5	14.1	65.4	12.408
2022-05-11 3:00	0.20	9.54	11.88	2.29	176.4	0	0	990	13.5	69.1	12.379
2022-05-11 4:00	0.40	9	11.385	2	182.8	3.2	0	990.9	12.1	80.9	12.339
2022-05-11 5:00	0.20	7.92	9.045	0.58	177	0	0	991.4	11.6	87.5	12.354
2022-05-11 6:00	0.30	8.325	9.675	1.03	220.3	0	0	992.7	12.1	87.8	12.435
2022-05-11 7:00	0.40	8.64	10.215	1.26	226.6	0	0	992.8	14	82.1	12.62
2022-05-11 8:00	0.20	8.46	10.305	1.18	25.8	0	0	992.9	16.7	69.5	13.186
2022-05-11 9:00	0.10	6.66	8.505	2.08	61.9	0	0	993.2	18.8	52.8	14.118
2022-05-11 10:00	0.20	5.22	7.065	1.8	71.6	0	0	992.8	20.3	43.3	14.609
2022-05-11 11:00	0.40	5.625	7.515	1.72	98.2	0	0	993	21.3	42.1	14.266
2022-05-11 12:00	0.30	5.49	7.74	1.8	257.6	0	0	992.9	22.6	38	13.665
2022-05-11 13:00	0.30	5.445	8.28	1.22	23.1	0	0	992.5	23.7	33.2	13.663
2022-05-11 14:00	0.20	5.445	8.145	1.53	201.4	0	0	991.9	25.4	28.7	13.658
2022-05-11 15:00	0.30	5.265	7.83	1.47	180.9	0	0	991.4	26	26.1	13.656
2022-05-11 16:00	0.40	5.175	7.65	1.1	329.7	0	0	990.9	26.4	22.6	13.65
2022-05-11 17:00	0.30	4.995	7.335	1.03	197.7	0	0	991.2	26.7	22.4	13.649
2022-05-11 18:00	0.30	4.86	6.84	0.53	169	0	0	991.4	26.3	22.2	13.295
2022-05-11 19:00	0.30	4.86	6.705	0.29	13	0	0	991.7	22.5	42.5	12.687
2022-05-11 20:00	0.10	5.67	7.965	0.63	83.8	0	0	991.7	17.9	52.6	12.616
2022-05-11 21:00	0.10	6.21	9.045	0.89	343.1	0	0	991.5	15.5	63.7	12.583
2022-05-11 22:00	0.10	6.03	8.235	0.68	48.9	0	0	991	15.1	56.2	12.552
2022-05-11 23:00	0.60	5.985	8.145	0.71	72.7	0	0	991	13.7	58.6	12.523
2022-05-12 0:00	0.30	6.3	8.685	0.78	100.6	0	0	990.8	12.1	61.1	12.492
2022-05-12 1:00	0.30	6.3	8.415	0.53	16.7	0	0	990.9	10.8	72.5	12.461
2022-05-12 2:00	4.00	7.155	9.765	0.67	70.6	0	0	990.3	10.1	73.2	12.428
2022-05-12 3:00	1.00	6.93	9.045	0.97	103.9	0	0	989.8	9.6	76	12.395
2022-05-12 4:00	0.40	7.155	9.405	0.6	52.3	0	0	989.6	9.4	76.2	12.373
2022-05-12 5:00	0.70	6.885	8.91	0.6	76.6	0	0	989.3	10.4	73.3	12.384
2022-05-12 6:00	0.30	7.875	10.575	1.49	99.8	4	0	989	11.3	77	12.335
2022-05-12 7:00	0.30	10.305	12.105	1.61	94.1	0.7	0	988.4	12.5	87.4	12.353
2022-05-12 8:00	0.70	11.925	13.365	1.6	69.4	0	0	988.5	13.9	89.4	12.369
2022-05-12 9:00	0.30	12.645	14.445	2.34	103.7	0.8	0	987.6	14.5	88.6	12.353
2022-05-12 10:00	0.30	13.41	15.93	1.42	48.3	2.8	0	988.4	14.5	88.5	12.39
2022-05-12 11:00	0.10	12.285	13.995	2.33	63.9	0.6	0	987.3	14.8	89.7	12.594
2022-05-12 12:00	0.30	11.655	13.5	2.85	104.7	0.1	0	986.2	15.6	88.2	13.192
2022-05-12 13:00	0.10	11.52	13.77	3.35	100.8	0	0	984.2	17.2	83	13.367
2022-05-12 14:00	0.10	12.42	15.525	3.02	128	2.7	0	983.7	18.6	78	13.651
2022-05-12 15:00	0.30	12.555	15.75	1.59	206.8	1.1	0	983.7	19	80.4	13.101
2022-05-12 16:00	0.40	11.295	13.815	1.03	348.7	0.4	0	984.2	18.5	81.4	12.827
2022-05-12 17:00	0.60	11.34	13.41	1.52	37.6	0	0	983.9	17.8	88.6	12.705
2022-05-12 18:00	0.30	11.79	13.77	1.72	85.1	0.1	0	983.5	16.8	90.8	12.623

2022-05-12 19:00	0.20	11.52	13.86	1.33	90.4	0	0	983.7	16.2	91.4	12.558
2022-05-12 20:00	0.20	11.115	13.545	0.91	105.1	0.4	0	984.1	15.9	91.5	12.52
2022-05-12 21:00	0.00	10.26	12.51	0.75	78.9	0	0	984	15.6	91.9	12.482
2022-05-12 22:00	0.10	10.17	12.555	0.88	97.6	0	0	983	15.3	92	12.438
2022-05-12 23:00	0.20	9.54	12.15	0.39	101.6	0	0	982.7	15.4	91.7	12.393
2022-05-13 0:00	0.30	8.145	9.99	0.57	176.5	0	0	982.4	15.2	91.6	12.352
2022-05-13 1:00	0.60	8.64	10.665	0.91	175.6	0	0	982.5	14.6	89.6	12.325
2022-05-13 2:00	0.20	8.145	10.35	0.77	185.4	0	0	982.6	13.8	85	12.302
2022-05-13 3:00	0.30	8.28	11.25	0.92	221.2	0	0	983.2	13.2	83.7	12.29
2022-05-13 4:00	0.20	7.965	9.945	0.41	100.5	0	0	983.6	12.9	87.5	12.273
2022-05-13 5:00	0.10	7.965	10.8	0.47	87.4	0	0	984.1	12.6	89.9	12.268
2022-05-13 6:00	0.20	14.355	16.515	0.79	186.4	0	0	984.4	13.1	91.9	12.281
2022-05-13 7:00	0.20	19.71	22.185	0.92	228.5	0	0	984.9	14	92.5	12.371
2022-05-13 8:00	0.20	11.115	12.15	1.23	290.5	0	0	984.9	15.4	91.3	12.852
2022-05-13 9:00	0.30	8.685	9.36	1.19	321.3	0	0	984.8	16.7	87.7	13.071
2022-05-13 10:00	0.50	9.765	10.71	0.99	334.8	0	0	984.3	18.4	81.9	13.472
2022-05-13 11:00	0.10	11.43	13.455	2.44	152.6	0	0	983.2	21.9	68.5	13.789
2022-05-13 12:00	0.20	12.375	16.605	3.84	165.1	0	0	981.5	22.2	56.2	13.78
2022-05-13 13:00	0.30	12.105	15.975	3.34	183.8	0	0	981.8	26.3	44.8	14.594
2022-05-13 14:00	0.30	11.16	13.905	4.03	169.7	0	0	981.4	28.3	38.6	14.139
2022-05-13 15:00	0.20	11.97	15.615	3.77	187	0	0	980.7	29.8	33.2	13.655
2022-05-13 16:00	0.70	10.62	15.57	3.78	183.8	0	0	980.5	30.5	28.1	13.652
2022-05-13 17:00	0.60	10.17	15.705	3.06	196.6	0	0	980.4	30.6	26.4	13.644
2022-05-13 18:00	0.50	8.955	13.77	2.13	183.5	0	0	980.1	30.1	24	13.271
2022-05-13 19:00	0.20	8.505	11.97	0.47	83.5	0	0	980	27.2	34.4	12.693
2022-05-13 20:00	0.10	10.305	14.535	1.15	69.8	0	0	980.4	21.7	52.2	12.622
2022-05-13 21:00	0.40	13.14	17.325	1.39	57.6	0	0	980.9	20.1	63.7	12.589
2022-05-13 22:00	1.00	13.68	17.1	0.61	66.9	0	0	981	17.6	73	12.559
2022-05-13 23:00	0.60	13.185	17.1	1.01	133.6	0	0	981.1	15.5	74.6	12.535
2022-05-14 0:00	0.60	8.505	13.725	1.48	159.3	0	0	981.1	16.6	56.2	12.513
2022-05-14 1:00	0.40	6.93	11.205	1.52	166.5	0	0	980.9	16.2	54	12.486
2022-05-14 2:00	0.30	5.985	10.215	2.26	174.8	0	0	980.6	15.5	58.3	12.471
2022-05-14 3:00	0.40	6.57	10.755	2.12	174	0	0	980.4	14.8	61.9	12.447
2022-05-14 4:00	0.60	6.975	10.62	0.97	161.5	0	0	980.5	14.1	66.1	12.418
2022-05-14 5:00	0.20	6.615	10.8	1.27	158.3	0	0	980.5	14.5	69.5	12.431
2022-05-14 6:00	0.30	6.255	11.205	1.96	169.9	0	0	980.2	16.9	65.7	12.466
2022-05-14 7:00	0.30	5.715	11.34	2.38	180.7	0	0	980	19.1	60	12.571
2022-05-14 8:00	0.30	5.31	10.395	1.45	185	0	0	979.5	21	54.4	13.188
2022-05-14 9:00	0.20	5.4	10.62	1.67	136.7	0	0	979	23.3	48	14.022
2022-05-14 10:00	0.30	5.4	11.025	2.77	142.4	0	0	978.5	25.6	42.6	14.607
2022-05-14 11:00	0.30	7.65	14.265	3.19	146.6	0	0	978	27.3	36.9	14.309
2022-05-14 12:00	0.40	8.28	15.165	3.36	150.1	0	0	977.2	28.6	33	13.657
2022-05-14 13:00	0.50	6.57	12.735	3.91	166.6	0	0	976.4	29.5	30.1	13.658
2022-05-14 14:00	0.70	5.94	10.35	3.75	196.4	0	0	975.5	30.4	25.7	13.655
2022-05-14 15:00	0.60	5.085	9.09	3.41	177.3	0	0	974.5	30.7	24.5	13.652
2022-05-14 16:00	0.80	5.04	9.27	3.36	170	0	0	973.8	30	25.5	13.64
2022-05-14 17:00	0.40	6.75	12.645	3.47	219.8	7.5	0	974	26.1	41.8	12.853
2022-05-14 18:00	0.60	5.49	7.515	2.9	284.3	0	0	974.7	20.3	67.8	12.735
2022-05-14 19:00	0.30	5.76	7.695	2.14	169.1	1.4	0	975.5	19.1	76.4	12.611
2022-05-14 20:00	0.30	6.075	8.325	2.44	213.4	1	0	975.3	17.1	84.5	12.579
2022-05-14 21:00	0.20	6.3	8.505	0.98	185.2	0	0	975.6	16.6	87.7	12.551
2022-05-14 22:00	0.10	6.255	8.1	0.93	188.2	0	0	975.5	15.8	90.3	12.523
2022-05-14 23:00	0.40	6.03	7.785	1.05	169.2	0	0	975.5	15.1	91.6	12.496
2022-05-15 0:00	0.10	6.525	8.685	1.26	184.6	0	0	975.3	15.2	89.5	12.468
2022-05-15 1:00	0.40	6.57	9.225	0.79	176.3	0	0	975.1	14.7	87.9	12.443
2022-05-15 2:00	0.30	6.255	9	1.06	165.8	0	0	975	14.2	85.7	12.412
2022-05-15 3:00	0.40	5.355	8.1	1.26	185.6	0	0	974.9	13.2	81	12.394
2022-05-15 4:00	0.40	5.04	7.605	0.97	184.3	0	0	974.9	12.1	78.4	12.372
2022-05-15 5:00	0.30	5.085	7.425	0.68	181.4	0	0	975.1	11.2	80.3	12.402
2022-05-15 6:00	0.20	4.41	6.93	1.13	206.7	0	0	975.4	12.9	78.3	12.479
2022-05-15 7:00	0.20	4.5	7.245	1.64	188.1	0	0	975.6	14.7	72.7	12.591
2022-05-15 8:00	0.20	3.915	6.975	1.6	233.1	0	0	975.3	17.3	56.4	13.257
2022-05-15 9:00	0.50	3.465	6.03	1.74	225.1	0	0	975	19.2	46.8	13.92
2022-05-15 10:00	0.20	3.51	5.985	1.9	205.9	0	0	974.5	21	43.3	14.58
2022-05-15 11:00	0.20	3.6	6.075	2.95	179.1	0	0	973.7	22.7	39.8	14.468
2022-05-15 12:00	0.40	3.96	6.48	3.05	206.1	0	0	973	22.5	40.3	13.649
2022-05-15 13:00	0.10	3.69	5.94	4.07	245.6	0	0	972.6	23.3	35.2	13.659
2022-05-15 14:00	0.40	3.24	4.86	4.74	232.7	0	0	972.2	23.8	29.4	13.651
2022-05-15 15:00	0.40	2.925	4.545	4.61	234.3	0	0	971.7	23.5	27.2	13.648
2022-05-15 16:00	0.50	1.98	3.06	5.34	239.9	0	0	971.6	23.4	25.2	13.648
2022-05-15 17:00	0.20	2.655	4.05	6.02	237.8	0	0	971.9	22	24.7	13.65
2022-05-15 18:00	0.20	2.97	4.365	5.48	244.1	0	0	972.4	20	27.2	13.35
2022-05-15 19:00	0.30	2.43	3.51	4.54	245.5	0	0	972.6	18.1	27.3	12.68
2022-05-15 20:00	0.30	1.89	3.06	3.19	247.2	0	0	973	15.8	29	12.609
2022-05-15 21:00	0.40	1.575	2.745	2.33	239.6	0	0	973.3	13.9	36.5	12.57
2022-05-15 22:00	0.20	1.35	2.565	1.78	244.8	0	0	973.9	12.4	45.2	12.533
2022-05-15 23:00	0.00	1.395	2.655	1.09	244.3	0	0	973.8	10.8	50.5	12.503
2022-05-16 0:00	0.20	1.53	2.97	0.81	222.5	0	0	973.3	9.2	55.8	12.468
2022-05-16 1:00	0.30	1.395	2.475	0.82	212.8	0	0	972.9	8.1	59.9	12.433
2022-05-16 2:00	0.30	1.395	2.52	1.2	185.8	0	0	972.7	7.2	63.8	12.392
2022-05-16 3:00	0.10	1.35	2.34	1.19	181.1	0	0	972.8	6	68.2	12.351
2022-05-16 4:00	0.20	1.305	2.295	0.91	199.5	0	0	972.7	5.4	68.3	12.323
2022-05-16 5:00	0.10	1.35	2.43	0.54	131.9	0	0	972.3	5	71.8	12.348
2022-05-16 6:00	0.40	1.305	2.52	1.15	163.4	0	0	971.9	8.4	61.9	12.459
2022-05-16 7:00	0.10	1.35	2.475	1.51	164.4	0	0	971.7	11.7	52.2	12.852
2022-05-16 8:00	0.30	1.35	2.43	2.75	167.9	0	0	971.4	14.4	43	13.4
2022-05-16 9:00	0.30	1.575	2.61	3.59	177.4	0	0	970.7	16.2	37.3	14.029
2022-05-16 10:00	0.20	1.98	3.195	3.82	200.8	0	0	970.2	17.4	34.4	14.615
2022-05-16 11:00	0.30	1.89	3.915	2.93	221.4	0	0	970.1	17.1	35	13.921
2022-05-16 12:00	0.20	1.575	2.745	1.99	218.6	0	0	970.1	16.7	37	14.134

2022-05-16 13:00	0.20	1.305	2.34	2.84	262.3	0	0	970.4	15.9	42.7	13.594
2022-05-16 14:00	0.40	1.215	1.98	2.69	288.3	0	0	970.5	15.4	48.5	13.65
2022-05-16 15:00	0.20	1.08	2.115	3.35	286.1	0.2	0	970.5	13.7	54.9	13.629
2022-05-16 16:00	0.40	1.035	1.665	3.72	295.3	0	0	970.3	13.5	58.4	13.655
2022-05-16 17:00	0.50	0.99	2.115	3.9	308.3	0	0	971	12.1	68.1	13.558
2022-05-16 18:00	0.20	1.125	1.575	3.39	317.2	0.3	0	971.6	10.1	76.7	12.691
2022-05-16 19:00	0.10	1.485	2.07	2.13	309.1	0.2	0	972.4	8.9	84.8	12.554
2022-05-16 20:00	0.30	1.62	2.565	1.85	297.2	0.6	0	973	8.6	86	12.516
2022-05-16 21:00	0.20	1.305	2.205	2.75	296.9	1.5	0	973.4	8	86.4	12.471
2022-05-16 22:00	0.20	0.855	1.62	2.65	302.9	0.3	0	973.6	7.5	86.6	12.436
2022-05-16 23:00	0.20	0.81	1.485	2.84	310.8	0	0	973.9	7.3	86.5	12.403
2022-05-17 0:00	0.10	0.585	0.855	3.88	324.6	0	0	974.3	6.6	86.8	12.355
2022-05-17 1:00	0.20	0.54	0.72	4.2	329.5	0	0	974.7	5.7	86.9	12.296
2022-05-17 2:00	0.10	0.585	0.675	3.83	324.8	0	0	975.2	4.8	87.4	12.262
2022-05-17 3:00	0.20	0.585	0.945	3.22	321.4	0	0	975.9	4.1	87.1	12.24
2022-05-17 4:00	0.20	0.27	0.45	3.33	326.4	0	0	976.5	3.4	87.9	12.216
2022-05-17 5:00	0.20	0.18	0.405	3.33	332.8	0	0	977.3	2.8	87	12.209
2022-05-17 6:00	0.30	0.18	0.36	3.19	331.6	0	0	978.1	2.5	87.9	12.243
2022-05-17 7:00	0.10	0.27	0.45	4.05	332.8	0	0	978.8	2.2	85	12.432
2022-05-17 8:00	0.30	1.08	1.215	4.23	323.1	0	0	979.2	2.1	82.1	13.003
2022-05-17 9:00	0.40	2.52	9.585	4.14	327.7	0	0	979.8	3.3	73.3	13.508
2022-05-17 10:00	0.20	2.835	3.825	4.3	330.8	0	0	980.2	5.5	59.8	12.865
2022-05-17 11:00	0.40	3.015	3.915	4.34	317.1	0	0	980.3	7.8	51.7	13.475
2022-05-17 12:00	0.10	3.15	4.05	4.69	320.7	0	0	980.2	9.8	43.6	13.648
2022-05-17 13:00	0.20	3.105	3.915	4.6	323.7	0	0	980.1	11	39.2	13.677
2022-05-17 14:00	0.10	3.015	3.735	4.61	325.3	0	0	980.2	11.9	35.8	13.729
2022-05-17 15:00	0.40	2.88	3.69	4.34	321.5	0	0	980.3	12.9	32	13.708
2022-05-17 16:00	0.30	2.745	3.51	4.02	318.1	0	0	980.5	13.4	29.4	13.53
2022-05-17 17:00	0.10	2.835	3.465	3.87	322.3	0	0	980.7	13.4	28.9	13.328
2022-05-17 18:00	0.10	2.7	3.285	3.14	326.6	0	0	981.1	13.1	30.4	13.128
2022-05-17 19:00	0.10	2.565	3.105	1.7	323	0	0	981.3	12	34.1	13.03
2022-05-17 20:00	0.40	2.7	3.375	0.55	330.3	0	0	981.7	9.1	48.5	12.992
2022-05-17 21:00	0.20	2.745	3.42	0.33	331.2	0	0	982	6	68.3	12.967
2022-05-17 22:00	0.10	2.565	3.15	0.33	240.6	0	0	982.2	3.3	70.8	12.958
2022-05-17 23:00	0.20	2.295	2.79	0.31	225.2	0	0	982.2	1.4	72.4	12.944
2022-05-18 0:00	0.10	2.79	3.6	0.36	173.4	0	0	982.1	0	77.7	12.926
2022-05-18 1:00	0.20	2.61	3.24	0.38	217.3	0	0	981.7	-0.6	79.1	12.918
2022-05-18 2:00	0.10	2.475	2.97	0.36	200.4	0	0	981.5	-1	80.6	12.911
2022-05-18 3:00	0.40	2.565	3.06	0.37	215.1	0	0	981.6	-0.9	77.5	12.898
2022-05-18 4:00	0.20	2.88	3.42	0.59	208.2	0	0	981.3	-1.4	79.8	12.886
2022-05-18 5:00	0.30	2.97	3.51	0.73	178.6	0	0	981.3	-0.4	78.4	12.892
2022-05-18 6:00	0.20	3.24	3.78	1.26	165.6	0	0	981.1	3.5	67.6	12.911
2022-05-18 7:00	0.10	3.06	4.41	1.84	167.2	0	0	981.2	8.5	49.5	12.982
2022-05-18 8:00	0.20	3.015	3.69	2.99	196.5	0	0	980.8	11.3	40.3	13.216
2022-05-18 9:00	0.20	3.645	4.5	3.76	233.3	0	0	979.8	13.3	37.5	13.562
2022-05-18 10:00	0.10	4.365	6.93	4.26	235.5	0	0	978.9	14	35.6	13.536
2022-05-18 11:00	0.10	4.32	5.535	3.93	238.6	0	0	978	14.6	33.1	13.6
2022-05-18 12:00	0.20	4.14	6.12	4.05	217.1	0	0	977.1	15.3	31.2	13.638
2022-05-18 13:00	0.10	3.87	5.4	3.86	224.9	0	0	976.3	15.9	28.3	13.794
2022-05-18 14:00	0.50	3.69	4.32	3.86	233.2	0	0	975.5	16.3	28	13.669
2022-05-18 15:00	0.20	3.51	3.915	3.71	219.2	0	0	974.7	16.5	28.8	13.603
2022-05-18 16:00	0.20	3.645	5.22	3.49	230	0	0	974	16.1	30.3	13.344
2022-05-18 17:00	0.30	3.465	4.14	3.1	238.2	0	0	973.2	15.8	31.3	13.296
2022-05-18 18:00	0.20	3.465	4.095	2.06	243.1	0	0	972.5	15.4	32.4	13.209
2022-05-18 19:00	0.20	3.375	4.005	0.92	230.9	0	0	972.3	14.3	37.1	13.148
2022-05-18 20:00	0.20	3.42	4.185	0.9	214.7	0	0	972.2	13.2	40.6	13.119
2022-05-18 21:00	0.20	3.42	4.5	1.53	248.6	0	0	972.2	12.9	39.6	13.107
2022-05-18 22:00	0.30	3.33	4.41	2.13	227.1	0	0	971.9	12.3	43.3	13.099
2022-05-18 23:00	0.10	3.51	4.68	1.65	240	0	0	971.5	11.2	51.7	13.08
2022-05-19 0:00	0.20	3.465	4.32	1.83	192.4	0	0	970.9	9.9	61.5	13.076
2022-05-19 1:00	0.30	3.465	4.275	1	195.4	0.3	0	970.5	9	69.4	13.067
2022-05-19 2:00	0.30	3.78	5.04	0.72	130.2	0.3	0	969.6	7.7	82.3	13.061
2022-05-19 3:00	0.20	3.96	5.085	1.12	122.5	0.7	0	969	7.3	85.1	13.052
2022-05-19 4:00	0.20	4.05	4.905	0.82	92.4	0.1	0	968.5	7.3	86.2	13.058
2022-05-19 5:00	0.50	4.725	5.76	0.98	120.9	0.4	0	968.4	7.2	87.4	13.038
2022-05-19 6:00	0.30	4.365	5.445	1.59	135.3	0	0	968.3	7.6	86.5	13.034
2022-05-19 7:00	0.30	3.96	5.175	1.64	161.5	0	0	968.3	8.1	82.5	13.021
2022-05-19 8:00	0.80	4.32	6.66	1.89	162.3	0	0	968.2	8.2	81.7	13.012
2022-05-19 9:00	0.30	3.33	4.635	2.16	177.9	0	0	968	8.6	81.7	13.062
2022-05-19 10:00	0.40	3.195	4.5	2.44	195.5	0	0	968.1	10.3	76.8	13.464
2022-05-19 11:00	0.30	3.285	4.86	1.94	299.4	0	0	967.8	12.2	66.6	13.581
2022-05-19 12:00	0.40	3.015	4.185	1.33	354.4	0	0	967.1	12.5	66.3	13.335
2022-05-19 13:00	0.30	2.79	3.915	0.95	5.7	0	0	967.1	14	61	13.532
2022-05-19 14:00	0.30	2.745	4.14	1.72	236.6	0	0	967.3	14.7	59.2	13.333
2022-05-19 15:00	0.30	2.7	3.87	2.29	239.4	0	0	967.4	14.6	59.7	13.226
2022-05-19 16:00	0.10	2.79	3.825	2.86	257.5	0	0	967.9	13.7	62.4	13.183
2022-05-19 17:00	0.10	2.61	3.285	2.57	268.1	0	0	967.9	13.8	61.2	13.237
2022-05-19 18:00	0.30	3.51	4.455	1.86	330.3	0	0	967.9	13	70.2	13.207
2022-05-19 19:00	0.40	3.555	4.635	0.97	36.1	0	0	968.3	12.2	74.4	13.11
2022-05-19 20:00	0.60	3.51	4.68	0.77	47.9	0	0	968.6	11.5	77.4	13.084
2022-05-19 21:00	0.30	3.78	4.905	0.87	89.4	0	0	968.8	10.7	81.7	13.071
2022-05-19 22:00	0.10	4.05	5.175	1.08	107.7	0	0	968.5	10.2	84.4	13.062
2022-05-19 23:00	0.10	3.69	4.95	0.88	100.9	0	0	967.8	8.9	86.3	13.063
2022-05-20 0:00	0.60	3.15	4.455	1.38	121.1	0	0	967.5	8.9	85.9	13.056
2022-05-20 1:00	0.60	4.455	5.85	1.91	153.9	0	0	967.2	10.6	82.8	13.051
2022-05-20 2:00	0.40	5.265	6.48	1.93	160.3	0	0	966.8	11	82.1	13.041
2022-05-20 3:00	0.40	5.175	6.615	1.56	139.1	0	0	966.5	10.8	82.3	13.032
2022-05-20 4:00	0.50	5.445	6.93	1.97	133.7	0	0	965.9	10.5	83.4	13.019
2022-05-20 5:00	0.50	5.805	6.975	2.3	135.7	0	0	965.1	10.8	82	12.993
2022-05-20 6:00	0.50	5.58	6.705	2.65	140.6	0	0	964.5	11.1	80.3	12.97

2022-05-20 7:00	0.50	5.04	5.76	2.7	133.2	1.2	0	963.5	10.4	86.6	12.942
2022-05-20 8:00	0.20	4.5	5.175	2.5	128.9	0	0	962.6	11.4	88.2	12.986
2022-05-20 9:00	0.50	5.355	6.255	3.25	156.3	1.2	0	962.3	12.9	87.4	12.968
2022-05-20 10:00	0.30	20.205	21.6	3.98	165.1	0.4	0	961.3	14.1	88.5	13.02
2022-05-20 11:00	0.30	26.19	27.72	4.46	167.1	0	0	960.1	16.1	84.7	13.355
2022-05-20 12:00	0.20	16.155	17.55	4.5	179.2	0	0	960.2	18.3	75.3	13.37
2022-05-20 13:00	0.40	13.275	14.625	3.71	170.6	0.1	0	960.5	17.9	78.4	13.32
2022-05-20 14:00	0.30	13.68	14.94	4.83	173.3	0.2	0	960	17.8	81.2	13.236
2022-05-20 15:00	0.60	17.19	18.9	3.76	170.8	1.9	0	960.2	16.6	89.3	13.183
2022-05-20 16:00	0.40	17.73	19.395	3.78	179.4	3	0	960.4	16.4	89.7	13.112
2022-05-20 17:00	0.50	12.87	14.355	2.58	203.1	2	0	960.8	16.1	90.5	13.08
2022-05-20 18:00	0.40	4.095	5.22	3.82	242.2	2.5	0	961.7	15.8	86.8	13.056
2022-05-20 19:00	0.20	1.98	3.33	3.05	243.2	0.1	0	962.3	14.1	83.5	13.006
2022-05-20 20:00	0.20	2.205	3.87	3.47	245.6	0	0	963.7	13.3	81.7	12.963
2022-05-20 21:00	0.50	2.475	4.32	2.89	248.3	0	0	965.3	11.7	83.4	12.931
2022-05-20 22:00	0.20	2.475	4.545	3	242.7	0	0	966.7	10.9	84.9	12.917
2022-05-20 23:00	0.20	2.385	4.5	3.03	253.8	0	0	968.1	10.2	85.1	12.907
2022-05-21 0:00	0.20	2.34	4.41	2.89	264.3	0	0	969.1	10	84.1	12.9
2022-05-21 1:00	0.20	2.295	4.23	1.83	285.9	0	0	969.7	9.5	83.5	12.903
2022-05-21 2:00	0.20	1.89	3.51	1.87	331.5	0	0	970.9	8.3	83.4	12.895
2022-05-21 3:00	0.40	1.53	3.015	2.14	341.2	0	0	972.3	6.2	86.1	12.884
2022-05-21 4:00	0.20	1.44	2.925	1.86	3	0	0	973.3	4.9	87.9	12.879
2022-05-21 5:00	0.10	1.485	2.61	1.87	342.9	0	0	974.5	3.8	86.4	12.877
2022-05-21 6:00	0.20	1.26	2.295	1.84	5.5	0	0	975.4	3.4	87.5	12.904
2022-05-21 7:00	0.30	1.17	2.115	1.7	17.4	0	0	975.9	3.8	86.7	12.961
2022-05-21 8:00	0.10	1.62	2.43	1.88	355.4	0	0	976.3	4.1	85.5	13.037
2022-05-21 9:00	0.30	1.485	2.07	1.98	344.2	0	0	976.8	4.3	87.4	13.043
2022-05-21 10:00	0.10	0.81	1.035	3.15	330.6	0	0	978	3.6	87.9	13.061
2022-05-21 11:00	0.20	0.81	1.035	2.84	321.2	0	0	979.5	3.1	86.7	13.126
2022-05-21 12:00	0.10	0.81	1.08	2.84	322.6	0	0	980.7	3.3	83.5	13.266
2022-05-21 13:00	0.40	0.81	1.17	2.84	325.3	0	0	981.5	4.2	78.7	13.42
2022-05-21 14:00	0.10	0.675	1.035	3.11	331.2	0	0	981.7	6	72.4	13.697
2022-05-21 15:00	0.20	0.63	0.9	3.55	309.3	0	0	982.5	7.4	68	13.731
2022-05-21 16:00	0.20	0.765	1.125	3.25	304.4	0	0	983.5	6.6	68	13.357
2022-05-21 17:00	0.40	0.72	1.035	2.56	314	0	0	984	6.2	67.9	13.224
2022-05-21 18:00	0.20	0.63	1.035	2.64	324.3	0	0	983.7	6.4	64.5	13.218
2022-05-21 19:00	0.10	0.81	1.17	1.65	335	0	0	983.4	6.4	64.6	13.13
2022-05-21 20:00	0.10	0.9	1.35	0.86	357	0	0	984.3	5.2	71.2	13.092
2022-05-21 21:00	0.30	1.125	1.845	0.28	123.7	0	0	985.7	2.5	81.9	13.074
2022-05-21 22:00	0.30	1.215	2.34	0.34	107.4	0	0	985.8	2	83.9	13.061
2022-05-21 23:00	0.20	1.215	2.07	0.42	131.6	0	0	985.6	2	85.3	13.051
2022-05-22 0:00	1.40	1.035	1.575	0.64	72.3	0	0	985.3	1.9	84.5	13.033
2022-05-22 1:00	0.40	0.99	1.44	0.65	106.2	0	0	985.4	2.1	82.7	13.017
2022-05-22 2:00	0.40	0.945	1.26	0.43	57	0	0	985.3	2.5	81.4	12.983
2022-05-22 3:00	0.20	1.215	1.89	0.37	46.7	0	0	985.1	2.7	83.5	12.944
2022-05-22 4:00	0.20	1.215	1.89	0.44	111.2	0	0	984.8	2.3	84.9	12.919
2022-05-22 5:00	0.20	0.99	1.485	0.89	99.8	0	0	984.3	2.1	84.2	12.9
2022-05-22 6:00	0.30	0.9	1.305	1.31	113.7	0	0	984.6	3.2	77.8	12.92
2022-05-22 7:00	0.20	0.675	1.125	1.52	132.5	0.1	0	985.3	3.8	74.4	12.972
2022-05-22 8:00	0.20	0.72	1.035	1.92	146.4	0.2	0	985.7	3.8	78.3	13.155
2022-05-22 9:00	0.20	0.63	0.81	1.33	163	0	0	985.5	5.3	68.5	13.376
2022-05-22 10:00	0.20	0.63	0.855	1.05	158.9	0	0	985.2	5.7	67.7	13.345
2022-05-22 11:00	0.40	0.585	0.855	0.85	145.8	0	0	985.1	6.6	62.9	13.411
2022-05-22 12:00	0.30	0.72	0.99	1.13	145.9	0	0	985.6	7	62.6	13.486
2022-05-22 13:00	0.20	0.765	0.99	1.5	302.1	0	0	985.7	7.8	60.7	13.716
2022-05-22 14:00	0.20	0.675	0.9	1.33	312	0	0	985.8	9	55.7	13.65
2022-05-22 15:00	0.30	0.72	1.035	1.91	300.5	0.2	0	986.4	9.3	54.2	13.352
2022-05-22 16:00	0.40	0.765	1.08	2.87	292.1	0.3	0	987.4	7.4	70.9	13.356
2022-05-22 17:00	0.10	0.54	0.72	1.92	314.7	0	0	987.6	8.4	64	13.358
2022-05-22 18:00	0.30	0.495	0.72	2.89	288.8	0	0	988	8.4	59.3	13.237
2022-05-22 19:00	0.40	0.405	0.675	1.95	315.1	0	0	988.7	6.8	68.5	13.141
2022-05-22 20:00	0.10	0.495	0.855	1.4	291.7	0	0	989.5	6	71.2	13.095
2022-05-22 21:00	0.30	0.63	1.125	0.54	279	0	0	990	5.7	72.1	13.096
2022-05-22 22:00	0.30	0.495	0.81	0.88	188	0	0	990.4	4.6	76.7	13.07
2022-05-22 23:00	0.10	0.765	1.305	0.51	201.3	0	0	990.5	4.3	79.1	13.067
2022-05-23 0:00	0.20	0.675	1.08	0.64	217.1	0	0	990.9	4.2	77.8	13.06
2022-05-23 1:00	0.10	0.675	1.035	0.94	258.6	0	0	991.5	4.1	77.2	13.049
2022-05-23 2:00	0.30	0.63	0.99	0.73	214.5	0	0	991.8	3.1	80.4	13.041
2022-05-23 3:00	0.20	0.72	1.215	0.82	254.8	0	0	992.1	2.2	81.9	13.025
2022-05-23 4:00	0.30	0.72	1.305	0.87	236.1	0	0	992.5	1.7	82.9	13.021
2022-05-23 5:00	0.40	0.765	1.305	1.28	242.7	0	0	992.9	2.2	82.2	13.033
2022-05-23 6:00	0.10	0.9	1.35	2.11	240.3	0	0	993.6	3.8	77.3	13.046
2022-05-23 7:00	0.30	0.9	1.215	1.43	255.5	0	0	994	6.3	66.3	13.117
2022-05-23 8:00	0.20	0.945	1.125	1.55	254.8	0	0	994.2	8.9	52.7	13.429
2022-05-23 9:00	0.20	1.215	1.575	2.01	246.7	0	0	994.1	10.4	41.7	13.775
2022-05-23 10:00	0.10	1.395	1.8	1.7	278.5	0	0	993.8	11.3	35.6	13.773
2022-05-23 11:00	0.30	1.485	1.755	1.99	264.8	0	0	993.3	12.5	32.4	13.99
2022-05-23 12:00	0.30	1.575	2.025	2.18	192.6	0	0	992.8	13.5	31.3	13.626
2022-05-23 13:00	0.20	1.62	1.98	2.13	179.2	0	0	992.4	14.3	29.2	13.328
2022-05-23 14:00	0.30	1.575	1.98	1.64	232.7	0	0	992.1	15.2	27.8	13.326
2022-05-23 15:00	0.20	1.575	1.935	1.88	191.1	0	0	991.6	16	27.2	13.324
2022-05-23 16:00	0.50	1.575	1.935	1.64	243.8	0	0	991	16.5	25.9	13.319
2022-05-23 17:00	0.20	1.62	1.98	1.65	228.4	0	0	990.8	16.5	25.3	13.32
2022-05-23 18:00	0.10	1.71	2.115	1.96	154.5	0	0	990.7	16	26.7	13.263
2022-05-23 19:00	0.20	1.755	2.25	1.6	150.9	0	0	990.7	14.9	29.7	13.136
2022-05-23 20:00	0.30	2.025	2.925	0.97	134.3	0	0	990.9	12	38.3	13.089
2022-05-23 21:00	0.20	2.205	3.285	1.37	134.6	0	0	991.3	9.9	43.5	13.073
2022-05-23 22:00	0.40	2.295	3.33	1.68	139.7	0	0	991.4	9	46.1	13.068
2022-05-23 23:00	0.30	2.43	3.6	1.55	125.6	0	0	991.4	7.9	51.9	13.065
2022-05-24 0:00	0.60	2.115	3.465	2.06	153.2	0	0	991.1	7.4	54.8	13.058

2022-05-24 1:00	0.20	1.89	3.15	2.5	176.8	0	0	991	6.2	59.7	13.045
2022-05-24 2:00	0.20	1.845	3.06	1.9	182.7	0	0	991.1	4.3	66.5	13.041
2022-05-24 3:00	0.50	1.755	2.97	1.24	184.5	0	0	991.2	2.7	72.4	13.047
2022-05-24 4:00	0.20	1.8	2.925	1.1	189	0	0	991.3	1.7	75.8	13.047
2022-05-24 5:00	0.30	2.115	3.42	0.98	201.9	0	0	991.7	2.9	71	13.062
2022-05-24 6:00	0.30	2.475	3.465	1.68	208.3	0	0	992.2	6.3	58.4	13.08
2022-05-24 7:00	0.30	2.565	3.555	2.52	234.3	0	0	992.6	9.8	43.7	13.135
2022-05-24 8:00	0.30	2.52	4.14	2.89	220.6	0	0	992.2	12.4	32.9	13.411
2022-05-24 9:00	0.10	2.25	2.835	3.2	211.3	0	0	991.6	13.9	29	13.708
2022-05-24 10:00	0.30	2.25	3.51	3.67	196.5	0	0	991.2	15.3	28.3	13.968
2022-05-24 11:00	0.20	2.34	3.465	4.66	194.9	0	0	991	16.2	25.7	13.999
2022-05-24 12:00	0.20	2.61	4.815	4.06	203.3	0	0	990.4	17	22.3	13.563
2022-05-24 13:00	0.20	2.52	3.24	3.46	240.7	0	0	989.9	17.9	22.5	13.331
2022-05-24 14:00	0.30	2.925	5.175	3.29	216.8	0	0	989.4	18.9	23.6	13.329
2022-05-24 15:00	0.30	2.61	4.545	3.16	216.5	0	0	989	19.4	24	13.325
2022-05-24 16:00	0.30	2.475	3.51	3.3	231.8	0	0	988.7	19.6	24.3	13.326
2022-05-24 17:00	0.30	2.385	3.195	2.97	221.2	0	0	988.6	19.6	24.1	13.326
2022-05-24 18:00	0.20	2.385	3.24	2.84	230.5	0	0	988.7	19.5	24.4	13.302
2022-05-24 19:00	0.30	2.385	3.375	1.67	251.2	0	0	988.9	18.7	26.4	13.132
2022-05-24 20:00	0.20	2.385	3.285	1.06	253.2	0	0	989.3	15.8	31.1	13.079
2022-05-24 21:00	0.30	2.565	3.6	0.91	233.4	0	0	989.9	13.2	36	13.071
2022-05-24 22:00	0.30	2.745	4.23	0.94	226.3	0	0	990.3	11.6	40	13.067
2022-05-24 23:00	0.10	2.7	3.78	0.74	222.2	0	0	990.6	10.3	42.7	13.067
2022-05-25 0:00	0.50	2.835	4.05	0.71	208.3	0	0	990.9	8.6	49.4	13.062
2022-05-25 1:00	0.20	2.925	4.275	0.69	197.7	0	0	990.8	7.3	55.6	13.063
2022-05-25 2:00	0.20	2.88	4.275	0.5	200.3	0	0	991	4.8	69	13.06
2022-05-25 3:00	0.30	2.79	3.96	0.76	164	0	0	991.4	3.5	72	13.05
2022-05-25 4:00	0.20	2.655	3.645	0.56	190.5	0	0	992.1	3.3	68.3	13.05
2022-05-25 5:00	0.30	2.7	3.645	0.65	181	0	0	992.7	4.7	66.7	13.077
2022-05-25 6:00	0.10	3.195	5.535	1.49	183.6	0	0	993.4	8.2	54.6	13.138
2022-05-25 7:00	0.20	3.24	5.805	1.73	199.5	0	0	993.7	10.9	46.6	13.259
2022-05-25 8:00	0.30	3.195	5.04	1.21	220.5	0	0	993.5	13.7	39.4	13.45
2022-05-25 9:00	0.20	3.195	5.895	0.91	213.6	0	0	993.4	16	33.5	13.561
2022-05-25 10:00	0.40	3.87	10.575	1.16	236.9	0	0	993.1	17.6	30	13.833
2022-05-25 11:00	0.20	5.985	22.995	2	182.3	0	0	992.5	18.8	29.1	14.033
2022-05-25 12:00	0.20	3.105	5.85	1.7	162	0	0	991.8	19.9	28.5	13.872
2022-05-25 13:00	0.20	12.15	43.83	1.68	149.5	0	0	991.4	20.3	28.5	13.326
2022-05-25 14:00	0.40	3.6	7.425	1.73	146.6	0	0	990.5	20.6	27.4	13.326
2022-05-25 15:00	0.10	3.555	7.245	1.99	88.8	0	0	989.6	20.7	28	13.326
2022-05-25 16:00	0.20	2.88	4.815	2.02	113	0	0	989.2	20.5	27.4	13.327
2022-05-25 17:00	0.40	3.195	5.67	2.42	166	0	0	988.9	19.9	29.1	13.26
2022-05-25 18:00	0.20	3.105	5.625	2.48	167	0	0	989	18.6	32.4	13.109
2022-05-25 19:00	0.30	2.79	4.68	2.6	150.6	0	0	989.1	17.1	38.7	13.083
2022-05-25 20:00	0.20	2.7	3.915	1.48	99.5	0	0	988.5	15.7	44.9	13.079
2022-05-25 21:00	0.10	2.61	3.69	2.13	68.6	0	0	988	14.9	49	13.078
2022-05-25 22:00	0.20	2.655	3.78	1.21	128.8	0.1	0	987.9	12.8	63.4	13.065
2022-05-25 23:00	0.30	2.88	3.69	1.09	144.3	0.4	0	987.6	10.6	79.6	13.061
2022-05-26 0:00	0.30	2.97	3.87	0.9	68.3	0.4	0	986.4	9.7	86.8	13.061
2022-05-26 1:00	0.40	2.925	3.735	1.44	57.9	0.2	0	985	9.4	88.2	13.053
2022-05-26 2:00	0.30	2.79	3.375	2.35	72.8	0.5	0	983.5	9.4	87.6	13.04
2022-05-26 3:00	0.20	2.97	3.555	2.6	70.7	1.4	0	981.8	9.2	88.5	13.019
2022-05-26 4:00	0.40	3.015	3.645	2.8	73	2	0	980.4	9.2	88.7	13.02
2022-05-26 5:00	0.10	3.015	3.6	3.02	78.2	2	0	978.8	9.1	88.3	13.018
2022-05-26 6:00	0.30	2.7	3.24	2.82	81.9	0.2	0	977.5	9.1	88	13.026
2022-05-26 7:00	0.30	1.89	2.43	2.66	86.8	0.8	0	976.2	9.3	88.6	13.036
2022-05-26 8:00	0.10	1.53	2.115	1.71	72.6	0.2	0	975.4	9.7	88.3	13.058
2022-05-26 9:00	0.30	1.395	2.025	1.85	66.8	0	0	974.5	10.2	88.5	13.115
2022-05-26 10:00	0.30	1.08	1.62	1.69	69.7	0.3	0	974	10.7	88.3	13.142
2022-05-26 11:00	0.20	0.81	1.305	1.33	71.6	0.3	0	973.4	11.4	87.8	13.211
2022-05-26 12:00	0.30	0.72	1.125	0.87	79.6	0.6	0	973.2	12	87.3	13.244
2022-05-26 13:00	0.50	0.63	1.125	0.73	35.9	0.6	0	972.9	12.5	87.2	13.263
2022-05-26 14:00	0.40	0.585	0.99	0.62	297.6	0.3	0	972.9	13	85.7	13.263
2022-05-26 15:00	0.10	0.9	1.755	1.62	285.2	0.2	0	973.2	13.1	85.7	13.214
2022-05-26 16:00	0.40	0.945	1.8	1.43	302.1	0	0	973.3	13.1	85.8	13.208
2022-05-26 17:00	0.30	1.44	2.97	1.52	300.2	0	0	973.6	13	86.7	13.148
2022-05-26 18:00	0.30	1.755	3.42	1.36	321.6	0	0	973.9	12.8	86.9	13.085
2022-05-26 19:00	0.20	2.025	4.14	1.24	319.6	0	0	974.1	12.4	87	13.055
2022-05-26 20:00	0.20	2.43	5.22	1	300.7	0	0	974.4	12.1	87.6	13.038
2022-05-26 21:00	0.50	2.385	5.355	1.36	324.2	0	0	974.3	11.8	88.5	13.035
2022-05-26 22:00	0.20	2.385	5.04	1.31	330	0	0	974.1	11.6	88.7	13.036
2022-05-26 23:00	0.20	2.34	4.905	1.41	332.4	0	0	974	11.3	88.6	13.037
2022-05-27 0:00	0.30	2.385	4.905	1.05	331.6	0	0	974.2	11	88.4	13.036
2022-05-27 1:00	0.30	2.61	5.355	1.17	322.9	0	0	974.1	10.9	88.5	13.037
2022-05-27 2:00	0.10	1.845	3.69	1.36	328.7	0	0	973.9	10.5	88.6	13.033
2022-05-27 3:00	0.20	1.485	3.195	1.71	331.6	0	0	973.9	10.2	88.8	13.032
2022-05-27 4:00	0.30	1.575	3.105	1.71	330	0	0	974.2	9.9	88.8	13.032
2022-05-27 5:00	0.20	1.26	2.385	2.01	336.1	0	0	974.3	9.8	88.6	13.042
2022-05-27 6:00	0.30	1.125	2.07	2.09	340.1	0	0	974.5	10	87.1	13.093
2022-05-27 7:00	0.20	0.855	1.62	2.22	336	0	0	974.8	9.9	87.6	13.109
2022-05-27 8:00	0.40	0.945	1.485	2.03	330.5	0	0	974.8	10.2	86	13.158
2022-05-27 9:00	0.20	0.9	1.485	1.96	338.7	0	0	974.8	10.6	83.7	13.211
2022-05-27 10:00	0.10	1.305	1.8	1.86	335.3	0	0	974.8	10.8	83.1	13.216
2022-05-27 11:00	0.40	2.025	2.61	2.18	322.2	0	0	974.9	10.4	84.8	13.257
2022-05-27 12:00	0.30	1.71	2.295	2.28	316.8	0	0	974.9	11.1	82	13.313
2022-05-27 13:00	0.20	1.98	2.655	2.69	319.6	0	0	974.7	11.4	80.2	13.347
2022-05-27 14:00	0.30	1.575	2.205	2.54	320	0	0	974.7	11.6	78.1	13.336
2022-05-27 15:00	0.00	1.485	2.16	1.79	324	0	0	975	12.3	75.2	13.321
2022-05-27 16:00	0.10	1.665	2.52	1.84	319.5	0	0	975	12.8	73.8	13.25
2022-05-27 17:00	0.30	1.71	2.61	1.51	310.4	0	0	975	12.2	81.6	13.278
2022-05-27 18:00	0.20	1.89	2.925	1.91	294.8	0	0	975	13.2	75.3	13.271

2022-05-27 19:00	0.10	1.935	3.285	1.6	273.5	0	0	975.2	13.3	73.8	13.124
2022-05-27 20:00	0.20	2.16	3.51	0.91	204.9	0	0	975.3	11.6	80.6	13.063
2022-05-27 21:00	0.10	2.205	3.69	0.9	215.4	0	0	975.4	9.8	83.7	13.038
2022-05-27 22:00	0.30	2.16	3.465	0.88	206	0	0	975.2	8.7	84.6	13.033
2022-05-27 23:00	0.10	2.34	3.735	1	201	0	0	975.2	8	85.9	13.029
2022-05-28 0:00	0.30	2.61	4.5	0.99	227.3	0	0	975.1	7.4	85.8	13.02
2022-05-28 1:00	0.10	2.655	4.41	0.96	217.1	0	0	975.1	6.6	87.1	13.02
2022-05-28 2:00	0.20	2.745	4.365	0.7	230.1	0	0	975	6.6	85.8	13.021
2022-05-28 3:00	0.10	2.925	4.77	1.16	226.7	0	0	975.2	5.8	86.9	13.01
2022-05-28 4:00	0.30	3.06	4.68	1.11	246.2	0	0	975.7	6	86.2	13.013
2022-05-28 5:00	0.30	3.015	4.635	1.84	264	0	0	976.3	7.3	84.7	13.023
2022-05-28 6:00	0.20	2.745	4.185	2.61	273.9	0	0	976.8	9.8	79.3	13.076
2022-05-28 7:00	0.30	2.655	3.96	2.42	280	0	0	977	11.7	74	13.124
2022-05-28 8:00	0.00	2.7	4.05	2.21	286.4	0	0	977	15	61.7	13.393
2022-05-28 9:00	0.20	2.61	3.555	2.45	286.3	0	0	976.9	17.2	52	13.677
2022-05-28 10:00	0.20	2.475	3.375	2.98	294.8	0	0	976.8	18.4	46.5	13.789
2022-05-28 11:00	0.10	2.115	2.88	3.12	281.9	0	0	976.7	19.1	44	13.68
2022-05-28 12:00	0.10	1.935	2.7	3.57	267.7	0	0	976.6	19.7	43.1	13.641
2022-05-28 13:00	0.60	1.8	2.61	2.67	286.5	0	0	976.4	19.3	45.1	13.775
2022-05-28 14:00	0.10	1.755	2.61	2.18	285.2	0	0	976.4	20.3	41.7	13.738
2022-05-28 15:00	0.30	1.755	2.835	2.93	215.4	0	0	976.2	20.9	41.1	13.326
2022-05-28 16:00	0.20	1.62	2.475	2.53	341.7	0	0	976.4	19.7	45	13.325
2022-05-28 17:00	0.20	1.665	2.565	1.91	179.9	0	0	976.8	18.7	49.3	13.318
2022-05-28 18:00	0.40	1.845	2.835	1.07	269.1	0	0	976.9	19.3	48.9	13.306
2022-05-28 19:00	0.20	1.935	2.835	1.84	180.3	0	0	977	17	63.2	13.149
2022-05-28 20:00	0.40	1.8	2.88	1.08	233.6	0.1	0	977.4	14.7	70.5	13.084
2022-05-28 21:00	0.10	3.015	4.86	0.48	160.1	0	0	977.8	13.7	78.2	13.082
2022-05-28 22:00	0.20	2.925	4.68	0.77	244.5	0	0	978.1	12.4	80.5	13.078
2022-05-28 23:00	0.40	3.42	5.715	0.45	330	0	0	978.5	10.9	83.7	13.079
2022-05-29 0:00	0.10	3.825	6.66	0.55	172.6	0	0	978.6	9	86.5	13.074
2022-05-29 1:00	0.20	3.33	5.49	0.42	143	0	0	978.6	9.6	86.4	13.077
2022-05-29 2:00	0.20	3.375	5.4	0.36	219.6	0	0	979	9.8	84.9	13.075
2022-05-29 3:00	0.20	3.33	5.22	0.62	204.3	0	0	979.5	9.8	83.7	13.07
2022-05-29 4:00	0.20	3.24	4.95	0.33	112.8	0	0	979.8	9.7	85.6	13.075
2022-05-29 5:00	0.30	3.465	5.265	0.35	159.9	0	0	980.4	10	86.4	13.077
2022-05-29 6:00	0.20	3.555	5.535	0.73	73.4	0.3	0	980.9	10.5	85.7	13.104
2022-05-29 7:00	0.50	3.33	5.04	1.03	62.3	0	0	981	11.8	83.5	13.193
2022-05-29 8:00	0.30	3.015	4.32	1.19	145.8	0	0	981.4	13.3	77.6	13.217
2022-05-29 9:00	0.30	3.06	4.59	1.31	159.4	0	0	981.7	14	76.6	13.293
2022-05-29 10:00	0.30	2.7	4.05	1.29	110.3	0	0	981.7	15.6	70.1	13.342
2022-05-29 11:00	0.20	2.43	3.555	1.2	108.9	0.1	0	981.7	16.3	68.9	13.32
2022-05-29 12:00	0.30	2.295	3.465	1.26	99.1	0	0	981.5	17.2	60.6	13.41
2022-05-29 13:00	0.30	2.745	4.185	2.08	83.3	0	0	981	18.5	56.4	13.745
2022-05-29 14:00	0.30	3.24	5.085	2.63	77.4	0	0	980.5	20.4	50.1	14.033
2022-05-29 15:00	0.20	2.97	4.545	2.41	105.3	0	0	979.8	21.8	43.9	13.782
2022-05-29 16:00	0.40	2.79	4.545	1.87	114.1	0	0	979.5	22	42.1	13.324
2022-05-29 17:00	0.30	2.88	4.545	1.35	103.7	0	0	979.6	21.6	46	13.274
2022-05-29 18:00	0.30	2.88	4.185	1.31	125.6	0	0	979.9	20.4	51.2	13.096
2022-05-29 19:00	0.20	3.78	5.985	1.1	152.8	2.2	0	980	18	65.7	13.078
2022-05-29 20:00	0.50	5.265	7.965	0.61	30.5	1.2	0	980	15.1	87.6	13.079
2022-05-29 21:00	0.20	5.04	6.885	0.67	69.8	0.9	0	980.9	14.7	89.4	13.076
2022-05-29 22:00	0.20	4.32	5.94	1.31	67.9	1.4	0	980.8	14.5	88.9	13.073
2022-05-29 23:00	0.30	4.275	6.165	1.42	91.3	0	0	980.8	14.3	89.8	13.075
2022-05-30 0:00	0.20	4.68	6.93	1.23	98	0.4	0	980.8	14.2	89.8	13.07
2022-05-30 1:00	0.40	4.95	7.2	1.15	103.1	0.1	0	980.4	14	90.4	13.071
2022-05-30 2:00	0.40	5.31	8.145	1.35	85	0	0	979.4	14	90.7	13.068
2022-05-30 3:00	0.20	5.76	8.82	1.37	103.8	0	0	978.9	13.9	90.5	13.067
2022-05-30 4:00	0.20	5.4	8.685	1.58	94.8	0	0	978.3	13.9	90.2	13.066
2022-05-30 5:00	0.40	5.535	8.46	1.34	111.6	0	0	978.1	13.7	90.1	13.078
2022-05-30 6:00	0.20	5.715	8.37	1.92	111.8	0	0	977.5	14.7	88.6	13.135
2022-05-30 7:00	0.20	5.985	8.46	1.71	106.5	0	0	977.4	15.9	85.7	13.199
2022-05-30 8:00	0.20	6.75	9.675	1.95	131.5	0	0	977.5	18.1	78.9	13.394
2022-05-30 9:00	0.40	7.335	10.665	2.23	140.6	0	0	976.8	19.9	73	13.609
2022-05-30 10:00	0.10	7.425	10.935	2.91	155.9	0	0	976.3	22.5	63.9	13.888
2022-05-30 11:00	0.20	7.425	10.26	2.46	194.8	0	0	976.3	23.3	60.4	14.031
2022-05-30 12:00	0.30	7.605	10.935	2.66	199.8	0	0	976.3	24.6	56.3	13.777
2022-05-30 13:00	0.40	7.65	10.755	2.76	201.5	0	0	976.4	25.1	55.1	13.325
2022-05-30 14:00	0.50	7.83	11.25	2.7	201	0	0	976.2	25.3	54.9	13.324
2022-05-30 15:00	0.50	8.1	11.43	2.82	201.6	0	0	975.9	25.7	54.5	13.324
2022-05-30 16:00	0.40	8.19	11.79	2.8	211.3	0	0	976.1	26	54.5	13.322
2022-05-30 17:00	0.50	8.55	12.33	1.7	236.1	0	0	976.4	25.9	55.5	13.324
2022-05-30 18:00	0.20	8.055	10.98	1.05	150.9	0	0	975.8	25.8	57	13.321
2022-05-30 19:00	0.30	9	12.6	1.2	150	0	0	975.8	25	60.8	13.159
2022-05-30 20:00	0.40	9.765	14.175	0.8	115.8	0	0	976.6	23.3	66.9	13.08
2022-05-30 21:00	0.40	9.81	13.095	0.84	69	0	0	977.3	21.2	75.7	13.078
2022-05-30 22:00	0.10	9.045	13.185	2.15	62	0	0	978.1	20.2	75.9	13.079
2022-05-30 23:00	0.30	6.165	9.765	2.24	74.1	0	0	978.5	17.9	75.6	13.079
2022-05-31 0:00	0.20	5.535	8.595	1.71	87.4	0	0	978.7	16.1	78.4	13.078
2022-05-31 1:00	0.20	5.355	8.28	1.24	72.3	0	0	979	14.6	81.7	13.077
2022-05-31 2:00	0.20	5.13	7.605	1.25	70.4	0	0	979.6	13.6	82.8	13.077
2022-05-31 3:00	0.10	5.085	7.605	1.45	80.5	0	0	980.1	12.8	84	13.076
2022-05-31 4:00	0.40	4.95	7.335	2.07	87.7	0	0	979.7	12.2	83.2	13.073
2022-05-31 5:00	0.40	4.725	6.795	2.42	95.1	0	0	979.2	12.2	82.6	13.086
2022-05-31 6:00	0.10	4.725	6.93	3.04	102.5	0	0	978.8	13.5	79.1	13.131
2022-05-31 7:00	0.10	5.715	8.235	2.6	110.4	0	0	979	16	73	13.205
2022-05-31 8:00	0.10	6.93	9.9	3.19	110.8	0	0	978.8	17.8	68.7	13.388
2022-05-31 9:00	0.20	7.11	10.755	3.48	113.9	0	0	978.5	20.3	62.3	13.648
2022-05-31 10:00	0.30	7.875	11.88	3.58	118.7	0	0	978	23.4	55.8	13.979
2022-05-31 11:00	0.40	9.18	13.995	3.73	124.5	0	0	977.1	25.6	52.6	14.03
2022-05-31 12:00	0.20	9.72	15.345	4.52	115.4	0	0	975.7	27.5	48.4	13.598

2022-05-31 13:00	0.60	10.035	16.785	4.62	132	0	0	975	28.9	44	13.324
2022-05-31 14:00	0.50	10.035	17.01	3.98	132	0	0	974.8	29.3	43.7	13.324
2022-05-31 15:00	0.50	7.785	14.085	4.45	170.3	0	0	974.6	30.6	35.7	13.324
2022-05-31 16:00	0.50	7.56	12.15	3.92	169.2	0	0	973.8	30.6	35.2	13.323
2022-05-31 17:00	0.40	8.595	13.905	4.6	166.7	0	0	972.9	30.3	36.5	13.322
2022-05-31 18:00	0.30	9.225	15.255	4.05	166.9	0	0	973	28.7	41	13.205
2022-05-31 19:00	0.20	9.135	13.185	3.04	169.3	0	0	973	27.6	45.2	13.131
2022-05-31 20:00	0.30	10.305	14.67	2.93	177	0	0	973.5	26.4	50.2	13.08
2022-05-31 21:00	0.30	11.385	15.075	1.91	175.7	0	0	973.9	24.8	56.9	13.079
2022-05-31 22:00	0.20	11.835	15.93	1.54	159.8	0	0	973.9	23	63.3	13.078
2022-05-31 23:00	0.50	11.385	15.57	1.93	169	0	0	973.6	22.3	65.6	13.078
2022-06-01 0:00	0.30	10.935	14.715	1.51	155.3	0	0	973.4	21.9	66.2	13.077
2022-06-01 1:00	0.40	11.745	15.48	0.73	139.8	0	0	973	20.4	73.5	13.076
2022-06-01 2:00	0.30	11.835	14.805	0.93	183.5	0	0	972.8	19.7	77.2	13.076
2022-06-01 3:00	0.30	12.6	16.425	1.77	198.1	0	0	972.7	19.9	77.6	13.075
2022-06-01 4:00	0.20	10.71	15.255	2.58	248.6	0	0	973.3	18.8	73.8	13.075
2022-06-01 5:00	0.30	5.31	8.775	2.3	245.8	0	0	974	16.8	68.5	13.086
2022-06-01 6:00	0.40	2.43	5.085	2.24	240.1	0	0	974.4	16.6	61.8	13.135
2022-06-01 7:00	0.20	2.07	5.085	3.14	234.7	0	0	974.1	17.9	55.5	13.161
2022-06-01 8:00	0.40	2.07	5.4	3.98	216.5	0	0	974	19.2	51	13.42
2022-06-01 9:00	0.10	1.62	5.49	4.78	238.9	0	0	973.9	19.2	48	13.547
2022-06-01 10:00	0.40	1.125	3.555	4.73	244.5	0	0	974.2	19	45.3	13.957
2022-06-01 11:00	0.20	1.35	4.995	4.55	266.9	0	0	974.5	19.2	44.7	14.035
2022-06-01 12:00	0.30	1.485	5.13	4.16	283.9	0	0	974.9	18.4	47.7	13.661
2022-06-01 13:00	0.20	0.99	2.52	3.49	271.2	0	0	975.2	18.5	47.8	13.328
2022-06-01 14:00	0.20	1.8	7.29	3.55	275.9	0	0	975.2	19.3	47.1	13.325
2022-06-01 15:00	0.20	1.215	3.51	3.72	286.7	0	0	975.5	18.8	48.4	13.326
2022-06-01 16:00	0.30	0.99	1.98	3.16	295.5	0	0	975.7	18.9	46.7	13.325
2022-06-01 17:00	0.30	1.08	2.115	2.96	302.7	0	0	975.9	19	44.9	13.326
2022-06-01 18:00	0.40	1.35	2.475	2.87	312.5	0	0	976.4	18	47.2	13.306
2022-06-01 19:00	0.20	1.26	2.16	1.82	314.8	0	0	977.3	16.2	52	13.132
2022-06-01 20:00	0.40	1.26	2.205	0.49	4.6	0	0	977.9	13.8	63.3	13.082
2022-06-01 21:00	0.20	1.35	2.25	0.76	359.2	0	0	977.8	12.3	67.8	13.079
2022-06-01 22:00	0.30	1.44	2.565	0.74	348.8	0	0	978	11.1	74.7	13.075
2022-06-01 23:00	0.50	1.485	2.835	1.1	349.3	0	0	978.1	10.3	76.3	13.061
2022-06-02 0:00	0.20	1.89	3.465	0.64	340.6	0	0	978.5	8.6	79.8	13.061
2022-06-02 1:00	0.30	2.34	4.32	0.67	220.4	0	0	979.1	6.6	83.5	13.056
2022-06-02 2:00	0.40	2.34	4.23	0.37	99.6	0	0	978.6	5.3	85.9	13.055
2022-06-02 3:00	0.10	2.475	4.545	0.7	149.9	0	0	977.9	4.5	87.1	13.043
2022-06-02 4:00	0.10	2.25	4.05	0.55	211.5	0	0	978.6	4.6	86.8	13.044
2022-06-02 5:00	0.10	2.16	3.555	0.59	223	0	0	979	5.7	85.4	13.068
2022-06-02 6:00	0.30	1.8	2.835	0.76	240.5	0	0	979.3	9.1	81.2	13.142
2022-06-02 7:00	0.10	1.935	6.66	1.51	269.7	0	0	979.3	11.9	70.3	13.277
2022-06-02 8:00	0.20	0.99	1.98	1.17	252.7	0	0	978.7	14	58	13.439
2022-06-02 9:00	0.10	1.305	3.69	1.28	153.7	0	0	978.2	15	50.9	13.555
2022-06-02 10:00	0.50	1.08	2.25	1.28	169.8	0	0	977.8	15.5	46.5	13.51
2022-06-02 11:00	0.30	0.99	1.8	1.48	222.8	0	0	977.4	16.3	42.9	13.934
2022-06-02 12:00	0.20	0.99	1.71	1.46	214.4	0	0	976.8	17.5	38	14.031
2022-06-02 13:00	0.40	2.385	8.595	1.56	311.6	0	0	976.2	18.4	34.5	13.577
2022-06-02 14:00	0.30	6.75	33.615	1.89	232.7	0	0	975.4	19.6	31.2	13.326
2022-06-02 15:00	0.30	1.26	2.655	1.95	246.8	0	0	974.8	20.1	29.7	13.325
2022-06-02 16:00	0.30	3.42	11.52	1.39	155.8	0	0	974.4	19.6	31.6	13.326
2022-06-02 17:00	0.30	1.215	2.07	0.71	11.5	0	0	974.2	19.8	32.2	13.32
2022-06-02 18:00	0.40	1.17	1.89	0.45	68.9	0	0	974.2	18.9	39.8	13.325
2022-06-02 19:00	0.40	4.41	14.355	0.56	104.8	0	0	974.2	18.6	40.3	13.199
2022-06-02 20:00	0.20	4.365	13.32	0.32	103.1	0	0	973.9	14.9	55.7	13.083
2022-06-02 21:00	0.20	2.52	4.5	0.59	108	0	0	973.8	12.7	63.8	13.078
2022-06-02 22:00	0.20	2.385	3.96	0.31	156.3	0	0	973.7	10	73.2	13.075
2022-06-02 23:00	0.40	2.745	4.545	0.31	171.5	0	0	973.6	8.4	78.7	13.072
2022-06-03 0:00	0.70	3.015	4.995	0.63	190.7	0	0	973.6	8	75.2	13.066
2022-06-03 1:00	0.60	3.33	5.04	0.73	175	0	0	973.5	7.7	74.7	13.062
2022-06-03 2:00	0.30	2.97	4.59	0.95	188.4	0	0	973.5	7.6	70.5	13.055
2022-06-03 3:00	0.20	2.925	4.545	0.62	163.8	0	0	973.3	6.1	75.1	13.052
2022-06-03 4:00	0.40	3.06	4.68	0.66	162	0	0	973.3	5.3	78.5	13.05
2022-06-03 5:00	0.30	2.925	4.41	0.96	181.5	0	0	973.6	7.2	74	13.086
2022-06-03 6:00	0.20	3.195	6.975	1.24	184	0	0	973.8	10.6	65.9	13.105
2022-06-03 7:00	0.10	5.04	16.11	1.4	181.1	0	0	974	10.8	67.2	13.105
2022-06-03 8:00	0.20	2.79	4.545	1.39	180.3	0	0	974.1	11.2	67.9	13.11
2022-06-03 9:00	0.20	3.015	5.67	2.53	178.2	0	0	974.1	12.9	62.1	13.424
2022-06-03 10:00	0.20	2.925	5.94	2.91	224.4	0	0	974	16	47.4	13.71
2022-06-03 11:00	0.10	3.375	11.25	3.08	221.7	0	0	974	17.4	41.2	13.943
2022-06-03 12:00	0.20	2.025	4.365	3.12	251.9	0	0	974.1	17.6	37.9	14.031
2022-06-03 13:00	0.30	1.8	3.645	2.87	263.5	0	0	974.2	17.4	38.2	13.481
2022-06-03 14:00	0.20	2.34	6.21	2.07	243.5	0	0	974.1	17.6	37.1	13.326
2022-06-03 15:00	0.10	2.79	7.875	2.03	264.2	0	0	974	17.5	37.3	13.327
2022-06-03 16:00	0.40	2.655	6.885	0.75	326.7	0	0	973.9	17.3	38.9	13.326
2022-06-03 17:00	0.30	2.655	6.66	1	352.5	0	0	973.6	16.8	43.6	13.318
2022-06-03 18:00	0.30	2.565	5.535	0.86	345.3	0	0	973.4	16	49.5	13.152
2022-06-03 19:00	0.20	2.43	5.175	2.52	285.6	0.4	0	974.1	14.3	57.6	13.063
2022-06-03 20:00	0.40	2.61	5.175	3.02	258.7	2.9	0	975.6	10.3	81	13.027
2022-06-03 21:00	0.30	2.34	4.32	2.17	287.1	2.1	0	975.8	8.8	84.4	13.026
2022-06-03 22:00	0.30	2.07	3.33	1.88	292.2	0.7	0	975.5	8.3	85.5	13.03
2022-06-03 23:00	0.30	2.115	3.285	1.85	271	0.2	0	975.5	8	86.2	13.026
2022-06-04 0:00	0.20	1.35	2.34	2.72	286.6	2.3	0	975.8	7.8	85.7	13.014
2022-06-04 1:00	0.10	0.72	1.935	2.79	285.3	1.9	0	976	6.8	85.9	13.011
2022-06-04 2:00	0.10	0.585	1.44	2.8	277.6	0	0	976	6.5	86.5	13.01
2022-06-04 3:00	0.20	0.585	1.395	2.51	275.4	0	0	976.3	6.3	85.9	13.012
2022-06-04 4:00	0.20	0.63	1.44	2.37	276.9	0	0	976.5	6.2	85.9	13.013
2022-06-04 5:00	0.20	0.63	1.485	2.35	277.8	0	0	976.8	6.2	85.7	13.029
2022-06-04 6:00	0.40	0.585	1.215	2.52	285.6	0	0	977.3	6.4	84.2	13.073

2022-06-04 7:00	0.20	0.63	1.35	2.91	277.9	0	0	977.7	6.8	82.8	13.165
2022-06-04 8:00	0.40	0.675	1.485	3.17	285.8	0	0	977.9	7.8	77.9	13.35
2022-06-04 9:00	0.10	0.675	1.71	3.25	292.7	0	0	978	9.2	67.9	13.386
2022-06-04 10:00	0.20	0.675	1.665	3.18	281.6	0.1	0	977.9	9.9	65.4	13.57
2022-06-04 11:00	0.10	0.675	1.755	3.83	290	0	0	978	10.9	60.3	13.754
2022-06-04 12:00	0.20	0.675	1.575	3.1	274.6	0.6	0	978.1	10.8	65.5	13.995
2022-06-04 13:00	0.20	0.855	2.34	2.18	315.7	0.6	0	978	10.7	70.4	13.746
2022-06-04 14:00	0.10	0.675	1.62	2.3	303.5	0.5	0	977.9	11.3	68	13.309
2022-06-04 15:00	0.30	1.08	2.34	2.24	291.9	2	0	977.8	10.5	75.3	13.364
2022-06-04 16:00	0.20	0.72	1.8	3.91	285.3	0	0	977.7	13.5	57.7	13.327
2022-06-04 17:00	0.20	0.81	1.845	2.54	314.7	1	0	978.1	12.5	60.3	13.269
2022-06-04 18:00	0.40	0.99	2.07	0.94	292	0.2	0	978.3	11.1	76.6	13.31
2022-06-04 19:00	0.20	0.99	1.935	0.62	196.9	0	0	978.3	11.4	80.2	13.146
2022-06-04 20:00	0.10	1.305	2.565	0.55	197.8	0	0	978.4	10.5	81.4	13.069
2022-06-04 21:00	0.30	1.26	2.295	0.8	198.8	0	0	978.4	9.6	79.8	13.062
2022-06-04 22:00	0.10	1.35	2.43	0.79	186	0	0	978.3	9	80.9	13.061
2022-06-04 23:00	0.40	1.395	2.565	0.77	194.3	0	0	978.2	8.7	79.5	13.052
2022-06-05 0:00	0.20	1.305	2.34	0.9	189.3	0	0	978.1	8.1	80.7	13.042
2022-06-05 1:00	0.10	1.305	2.43	0.91	205.2	0	0	978.1	8.5	78.1	13.04
2022-06-05 2:00	0.20	1.485	2.835	0.98	222.1	0	0	978.1	7.9	78.2	13.033
2022-06-05 3:00	0.10	1.665	3.06	0.75	229.8	0	0	978.1	6.7	79.2	13.031
2022-06-05 4:00	0.30	1.89	3.51	0.92	196.8	0	0	978.4	5.3	81.3	13.028
2022-06-05 5:00	0.10	1.755	2.925	0.84	200.9	0	0	978.9	5.3	79.7	13.045
2022-06-05 6:00	0.10	1.575	2.565	1.49	247.3	0	0	979.1	8.7	69	13.077
2022-06-05 7:00	0.10	1.125	1.935	2.1	284.6	0	0	979.2	12.2	56.1	13.133
2022-06-05 8:00	0.30	0.81	1.44	2.15	291.9	0	0	979.4	14.6	48.8	13.421
2022-06-05 9:00	0.20	0.63	1.35	2.71	285.8	0	0	979.4	15.9	41.3	13.767
2022-06-05 10:00	0.10	0.81	1.53	2.82	263.8	0	0	979.2	16.8	37.6	13.869
2022-06-05 11:00	0.00	1.125	1.89	2.66	267.2	0	0	979.1	16.8	36.1	14.035
2022-06-05 12:00	0.40	1.125	1.89	2.7	263.5	0	0	979.2	17.3	34.9	13.64
2022-06-05 13:00	0.30	1.125	2.025	2.49	275.9	0	0	979.2	18.2	34	13.327
2022-06-05 14:00	0.30	1.215	2.115	2.48	264.9	0	0	979.1	18.8	32.6	13.326
2022-06-05 15:00	0.20	1.17	1.89	2.08	277.7	0	0	978.9	19.2	30.3	13.326
2022-06-05 16:00	0.20	1.125	1.89	1.69	309.5	0	0	978.7	19.1	31.5	13.326
2022-06-05 17:00	0.40	1.035	1.575	0.8	103.4	0	0	978.7	18.9	33.7	13.325
2022-06-05 18:00	0.30	0.99	1.53	0.76	52.2	0	0	978.8	18.9	33.9	13.285
2022-06-05 19:00	0.30	1.035	1.53	0.54	72.9	0	0	979.2	18.4	39.3	13.133
2022-06-05 20:00	0.40	1.53	2.43	0.29	28.7	0	0	979.2	14.1	63.2	13.078
2022-06-05 21:00	0.40	1.305	2.07	0.7	72	0	0	979.5	12.4	55.3	13.077
2022-06-05 22:00	4.10	1.395	2.295	0.7	67.4	0	0	979.8	11.2	58.2	13.073
2022-06-05 23:00	5.20	1.62	2.43	0.76	58.8	0	0	979.8	9.9	61.7	13.068
2022-06-06 0:00	2.00	1.98	3.15	0.69	58.7	0	0	979.9	8.6	66.4	13.065
2022-06-06 1:00	0.30	2.205	3.555	0.78	69.7	0	0	979.7	7.6	71.3	13.06
2022-06-06 2:00	0.90	2.385	3.51	0.51	73.8	0	0	979.6	7.1	74.6	13.058
2022-06-06 3:00	0.90	2.7	4.05	0.75	80.2	0	0	979.3	7	76	13.049
2022-06-06 4:00	0.20	2.88	4.365	0.9	91.3	0	0	979.4	7.1	76.7	13.048
2022-06-06 5:00	0.30	2.79	3.96	0.47	30.8	0	0	979.9	8	75.4	13.096
2022-06-06 6:00	0.50	2.925	4.41	0.85	50	0	0	980.3	10.3	72.3	13.155
2022-06-06 7:00	0.30	3.42	5.58	1.48	127.3	0	0	980.4	12.7	67.9	13.246
2022-06-06 8:00	0.20	4.005	6.84	1.47	152.9	0	0	980.4	14.5	62.9	13.251
2022-06-06 9:00	0.50	4.185	7.155	1.55	152.2	0	0	980.2	15.3	61.6	13.433
2022-06-06 10:00	0.70	4.14	7.515	2.13	165.5	0	0	979.9	17.9	51.1	13.649
2022-06-06 11:00	0.20	4.365	8.91	3.21	141.8	0	0	979.5	20.2	39.6	13.97
2022-06-06 12:00	0.30	3.96	8.145	3.52	150.1	0	0	979	20.7	40.5	14.029
2022-06-06 13:00	0.10	3.87	7.245	3.43	152.1	0	0	978.8	20.6	41	13.468
2022-06-06 14:00	0.20	4.275	8.055	3.77	180.6	0.1	0	978.9	19.6	45.6	13.321
2022-06-06 15:00	0.20	3.15	4.41	2.63	280.1	4.6	0	979.5	15	69	13.22
2022-06-06 16:00	0.40	6.075	10.8	0.74	34.8	2.4	0	979.5	12.2	83.5	13.118
2022-06-06 17:00	0.30	5.355	8.145	1.06	89	0	0	979.2	13	86.9	13.148
2022-06-06 18:00	0.10	5.355	6.93	0.86	78.3	0	0	978.7	13	85.3	13.083
2022-06-06 19:00	0.10	5.31	6.57	0.77	36.9	0	0	978.5	12.6	86.8	13.058
2022-06-06 20:00	0.20	5.355	6.615	1.2	21.9	0	0	978.3	12.1	87.2	13.05
2022-06-06 21:00	0.40	5.31	6.75	1.45	33.7	0.1	0	977.9	11.8	86.3	13.044
2022-06-06 22:00	0.10	5.04	6.75	1.56	46.6	0	0	977.4	11.3	87.1	13.041
2022-06-06 23:00	0.30	5.67	7.65	1.24	33.4	0	0	976.7	11.3	88.4	13.041
2022-06-07 0:00	0.10	5.445	7.29	1.51	29.3	0.4	0	975.8	11.3	88.7	13.035
2022-06-07 1:00	0.20	4.725	6.39	1.58	25	0.2	0	975.1	11.4	88.7	13.037
2022-06-07 2:00	0.20	3.78	5.31	1.36	21	0	0	974.6	11.4	88.7	13.039
2022-06-07 3:00	0.40	3.42	5.31	1.39	14.5	0	0	974.2	11.3	89	13.037
2022-06-07 4:00	0.40	4.14	6.3	1.15	353.2	0	0	974	11.3	89.2	13.036
2022-06-07 5:00	0.30	4.005	5.85	1.21	350	0	0	974.1	11.3	89.3	13.044
2022-06-07 6:00	0.20	3.51	4.95	1.46	349.2	0	0	974	11.5	88.7	13.079
2022-06-07 7:00	0.10	3.51	4.635	1.71	343.8	0	0	974.1	11.8	87.7	13.098
2022-06-07 8:00	0.40	3.51	4.77	1.88	336.7	0	0	974.1	12.1	86.9	13.214
2022-06-07 9:00	0.20	2.655	3.69	2.11	332.7	0	0	973.9	13	82.6	13.424
2022-06-07 10:00	0.30	2.07	3.195	2.59	330.2	0	0	973.8	13.6	78.5	13.449
2022-06-07 11:00	0.10	2.475	3.645	2.66	338.5	0	0	973.6	14.7	70.9	13.622
2022-06-07 12:00	0.20	2.385	3.555	2.46	346	0	0	973.4	16.1	63	13.51
2022-06-07 13:00	0.20	2.25	3.6	2.78	335.2	0	0	973.3	16.3	60.6	13.587
2022-06-07 14:00	0.20	2.205	4.05	2.6	336	0	0	973.3	16.9	58.4	14.03
2022-06-07 15:00	0.30	2.025	3.33	2.19	351.5	0	0	973.4	16.9	58.6	13.721
2022-06-07 16:00	0.40	2.025	3.465	2.28	330.6	0	0	973.5	17.5	57.5	13.325
2022-06-07 17:00	0.10	1.98	3.195	2.05	336.1	0	0	973.6	17	59.4	13.288
2022-06-07 18:00	0.30	2.07	3.375	2.15	325	0	0	973.8	17.4	57.6	13.235
2022-06-07 19:00	0.30	2.07	3.465	2.41	318.3	0	0	974.2	15.6	67	13.107
2022-06-07 20:00	0.20	2.025	3.06	1.64	308.3	0	0	974.3	14.3	71.3	13.078
2022-06-07 21:00	0.20	2.25	3.51	1.09	295.8	0	0	974.7	13	76.2	13.075
2022-06-07 22:00	0.30	2.88	4.86	0.97	271.1	0	0	975	11.6	79.3	13.068
2022-06-07 23:00	0.30	2.97	4.725	0.74	270.1	0	0	975.2	10.8	80.6	13.066
2022-06-08 0:00	0.20	2.97	4.725	0.67	263.6	0	0	975.3	9.9	81.7	13.057

2022-06-08 1:00	0.30	3.105	4.995	0.77	235.5	0	0	975.6	8.9	83	13.046
2022-06-08 2:00	0.60	3.06	4.905	0.71	213.8	0	0	975.9	7.8	85.5	13.042
2022-06-08 3:00	0.10	3.285	5.04	0.78	219.9	0	0	976.2	7.6	86.7	13.035
2022-06-08 4:00	0.50	3.465	5.22	0.92	205.8	0	0	976.4	7.1	87.1	13.036
2022-06-08 5:00	0.30	3.87	5.445	1.15	213.5	0	0	976.6	8.2	86.5	13.057
2022-06-08 6:00	0.10	3.645	4.86	1.55	227.3	0	0	977.1	11.3	79.3	13.087
2022-06-08 7:00	0.10	3.06	4.23	2.54	238.6	0	0	977.4	14.2	69.4	13.138
2022-06-08 8:00	0.10	2.835	4.185	3.26	258.6	0	0	977.4	16.6	58.7	13.414
2022-06-08 9:00	0.30	2.16	3.555	3.48	274.7	0	0	977.1	18	51.5	13.658
2022-06-08 10:00	0.40	1.665	2.745	3.49	283.3	0	0	976.8	18.7	46.9	13.755
2022-06-08 11:00	0.60	1.575	2.34	3.11	281.6	0	0	976.4	19.5	44.8	14.032
2022-06-08 12:00	0.40	1.44	2.07	2.89	263.6	0	0	976.1	19.8	42.7	13.694
2022-06-08 13:00	0.50	1.305	2.025	2.64	294.1	0	0	975.9	20.8	40	13.327
2022-06-08 14:00	0.30	1.125	1.845	3.19	287.5	0	0	975.8	20.7	36.4	13.326
2022-06-08 15:00	0.30	1.17	2.115	2.31	226.5	0.2	0	976.2	19.3	46.6	13.326
2022-06-08 16:00	0.20	1.26	2.025	1.71	161.2	0.9	0	976.4	17.5	59.8	13.318
2022-06-08 17:00	0.00	1.17	1.665	1.31	151.6	0	0	976.1	18.9	53	13.321
2022-06-08 18:00	0.20	1.26	2.25	2.47	231.5	0	0	976	18.2	54.2	13.268
2022-06-08 19:00	0.10	1.305	2.07	1.86	278.6	0	0	975.7	16.9	57.1	13.138
2022-06-08 20:00	0.20	1.845	3.15	0.78	257.2	0	0	975.6	15.4	64.8	13.079
2022-06-08 21:00	0.20	1.935	3.15	0.71	204	0	0	976.2	13.9	70.9	13.078
2022-06-08 22:00	0.30	2.43	3.78	0.35	213.4	0	0	976.2	12.9	79.5	13.077
2022-06-08 23:00	0.10	3.06	5.04	0.5	171.8	0	0	975.9	11.9	84.1	13.075
2022-06-09 0:00	0.40	3.15	5.22	0.4	238.8	0	0	975.7	11.5	82.8	13.075
2022-06-09 1:00	0.50	3.375	5.805	0.5	191.9	0	0	975.3	10.1	85	13.07
2022-06-09 2:00	0.20	3.42	5.805	0.43	229.7	0	0	975.1	9.2	85.2	13.066
2022-06-09 3:00	0.50	3.51	5.85	0.54	260.7	0	0	975	9	85.6	13.061
2022-06-09 4:00	0.20	3.465	5.355	0.55	269.9	0	0	975.1	8.7	86.4	13.057
2022-06-09 5:00	0.50	3.42	5.535	0.42	155.2	0	0	975.3	8.5	86.6	13.076
2022-06-09 6:00	0.20	3.15	4.77	0.61	259.8	0	0	975.3	9.8	86.6	13.11
2022-06-09 7:00	0.10	3.15	4.5	1.31	299.7	0	0	975.3	12.5	80.1	13.257
2022-06-09 8:00	0.40	1.98	2.835	0.84	337.4	0	0	975.1	15.9	63.2	13.428
2022-06-09 9:00	0.20	1.665	2.295	0.85	336.6	0	0	974.6	17.6	55.7	13.612
2022-06-09 10:00	0.40	2.07	3.33	1.52	297.4	2.4	0	974.1	18.3	53.6	13.989
2022-06-09 11:00	0.60	1.8	2.61	1.16	286.9	0	0	973.6	17.5	60.7	14.031
2022-06-09 12:00	0.20	2.025	2.835	1.43	94.3	0	0	972.8	18.6	58.6	13.53
2022-06-09 13:00	0.20	1.8	2.43	1.41	48.9	0	0	972.5	18.2	55.5	13.325
2022-06-09 14:00	0.20	2.25	3.78	2.41	349.8	0	0	972.6	17.4	60.4	13.326
2022-06-09 15:00	0.40	2.385	4.005	1.93	359.6	2	0	972.9	16	71.5	13.325
2022-06-09 16:00	0.20	2.565	4.635	1.05	355.2	1.5	0	972.9	14.2	83.7	13.246
2022-06-09 17:00	0.20	2.07	3.69	0.87	135.7	0	0	973	14.7	82	13.33
2022-06-09 18:00	0.20	1.8	3.06	0.7	332.5	0	0	973.1	16.9	71.7	13.319
2022-06-09 19:00	0.20	1.305	2.385	0.7	329.6	0	0	973.2	15.8	70.1	13.147
2022-06-09 20:00	0.10	2.475	4.68	1.54	311	2.1	0	973.8	14.1	76.4	13.066
2022-06-09 21:00	0.30	2.43	5.76	0.87	356.1	1	0	974.1	11.8	84.2	13.058
2022-06-09 22:00	0.30	2.7	5.58	1.44	263.6	0.1	0	973.8	11.5	84.2	13.056
2022-06-09 23:00	0.10	3.195	5.355	0.95	272.3	0	0	973.7	11.6	83.8	13.061
2022-06-10 0:00	0.30	3.24	5.31	1.6	273.6	0	0	973.4	11	83.9	13.055
2022-06-10 1:00	0.20	3.33	5.49	1.9	281.6	0	0	973.5	10.6	84.2	13.049
2022-06-10 2:00	0.30	3.51	5.805	1.44	272.8	0	0	973.4	10.8	83.8	13.052
2022-06-10 3:00	0.20	3.69	6.03	1.24	276.3	0	0	973.5	10.1	83.1	13.047
2022-06-10 4:00	0.20	3.78	6.525	0.97	256.2	0	0	973.7	9.2	84.6	13.048
2022-06-10 5:00	0.20	3.825	6.48	1.45	279.7	0	0	974.2	9.2	84.8	13.059
2022-06-10 6:00	0.20	3.195	4.635	1.51	321.7	0	0	974.5	10.8	77	13.097
2022-06-10 7:00	0.20	2.475	3.51	1.57	318.5	0	0	974.8	12.3	67.8	13.139
2022-06-10 8:00	0.10	2.115	3.06	1.85	318.4	0	0	975.1	13.5	58.4	13.421
2022-06-10 9:00	0.40	2.205	3.33	2.31	276.3	0	0	975.1	15.2	50.3	13.732
2022-06-10 10:00	0.40	2.16	2.97	2.58	270.2	0	0	974.9	16.6	44.2	13.985
2022-06-10 11:00	0.30	2.205	3.06	3.04	244.5	0	0	974.6	17.7	40.8	14.037
2022-06-10 12:00	0.40	2.565	3.69	3.79	255.5	0	0	974.3	18.5	39.5	13.641
2022-06-10 13:00	0.30	2.43	3.6	3.83	268.2	0	0	974.1	18.2	39.6	13.327
2022-06-10 14:00	0.10	2.16	3.24	3.35	263.8	0	0	973.8	19.1	35.6	13.327
2022-06-10 15:00	0.10	2.025	2.925	2.85	258.2	0	0	973.7	19.2	33.7	13.326
2022-06-10 16:00	0.40	2.115	3.87	2.84	278.8	0	0	973.9	18.4	36.9	13.325
2022-06-10 17:00	0.20	2.115	3.285	3.05	274.9	0	0	974.2	17.8	36.1	13.325
2022-06-10 18:00	0.30	2.16	3.285	2.48	300	0	0	974.6	17	36.8	13.26
2022-06-10 19:00	0.10	2.07	2.88	1.07	316.5	0	0	974.9	15.8	41.4	13.103
2022-06-10 20:00	0.10	2.385	3.42	0.35	33.4	0	0	975.2	14	58.3	13.078
2022-06-10 21:00	0.30	3.15	4.95	0.22	128.8	0	0	975.7	11.8	77	13.077
2022-06-10 22:00	0.40	4.05	6.3	0.36	137.8	0	0	975.7	10.9	79	13.078
2022-06-10 23:00	0.30	3.87	6.21	0.33	169.1	0	0	975.7	8.7	79.1	13.072
2022-06-11 0:00	0.30	4.59	8.37	0.37	120.6	0	0	975.4	7.3	83.7	13.067
2022-06-11 1:00	0.20	3.96	6.48	0.35	147.5	0	0	974.9	8	82.6	13.057
2022-06-11 2:00	0.10	4.14	6.795	0.31	134.9	0	0	974.7	7.4	84.4	13.052
2022-06-11 3:00	0.20	3.87	5.805	0.36	160.3	0	0	974.4	7.4	82	13.05
2022-06-11 4:00	0.60	5.265	7.56	0.91	189.7	0	0	974.6	7.7	79.1	13.041
2022-06-11 5:00	0.50	5.76	7.83	0.85	177.5	0	0	974.5	8.5	77.3	13.057
2022-06-11 6:00	0.20	4.95	6.705	1.17	239.4	0	0	975.2	9.4	73.5	13.084
2022-06-11 7:00	0.20	3.915	5.265	0.77	203.1	0.1	0	975.6	10.2	71.9	13.108
2022-06-11 8:00	0.10	3.915	5.22	0.91	54.6	0.2	0	975.7	10.7	72.9	13.169
2022-06-11 9:00	0.30	3.915	5.085	1.36	90.5	0.4	0	975.2	10.6	79.6	13.227
2022-06-11 10:00	0.50	3.42	4.5	1.75	63.4	0	0	974.8	12.8	73.7	13.584
2022-06-11 11:00	0.00	3.375	4.455	1.81	32.7	0	0	974.4	14.8	64.8	13.63
2022-06-11 12:00	0.30	3.69	4.905	2.3	11.5	0	0	973.6	16.4	61.6	13.98
2022-06-11 13:00	0.30	3.78	5.4	2.6	15.8	0	0	972.5	18	55.5	13.968
2022-06-11 14:00	0.20	4.095	5.985	2.52	59.7	0.8	0	972.3	17.2	60.3	13.278
2022-06-11 15:00	0.20	4.905	7.02	1.51	48.8	1	0	972.6	13.9	85	13.414
2022-06-11 16:00	0.20	3.87	5.895	1.51	132.5	0	0	972.8	14.2	85.8	13.304
2022-06-11 17:00	0.40	2.835	4.905	2.46	187.4	2.2	0	973.4	13	80.2	13.078
2022-06-11 18:00	0.40	2.835	5.85	0.9	206.4	1	0	973.3	12.1	83.1	13.067

2022-06-11 19:00	0.30	2.835	4.815	0.9	186.3	0.5	0	973.3	11.9	86.2	13.064
2022-06-11 20:00	0.10	2.655	4.59	1.75	229.6	0.8	0	973.6	11.2	86.7	13.056
2022-06-11 21:00	0.20	1.98	4.455	1.59	294.3	0.1	0	974	10	86.7	13.055
2022-06-11 22:00	0.20	2.745	4.725	1.66	291.8	1.1	0	974.3	9.8	87.3	13.044
2022-06-11 23:00	0.20	3.15	5.175	1.87	308.4	0.7	0	974	9.2	87.9	13.04
2022-06-12 0:00	0.10	3.105	5.355	1.8	303.7	0	0	974	8.8	88.1	13.04
2022-06-12 1:00	0.20	2.565	4.41	2.05	297	0	0	974.1	8.3	88.2	13.033
2022-06-12 2:00	0.20	2.43	4.635	2.02	283.7	0	0	974.2	7.6	88.3	13.029
2022-06-12 3:00	0.20	1.935	4.005	2.06	273.1	0	0	974.4	7.3	88.5	13.023
2022-06-12 4:00	0.20	2.52	4.86	2.07	269.5	0.1	0	974.5	6.8	88.5	13.015
2022-06-12 5:00	0.20	2.565	5.04	2.25	273.9	0	0	974.7	6.8	88.7	13.028
2022-06-12 6:00	0.20	2.025	4.005	2.21	260.7	0	0	974.9	7.2	88.9	13.063
2022-06-12 7:00	0.20	1.395	2.385	2.21	280.2	0	0	975.3	7.9	88	13.137
2022-06-12 8:00	0.20	0.855	1.575	2.46	274.3	0	0	975.7	9.4	83.7	13.358
2022-06-12 9:00	0.20	0.675	1.17	2.54	275.2	0	0	975.9	10.4	80.1	13.455
2022-06-12 10:00	0.10	0.72	1.215	2.94	282.5	0	0	976	11.4	77.8	13.496
2022-06-12 11:00	0.20	1.125	1.755	2.38	293.6	0	0	976.2	12.5	75.4	13.545
2022-06-12 12:00	0.40	1.35	1.89	2.96	300.1	0	0	976.5	11.6	81	13.5
2022-06-12 13:00	0.10	1.035	1.53	2.86	305.5	0	0	976.8	11.4	79.6	13.547
2022-06-12 14:00	0.10	0.81	1.35	2.14	313.8	0	0	977	12.2	77.1	14.031
2022-06-12 15:00	0.30	0.81	1.53	1.98	320.7	0	0	977	13.4	70.9	14.024
2022-06-12 16:00	0.30	0.9	1.845	1.86	311.4	0.2	0	977.1	13.3	75.1	13.348
2022-06-12 17:00	0.20	1.575	2.565	2.13	304.5	0	0	977.4	12.3	83.6	13.295
2022-06-12 18:00	0.30	1.8	2.925	1.76	305.4	0	0	977.9	11.9	83.1	13.115
2022-06-12 19:00	0.10	2.295	3.42	1.34	294.3	0	0	978.2	11.8	83.1	13.076
2022-06-12 20:00	0.10	2.925	4.32	0.91	268.4	0	0	978.5	11.8	84.3	13.056
2022-06-12 21:00	0.10	3.51	4.995	1.3	267.1	0	0	978.8	11.7	84.4	13.055
2022-06-12 22:00	0.30	3.825	5.715	1.52	263.3	0	0	978.8	11.5	84.9	13.054
2022-06-12 23:00	0.40	4.275	6.705	1.35	276.6	0	0	979	10.9	85.4	13.051
2022-06-13 0:00	0.40	4.5	7.065	1.52	260.7	0	0	979	10.3	86.7	13.048
2022-06-13 1:00	0.10	4.455	6.525	1.79	294.1	0	0	979.3	11	85.7	13.048
2022-06-13 2:00	0.10	4.455	6.615	1.22	285.2	0	0	979.3	11	86	13.045
2022-06-13 3:00	0.40	4.5	6.93	1.23	271.7	0	0	979.8	10.1	86.5	13.039
2022-06-13 4:00	0.20	4.41	6.39	1.31	259	0	0	980.4	9.7	86.4	13.04
2022-06-13 5:00	0.00	4.365	6.075	1.71	279.5	0	0	980.8	10	84.4	13.065
2022-06-13 6:00	0.20	3.87	4.95	1.65	299.9	0	0	980.9	11.5	78.9	13.095
2022-06-13 7:00	0.40	3.42	4.5	2.4	308.4	0	0	982.1	13.6	71	13.143
2022-06-13 8:00	0.40	3.285	4.275	2.08	324.6	0	0	981.8	15.6	63.3	13.409
2022-06-13 9:00	0.20	3.465	4.455	2.25	324.6	0	0	981.6	17.6	56.4	13.718
2022-06-13 10:00	0.10	3.375	4.635	1.96	338.2	0	0	981.5	19.2	52.2	13.962
2022-06-13 11:00	0.30	3.195	4.275	1.74	324	0	0	981.8	20.5	47.9	14.031
2022-06-13 12:00	0.30	3.105	4.185	1.76	321.6	0	0	981.9	21.4	44.7	13.723
2022-06-13 13:00	0.10	2.97	4.095	1.4	343.3	0	0	981.4	22.2	42	13.326
2022-06-13 14:00	0.40	2.745	3.6	1.28	12.9	0	0	981	22.7	40.2	13.325
2022-06-13 15:00	0.10	2.7	3.555	0.96	355.7	0	0	981.4	23.2	39	13.325
2022-06-13 16:00	0.30	2.7	3.465	1	175.9	0	0	981.4	24	37.4	13.323
2022-06-13 17:00	0.30	2.925	3.825	0.95	300.8	0	0	981.2	23.6	39.6	13.313
2022-06-13 18:00	0.40	2.745	3.375	0.59	253.5	0	0	981.3	24.2	36.7	13.306
2022-06-13 19:00	0.30	2.925	3.735	0.21	357.6	0	0	981.4	23.1	50.9	13.135
2022-06-13 20:00	0.40	4.68	6.615	0.21	339.5	0	0	981.5	18.7	70.6	13.08
2022-06-13 21:00	0.40	5.355	7.47	0.29	290.5	0	0	981.6	14.9	78.1	13.078
2022-06-13 22:00	0.40	6.435	9.315	0.29	358.1	0	0	981.5	13.1	85.5	13.078
2022-06-13 23:00	0.30	6.885	10.665	0.48	196.5	0	0	981.7	11.4	86.7	13.077
2022-06-14 0:00	0.10	6.795	9.27	0.48	271.2	0	0	981.8	11	85.7	13.074
2022-06-14 1:00	0.40	7.335	9.81	0.42	84.2	0	0	981.9	9.7	86.8	13.073
2022-06-14 2:00	1.80	7.245	10.125	0.38	74.4	0	0	982	8.9	86.9	13.061
2022-06-14 3:00	1.80	8.55	10.62	0.57	60.6	0	0	982.2	9	86.5	13.056
2022-06-14 4:00	2.20	8.28	10.215	0.57	124.8	0	0	982.8	9	83.5	13.055
2022-06-14 5:00	0.30	9.405	11.115	0.3	306.7	0	0	983.9	10.6	80.9	13.082
2022-06-14 6:00	0.30	9.045	10.26	0.35	52	0	0	984.2	15.3	67.6	13.107
2022-06-14 7:00	0.50	7.605	8.685	0.77	166	0	0	984.4	18	61.5	13.137
2022-06-14 8:00	0.20	4.185	5.04	0.96	149.6	0	0	984.3	21.3	49.4	13.367
2022-06-14 9:00	0.40	3.15	3.645	0.85	82	0	0	984	23.8	37.5	13.631
2022-06-14 10:00	0.60	3.06	3.645	0.96	52.7	0	0	983.5	24.6	33.4	13.837
2022-06-14 11:00	0.40	3.105	3.555	1.23	42.2	0	0	983.3	25.1	33	14.029
2022-06-14 12:00	0.40	3.33	3.735	1.65	166	0	0	983	25.9	31.8	13.74
2022-06-14 13:00	0.60	3.42	3.915	1.48	94.3	0	0	982.6	26.3	30.6	13.324
2022-06-14 14:00	0.30	3.645	4.185	1.97	125.2	0	0	982	26.8	30.7	13.325
2022-06-14 15:00	0.50	3.78	4.545	2.04	171.5	0	0	981.6	27.3	30.8	13.323
2022-06-14 16:00	0.30	4.275	6.345	2.62	159.1	0	0	981.4	27.1	30.8	13.322
2022-06-14 17:00	0.20	4.095	5.805	1.69	142.9	0	0	981	26	32.9	13.323
2022-06-14 18:00	0.20	4.68	6.345	1.92	127.3	0	0	980.8	26.2	32	13.312
2022-06-14 19:00	0.50	4.275	5.175	1.28	116.6	0	0	981.1	24.6	36.8	13.147
2022-06-14 20:00	0.20	4.455	5.49	0.99	109.7	0	0	980.9	21.9	44.6	13.082
2022-06-14 21:00	0.10	4.32	5.625	1.45	102	0	0	980.5	20.2	47.1	13.079
2022-06-14 22:00	0.10	3.96	5.355	1.36	121.8	0	0	981.1	20.1	45.5	13.078
2022-06-14 23:00	0.30	5.175	7.155	1.4	120	0	0	980.5	19.7	48.3	13.077
2022-06-15 0:00	0.10	6.66	8.865	0.81	143.9	0.1	0	981.3	19.1	56	13.076
2022-06-15 1:00	0.40	7.425	9.585	0.64	37.4	0.1	0	981.6	16.6	78.6	13.076
2022-06-15 2:00	0.20	10.485	13.68	1.15	159.9	8.5	0	981.8	15.6	86.8	13.076
2022-06-15 3:00	0.30	9.405	16.92	3.48	144.3	4.9	0	980.1	15.9	87.2	13.076
2022-06-15 4:00	0.20	6.705	9	3.15	132.7	0.1	0	979	16.2	84.1	13.075
2022-06-15 5:00	0.40	5.94	7.695	2.81	150.1	0	0	978.2	16.1	83.4	13.077
2022-06-15 6:00	0.10	6.165	8.37	1.93	165.1	0	0	979.1	16	86	13.135
2022-06-15 7:00	0.30	6.75	9.72	2.54	159.3	0	0	979.2	17	82	13.165
2022-06-15 8:00	0.50	6.615	9.9	3.55	159.8	0	0	979.3	17.8	80.6	13.294
2022-06-15 9:00	0.30	6.615	9.855	3.48	153.9	0	0	979.1	19	78.1	13.529
2022-06-15 10:00	0.20	7.11	10.215	3.51	161	0	0	979	20.5	74.8	13.502
2022-06-15 11:00	0.10	6.615	9.36	3.53	153.7	0	0	978.8	20.7	73.6	13.638
2022-06-15 12:00	0.20	6.57	9.54	3.6	150.1	0	0	978.3	21.8	70.3	14.028

2022-06-15 13:00	0.20	6.93	9.945	3.54	153.4	0	0	977.7	22.3	68.5	13.964
2022-06-15 14:00	0.50	7.29	10.62	3.01	147.6	0	0	977.3	22.6	68.5	13.329
2022-06-15 15:00	0.10	13.77	18.225	4.03	167.7	0	0	977.3	22.8	69.4	13.316
2022-06-15 16:00	0.30	17.28	22.275	3.85	161.8	0	0	976.8	21.7	75.2	13.398
2022-06-15 17:00	0.30	15.615	19.08	2.56	152.5	0	0	976	22.1	77.8	13.336
2022-06-15 18:00	0.20	16.065	19.845	3.72	168.7	0	0	976	21.9	78.9	13.203
2022-06-15 19:00	0.20	20.07	24.21	2.73	162.7	0	0	974.8	21	81.3	13.123
2022-06-15 20:00	0.30	19.35	23.31	1.64	163	0	0	975	20.2	84.4	13.081
2022-06-15 21:00	0.30	19.8	23.895	2.06	151.4	0	0	975.7	19.9	85.7	13.078
2022-06-15 22:00	0.50	20.295	24.57	2	144.1	0	0	975.8	19.7	85.9	13.076
2022-06-15 23:00	0.50	22.14	26.82	2.17	147.2	0	0	975	19.5	86.3	13.077
2022-06-16 0:00	0.30	26.82	32.265	2.49	155.6	0.2	0	973.7	19.3	87.1	13.074
2022-06-16 1:00	0.40	29.475	35.19	2.88	159.3	0	0	972.6	19	88.9	13.072
2022-06-16 2:00	0.30	27.99	33.345	2.08	152	0	0	971.1	19	88.2	13.072
2022-06-16 3:00	0.20	25.785	30.69	1.45	143	0	0	969.8	18.7	88.5	13.07
2022-06-16 4:00	0.50	24.48	29.025	2.03	136.7	0	0	969.7	18.4	88.9	13.068
2022-06-16 5:00	0.50	24.3	28.44	2.61	158.9	0	0	969.9	18.9	86	13.067
2022-06-16 6:00	0.10	25.11	28.485	2.7	183.4	0	0	969.6	19.2	83	13.082
2022-06-16 7:00	0.30	23.355	26.82	3.23	198.5	0	0	969.4	20.3	79.3	13.189
2022-06-16 8:00	0.20	13.77	16.425	4.32	225.4	0	0	969.3	21.7	70.3	13.354
2022-06-16 9:00	0.10	7.155	10.44	4.98	249.3	0	0	969.3	23.2	51.4	13.626
2022-06-16 10:00	0.30	7.2	11.565	4.88	234.6	0	0	969.4	24.2	40.6	13.949
2022-06-16 11:00	0.40	7.11	12.42	4.68	224.9	0	0	968.9	25.1	39.1	14.029
2022-06-16 12:00	0.20	7.335	13.41	4.94	208.4	0	0	967.7	25.7	37.2	13.696
2022-06-16 13:00	0.50	7.335	12.96	4.97	196	0	0	966.6	25.7	36.5	13.309
2022-06-16 14:00	0.50	7.65	11.97	4.09	201	0	0	966	24.3	39.6	13.273
2022-06-16 15:00	0.20	8.01	14.355	5.14	229.6	0	0	966.1	22.7	45.3	13.135
2022-06-16 16:00	0.40	5.715	11.79	4.65	225.7	0	0	965.8	21.7	48.1	13.291
2022-06-16 17:00	0.20	4.365	9.72	5.16	229.4	0	0	965.3	22.2	45.8	13.324
2022-06-16 18:00	0.30	4.185	10.125	5.98	231.8	0	0	965.2	21.8	42.7	13.3
2022-06-16 19:00	0.50	3.915	8.955	4.57	228.8	0	0	964.9	20.3	46.7	13.124
2022-06-16 20:00	0.30	3.555	7.47	3.41	227.3	0	0	964.7	18.2	56.4	13.08
2022-06-16 21:00	0.40	2.97	7.245	3.77	230.3	0	0	964.7	17.6	54.8	13.078
2022-06-16 22:00	0.30	2.835	6.66	3.78	233.1	0	0	964.9	16.6	59	13.077
2022-06-16 23:00	0.20	2.835	6.165	3.98	241.3	0	0	965	16.3	62.4	13.076
2022-06-17 0:00	0.10	2.745	5.76	3.75	246.4	0	0	965.1	16.1	66.1	13.074
2022-06-17 1:00	0.10	2.7	5.175	3.34	248.3	0	0	965.2	15.7	69.7	13.074
2022-06-17 2:00	0.10	2.52	4.725	3.32	240.2	0	0	964.9	15.4	71.9	13.072
2022-06-17 3:00	0.20	2.7	4.365	3.6	241	0	0	964.7	14.9	73.8	13.069
2022-06-17 4:00	0.40	3.24	5.13	3.83	242.2	0	0	964.5	15	73.6	13.063
2022-06-17 5:00	0.20	3.645	5.715	4.02	242.4	0	0	964.2	15.1	72.2	13.072
2022-06-17 6:00	0.30	3.6	6.165	5.03	248.6	0	0	964.2	15	71.4	13.123
2022-06-17 7:00	0.10	1.575	3.51	5.38	290.8	0.3	0	965.5	12.3	75.1	13.085
2022-06-17 8:00	0.30	1.125	3.15	5.18	290.7	0	0	967.1	10.3	74.5	13.189
2022-06-17 9:00	0.10	0.9	2.385	5.03	295.3	0.1	0	968.5	9.1	76.9	13.196
2022-06-17 10:00	0.10	0.9	2.025	4.97	300	0	0	970	6.7	80.6	13.249
2022-06-17 11:00	0.30	0.99	2.7	4.82	298.6	0.1	0	971.6	5.6	79.3	13.23
2022-06-17 12:00	0.40	1.08	2.565	4.86	292.1	0	0	972.9	5.8	78	13.359
2022-06-17 13:00	0.20	1.44	3.42	5.03	297.3	0	0	973.9	7.6	72.4	13.524
2022-06-17 14:00	0.20	1.845	5.445	5.64	304.9	0	0	975	8.6	67.3	13.575
2022-06-17 15:00	0.20	1.575	4.455	4.91	312.3	0	0	976.2	8	72.2	13.899
2022-06-17 16:00	0.20	1.26	3.825	4.79	318.7	0	0	977.2	7.7	75.7	14.014
2022-06-17 17:00	0.20	4.05	8.055	5.26	329.6	0	0	978.5	7.2	71.9	13.39
2022-06-17 18:00	0.30	5.715	8.595	3.69	328	0	0	980	8	64.7	13.1
2022-06-17 19:00	0.20	5.265	7.74	3.25	324.1	0	0	980.8	9.4	61	13.087
2022-06-17 20:00	0.00	4.59	6.795	2.99	323.6	0	0	981.7	9.1	63.6	13.036
2022-06-17 21:00	0.40	3.78	6.21	3.09	334.4	0	0	982.9	8.6	59.6	13.028
2022-06-17 22:00	0.30	3.24	5.13	2.91	339.1	0	0	983.8	7.4	63.3	13.026
2022-06-17 23:00	0.40	2.97	4.77	2.76	336.2	0	0	984.7	6.5	64.5	13.023
2022-06-18 0:00	0.30	2.7	4.365	2.84	335.5	0	0	985.7	5.9	64.3	13.018
2022-06-18 1:00	0.20	2.43	3.6	2.32	327	0	0	986.2	5.3	67.7	13.017
2022-06-18 2:00	0.30	2.385	3.33	2.02	324.1	0	0	986.3	4.8	70.9	13.015
2022-06-18 3:00	0.30	2.16	3.105	1.98	304.7	0	0	986.6	4	74.6	13.009
2022-06-18 4:00	0.20	2.205	3.015	1.97	299.5	0	0	987.3	3.1	77.9	13.007
2022-06-18 5:00	0.30	2.025	3.015	2.3	313	0	0	987.9	4.3	74.5	13.029
2022-06-18 6:00	0.20	1.8	2.79	2.88	324.9	0	0	988.4	6.4	66.2	13.063
2022-06-18 7:00	0.30	1.62	2.745	3.17	332.5	0	0	988.6	8.1	57.2	13.114
2022-06-18 8:00	0.30	1.71	3.195	3.56	330.1	0	0	989	9.7	49.9	13.409
2022-06-18 9:00	0.40	1.755	3.375	3.54	330.2	0	0	989.2	11.3	45.5	13.755
2022-06-18 10:00	0.20	2.025	3.915	4.01	331.2	0	0	989.3	12.8	40.1	13.976
2022-06-18 11:00	0.20	2.07	4.005	3.88	332.3	0	0	989.4	14	37.3	14.045
2022-06-18 12:00	0.10	2.25	4.185	3.77	331	0	0	989.4	15.2	34.9	13.68
2022-06-18 13:00	0.30	2.115	3.825	3.43	333.1	0	0	989.4	16.2	32.7	13.33
2022-06-18 14:00	0.30	2.25	4.05	3.88	336.7	0	0	989.2	16.9	31.2	13.33
2022-06-18 15:00	0.20	2.16	3.825	3.61	324.5	0	0	989.2	17.4	31.4	13.326
2022-06-18 16:00	0.10	2.16	3.465	3.17	335.9	0	0	989.1	17.6	31.7	13.325
2022-06-18 17:00	0.10	2.25	3.285	3.06	337.6	0	0	989.4	17.7	31.4	13.326
2022-06-18 18:00	0.20	2.16	3.105	2.33	341.8	0	0	989.7	17.3	32.5	13.316
2022-06-18 19:00	0.20	2.115	2.88	1.33	355.7	0	0	989.8	16.1	36.4	13.143
2022-06-18 20:00	0.10	2.34	3.645	0.61	344.3	0	0	990.1	13.5	47.7	13.073
2022-06-18 21:00	0.30	2.52	3.555	0.54	339.9	0	0	990.5	10.8	58.4	13.063
2022-06-18 22:00	0.20	2.475	3.33	0.52	335.8	0	0	990.6	9.5	57.6	13.062
2022-06-18 23:00	0.40	2.385	3.06	0.4	336.2	0	0	991	7.7	64.3	13.06
2022-06-19 0:00	0.20	2.295	3.015	0.44	358.1	0	0	991.1	6.2	67.5	13.056
2022-06-19 1:00	0.20	2.97	4.59	0.46	99.6	0	0	990.7	3.2	78	13.047
2022-06-19 2:00	0.30	3.51	5.715	0.42	230.7	0	0	990.9	1.3	80.3	13.04
2022-06-19 3:00	0.10	3.42	5.31	0.42	172	0	0	991.3	0.6	82.1	13.036
2022-06-19 4:00	0.30	3.15	4.95	0.4	172.3	0	0	991.7	-0.2	84.1	13.038
2022-06-19 5:00	0.30	3.015	4.275	0.33	158.2	0	0	992.1	1.5	83	13.074
2022-06-19 6:00	0.50	2.835	3.465	0.57	210.8	0	0	992.4	5.2	75.1	13.174

2022-06-19 7:00	0.20	1.89	2.25	0.73	241.9	0	0	992.4	8.1	59.2	13.287
2022-06-19 8:00	0.20	1.62	2.025	0.74	276.3	0	0	992.4	10.5	50.2	13.472
2022-06-19 9:00	0.10	1.575	2.475	0.71	257.3	0	0	992.1	11.6	45.6	13.429
2022-06-19 10:00	0.20	1.485	1.755	1.48	253.3	0	0	992.1	12.3	44.2	13.586
2022-06-19 11:00	0.20	1.35	1.575	1.56	234.7	0	0	991.5	13.5	39.7	13.902
2022-06-19 12:00	0.30	1.26	1.485	1.22	213.2	0	0	990.7	14.5	36.5	14.033
2022-06-19 13:00	0.40	1.08	1.44	1.02	189	0	0	990	16	29.4	13.687
2022-06-19 14:00	0.40	1.305	1.935	1.37	256.8	0	0	989.4	17	28.2	13.327
2022-06-19 15:00	0.50	1.395	1.62	0.81	296.4	0	0	988.4	17.4	26	13.326
2022-06-19 16:00	0.40	1.53	1.8	0.36	109.4	0	0	987.8	16.5	42.1	13.284
2022-06-19 17:00	0.10	4.545	16.83	0.55	258.9	0	0	987.8	16.2	45.1	13.168
2022-06-19 18:00	0.10	2.7	3.465	0.43	176.9	0	0	987.6	15.6	51.4	13.107
2022-06-19 19:00	0.30	2.835	3.195	0.38	129.1	0	0	987.5	14.4	62.5	13.08
2022-06-19 20:00	0.10	3.465	4.005	0.59	115	0	0	987.2	13.3	64.4	13.074
2022-06-19 21:00	0.20	4.275	5.31	0.75	120.6	0	0	986.8	13.1	60.4	13.076
2022-06-19 22:00	0.40	4.635	6.075	0.44	143.6	0	0	986.7	12.6	64.4	13.074
2022-06-19 23:00	0.60	5.355	6.84	0.5	134.4	0	0	986.4	11.2	67.4	13.07
2022-06-20 0:00	0.50	6.255	7.605	0.63	163.7	0	0	986.3	10.4	68.7	13.066
2022-06-20 1:00	0.50	6.39	7.785	0.89	172.4	0	0	986.1	10.7	69.4	13.063
2022-06-20 2:00	0.10	6.345	7.38	0.57	156.6	0	0	985.9	10.5	71.2	13.057
2022-06-20 3:00	0.30	6.3	7.38	1.04	136.3	0	0	985.3	9.7	73.8	13.045
2022-06-20 4:00	0.30	6.525	7.83	1.46	117.8	0	0	984.7	9.9	73.1	13.045
2022-06-20 5:00	0.40	6.345	7.56	1.35	124.3	0	0	984.5	11.1	69.3	13.058
2022-06-20 6:00	0.50	6.165	7.785	2.46	166.3	0	0	984.7	13.7	62	13.105
2022-06-20 7:00	0.20	5.76	7.56	3.43	168.3	0	0	984.2	16.5	55.7	13.175
2022-06-20 8:00	0.20	5.535	8.415	4.09	180.2	0	0	983.9	18.5	51.7	13.414
2022-06-20 9:00	0.40	5.985	9.81	3.39	178.3	0	0	983.9	18.2	54	13.53
2022-06-20 10:00	0.50	6.795	11.34	3.78	166.1	0	0	983.4	18.6	55.3	13.625
2022-06-20 11:00	0.20	7.11	11.655	3.24	163	0	0	983.6	17.9	58.4	13.407
2022-06-20 12:00	0.20	6.885	10.305	3.12	168	0	0	983.4	17.9	59	13.709
2022-06-20 13:00	0.10	7.02	11.295	3.61	167.9	0	0	982.5	18.6	57.7	14.027
2022-06-20 14:00	0.40	7.38	11.79	3.45	158.4	0	0	981.9	18.2	60.1	13.764
2022-06-20 15:00	0.40	7.155	10.845	3.62	167.4	0	0	981.3	18.6	59	13.325
2022-06-20 16:00	0.10	7.29	11.025	3.37	165.2	0	0	980.7	18.6	61.5	13.325
2022-06-20 17:00	0.20	6.84	10.305	2.42	156.3	0	0	980.3	18.7	62.1	13.273
2022-06-20 18:00	0.20	6.435	9.405	2.51	155.6	0	0	979.5	18.6	65.1	13.127
2022-06-20 19:00	0.50	5.895	8.325	1.05	81.2	0	0	980.3	18.6	68.2	13.077
2022-06-20 20:00	0.20	6.255	9.135	2.06	79.7	0	0	980.4	17.6	65.5	13.076
2022-06-20 21:00	0.50	7.065	10.035	2.6	91.3	0	0	980.5	16.1	70.7	13.076
2022-06-20 22:00	0.30	6.975	10.89	3.74	138	0	0	979.3	16.6	71.6	13.075
2022-06-20 23:00	0.30	6.93	10.44	3.75	154.9	0	0	978.7	17.1	72.3	13.073
2022-06-21 0:00	0.40	8.235	10.8	3.34	160.6	0	0	978.2	17.3	75.8	13.07
2022-06-21 1:00	0.60	11.295	13.905	2.52	156.6	0	0	978.1	17.3	78.8	13.07
2022-06-21 2:00	0.40	11.61	14.13	2.36	136.3	0.1	0	978.5	16.9	81.6	13.065
2022-06-21 3:00	0.30	10.35	13.185	2.8	164.8	0	0	977.3	16.6	82.6	13.063
2022-06-21 4:00	0.30	9	10.98	3.15	172.5	0	0	976.6	16.5	82.2	13.061
2022-06-21 5:00	0.30	8.64	10.53	3.52	176	0	0	975.9	17	80.1	13.1
2022-06-21 6:00	0.20	9.18	11.25	3.3	190.3	0	0	976	18.5	76.2	13.179
2022-06-21 7:00	0.20	11.205	14.355	2.33	230.2	1.9	0	976.5	20.1	76.5	13.239
2022-06-21 8:00	0.20	10.755	13.005	1.62	182.8	0.4	0	976.3	19.5	84.9	13.148
2022-06-21 9:00	0.30	11.475	13.95	2.36	174.4	0	0	975.5	20.3	82.5	13.454
2022-06-21 10:00	0.00	12.96	16.335	2.63	192.8	0	0	975.4	23.7	71.2	13.706
2022-06-21 11:00	0.20	14.22	17.685	3.02	198.8	0	0	975.5	24.5	69.6	13.813
2022-06-21 12:00	0.30	14.4	17.415	2.19	189.8	0	0	974.9	24.9	72.8	14.022
2022-06-21 13:00	0.20	14.355	17.28	2.41	183.5	0	0	974.6	25.6	71.9	13.675
2022-06-21 14:00	0.20	9.945	12.42	3.17	199.2	0	0	973.9	29	55.7	13.324
2022-06-21 15:00	0.30	4.995	6.84	4.55	220.4	0	0	973.4	30.7	44.2	13.322
2022-06-21 16:00	0.20	4.455	5.85	4.29	215.7	0	0	972.7	31.8	40	13.323
2022-06-21 17:00	0.30	3.735	5.715	4.42	229.4	0	0	972.4	31.5	39.9	13.322
2022-06-21 18:00	0.20	3.6	5.265	3.85	234.1	0	0	972.4	30.6	42	13.312
2022-06-21 19:00	0.30	3.825	5.58	3.55	226.3	0	0	972.5	29.1	45.9	13.183
2022-06-21 20:00	0.30	3.96	5.49	3.38	220.1	0	0	972.6	27.3	51.7	13.086
2022-06-21 21:00	0.40	3.87	5.67	2.82	231.6	0	0	973	25.2	55.6	13.077
2022-06-21 22:00	0.40	4.86	6.795	3.53	233.5	0	0	973.4	23.8	62.5	13.077
2022-06-21 23:00	0.20	5.085	6.84	3.29	235.8	0	0	973.6	22.6	68.2	13.076
2022-06-22 0:00	0.30	5.445	6.975	2.39	220	0	0	973.6	21.5	73.5	13.075
2022-06-22 1:00	0.30	5.85	7.695	1.79	201.2	0	0	973.2	20.3	77.1	13.074
2022-06-22 2:00	0.30	5.94	7.83	1.6	194	0	0	972.8	19.1	78	13.075
2022-06-22 3:00	0.30	5.355	7.56	1.96	208.8	0	0	972.7	18.2	73.1	13.072
2022-06-22 4:00	0.20	4.59	6.525	1.56	202.1	0	0	972.9	17.5	71.6	13.074
2022-06-22 5:00	0.40	4.68	6.75	1.97	201.6	0	0	973.3	17.7	72.4	13.085
2022-06-22 6:00	0.30	4.59	7.065	3.25	217.5	0	0	973.5	19.4	65.7	13.108
2022-06-22 7:00	0.20	4.05	9.36	3.78	246.3	0	0	973.9	21.3	55.3	13.137
2022-06-22 8:00	0.50	4.185	10.44	4.41	246.3	0	0	974.1	22.2	51.7	13.367
2022-06-22 9:00	0.30	3.645	8.19	4.35	250.2	0	0	974.4	22.7	50.2	13.567
2022-06-22 10:00	0.40	3.015	7.965	5.07	265.7	0	0	975.1	22.3	49.6	13.824
2022-06-22 11:00	0.20	2.7	8.19	4.64	267.5	0	0	975.6	21.7	51.3	14.03
2022-06-22 12:00	0.10	2.205	6.525	3.61	280.1	0	0	976.4	21.3	54.6	13.635
2022-06-22 13:00	0.20	1.89	4.41	4.51	292.9	0	0	977.1	20.8	58	13.325
2022-06-22 14:00	0.20	2.16	3.465	4.19	291.8	0	0	978.1	19.5	59.3	13.326
2022-06-22 15:00	0.10	1.44	2.88	3.95	287	0	0	978.4	19.8	54.8	13.326
2022-06-22 16:00	0.40	0.9	2.025	3.1	292	0	0	978.6	20.3	50.5	13.325
2022-06-22 17:00	0.10	1.44	2.7	3.36	286.5	0	0	979	20.5	47.4	13.324
2022-06-22 18:00	0.20	1.665	2.745	3.14	287.6	0	0	979.4	20	44.7	13.312
2022-06-22 19:00	0.40	1.575	2.925	2.1	290.3	0	0	979.8	19.4	45.4	13.138
2022-06-22 20:00	0.20	2.115	4.05	0.68	302.7	0	0	980	17	57.3	13.08
2022-06-22 21:00	0.30	2.385	4.23	0.49	166.9	0	0	980.4	12.2	78.8	13.076
2022-06-22 22:00	0.20	2.835	5.13	0.38	176.5	0	0	980.4	10.3	79.1	13.073
2022-06-22 23:00	0.20	2.565	4.32	0.32	180.2	0	0	980.6	9.1	79.6	13.072
2022-06-23 0:00	0.20	2.52	4.32	0.34	167.8	0	0	980.8	8.3	82.7	13.068

2022-06-23 1:00	0.30	2.835	4.95	0.47	168.3	0	0	980.8	7.8	83.5	13.062
2022-06-23 2:00	0.20	2.745	4.455	0.49	167	0	0	981	7.6	82.3	13.061
2022-06-23 3:00	0.30	2.61	4.185	0.59	169.7	0	0	980.9	7.3	84.6	13.053
2022-06-23 4:00	0.20	2.655	3.915	0.85	176.1	0	0	980.9	7.9	83.6	13.051
2022-06-23 5:00	0.10	2.655	3.78	1.18	184.7	0	0	980.9	9.1	81.1	13.072
2022-06-23 6:00	0.10	2.97	4.32	1.57	213.6	0	0	981	12.2	73.7	13.101
2022-06-23 7:00	0.30	3.42	4.86	1.79	243.8	0	0	981.1	15.4	63.3	13.14
2022-06-23 8:00	0.30	4.5	8.82	1.31	230.4	0	0	980.8	18.4	54.8	13.371
2022-06-23 9:00	0.40	4.455	5.49	1.63	207.6	0	0	980.7	21	48.2	13.692
2022-06-23 10:00	0.20	5.49	6.75	2.62	204	0	0	980.2	23.5	39.7	13.967
2022-06-23 11:00	0.70	6.525	7.605	3.07	271	0	0	979.8	24.7	33.5	14.03
2022-06-23 12:00	0.50	9.72	26.82	3.33	240.9	0	0	979.5	25.6	31.9	13.674
2022-06-23 13:00	0.20	8.055	15.705	3.52	235.1	0	0	979	26.1	30.5	13.326
2022-06-23 14:00	0.40	6.66	10.845	3.42	239.7	0	0	978.5	26.4	29.6	13.325
2022-06-23 15:00	0.60	4.905	6.48	3.26	239.3	0	0	978.2	26.4	30.8	13.324
2022-06-23 16:00	0.30	5.13	8.64	2.79	225.4	0	0	977.9	26.2	31.9	13.322
2022-06-23 17:00	0.30	6.255	14.76	2.75	210	0	0	977.3	26.2	32.9	13.323
2022-06-23 18:00	0.30	4.185	6.435	3.51	207.8	0	0	977.1	26.4	34.5	13.309
2022-06-23 19:00	0.30	3.825	5.445	2.34	219.1	0	0	977.5	24.7	39	13.128
2022-06-23 20:00	0.20	3.645	5.175	2.17	216.5	0	0	977.5	23.2	42.5	13.078
2022-06-23 21:00	0.10	3.78	5.175	1.2	198.2	0	0	978	21.7	48.2	13.078
2022-06-23 22:00	0.20	4.095	5.4	1.59	209	0	0	978.3	21.1	50.8	13.077
2022-06-23 23:00	0.30	4.275	5.895	1.89	214.6	0	0	978.3	20.9	51.9	13.073
2022-06-24 0:00	0.20	4.32	5.67	1.07	201.7	0	0	978.2	19.8	56.5	13.073
2022-06-24 1:00	0.10	4.32	6.255	1.7	218.8	0.3	0	978.2	19	65.4	13.07
2022-06-24 2:00	0.20	4.815	6.345	0.74	230.6	0.1	0	978	16.9	80.1	13.068
2022-06-24 3:00	0.30	4.905	5.85	0.75	206.4	0	0	977.9	15.9	83.7	13.07
2022-06-24 4:00	0.60	4.77	5.67	0.74	150.6	0	0	978.2	15	87.1	13.071
2022-06-24 5:00	0.20	5.265	6.255	0.91	182.3	0	0	978.7	15.8	85.1	13.083
2022-06-24 6:00	0.20	5.22	6.66	1.98	216.7	0	0	979.3	17.8	77.5	13.108
2022-06-24 7:00	0.10	4.905	6.345	2.54	241.5	0	0	979.7	19.1	72.1	13.175
2022-06-24 8:00	0.20	5.445	9.315	2.29	288.6	0	0	980.1	19.2	72.8	13.215
2022-06-24 9:00	0.10	5.22	6.75	1.79	318.1	0	0	980.4	19.1	73.3	13.294
2022-06-24 10:00	0.30	5.895	7.38	1.34	311	0	0	980.8	19.4	71.9	13.363
2022-06-24 11:00	0.40	6.84	8.865	1.68	304.8	0	0	981.3	20.1	68.9	13.503
2022-06-24 12:00	0.10	6.57	7.83	1.28	311.7	0	0	981.8	21.3	64.9	13.635
2022-06-24 13:00	0.20	6.345	7.38	1	329	0	0	982	22.3	61.8	14.023
2022-06-24 14:00	0.20	5.94	7.2	1.44	295.4	0	0	982	23.6	56.3	14.006
2022-06-24 15:00	0.50	5.085	6.12	1.16	2.2	0	0	981.9	24.6	52.4	13.345
2022-06-24 16:00	0.10	4.77	5.625	1.48	312.4	0	0	982.3	25.2	49.9	13.324
2022-06-24 17:00	0.50	4.725	5.985	0.95	319	0	0	982.4	25	51.1	13.323
2022-06-24 18:00	0.20	4.545	5.445	0.9	355.7	0	0	982.6	25.1	48.1	13.28
2022-06-24 19:00	0.50	4.77	6.03	1.04	357.2	0	0	983.1	23	51.6	13.119
2022-06-24 20:00	0.20	4.725	6.12	0.89	16.5	0	0	983.8	21	51.3	13.076
2022-06-24 21:00	0.20	4.68	5.67	1.09	23.1	0	0	984.2	19.6	51.3	13.076
2022-06-24 22:00	0.20	4.905	5.895	0.65	16.9	0	0	984.9	18.9	52.5	13.076
2022-06-24 23:00	0.20	5.715	7.83	2.12	46.3	0	0	985.1	17.7	52.6	13.075
2022-06-25 0:00	0.20	5.355	7.245	1.99	46.1	0	0	985.5	16.6	58.8	13.073
2022-06-25 1:00	0.20	4.32	5.76	1.92	68.7	0	0	985.5	15.6	60.9	13.073
2022-06-25 2:00	0.20	3.87	4.995	1.82	54.8	0	0	985.8	14.9	62.4	13.069
2022-06-25 3:00	0.30	3.78	4.725	1.6	61.5	0	0	986.1	14.2	64.4	13.064
2022-06-25 4:00	0.20	3.825	4.77	1.79	62.6	0	0	986.5	13.7	67.2	13.056
2022-06-25 5:00	0.40	3.78	4.95	1.59	71	0	0	986.4	13.4	69.2	13.076
2022-06-25 6:00	0.10	3.645	4.635	2.2	84.1	0	0	986.3	14.2	66.9	13.113
2022-06-25 7:00	0.10	2.835	4.005	2.62	113.6	0	0	986.1	16.3	56.4	13.166
2022-06-25 8:00	0.20	3.465	5.22	3.42	111.4	0	0	985.7	18.1	51.2	13.417
2022-06-25 9:00	0.30	4.095	6.075	3.42	116.9	0	0	984.9	19.7	49.8	13.689
2022-06-25 10:00	0.30	4.59	6.435	2.93	134.1	0	0	984.5	21.2	50.8	13.974
2022-06-25 11:00	0.10	5.31	7.605	2.96	143.4	0	0	983.7	23.4	50	14.031
2022-06-25 12:00	0.10	6.3	9.045	3.18	144.6	0	0	982.7	25.3	49.4	13.577
2022-06-25 13:00	0.20	7.47	11.88	3.2	148	0	0	981.4	27.2	49.2	13.324
2022-06-25 14:00	0.20	8.325	12.24	2.95	149.4	0.1	0	980.3	27.3	52.5	13.311
2022-06-25 15:00	0.60	8.415	11.88	1.64	89.1	2.4	0	979.9	23.8	76	13.298
2022-06-25 16:00	0.20	4.86	6.57	2.61	124.6	0	0	979.3	25.7	62	13.323
2022-06-25 17:00	0.40	5.805	7.65	2.02	129.9	0	0	978.4	26.1	61.5	13.324
2022-06-25 18:00	0.30	5.985	7.83	2.45	140.1	0	0	978.1	25.9	61	13.321
2022-06-25 19:00	0.50	6.795	9.045	1.94	137	0	0	978.1	24.6	66.8	13.177
2022-06-25 20:00	0.20	7.29	9.585	1.44	141.7	0	0	977.8	23.4	71.1	13.077
2022-06-25 21:00	0.40	7.11	9.63	1.18	167.7	0	0	977.9	23	66.2	13.074
2022-06-25 22:00	0.20	6.435	9.315	2.47	249	0	0	978.2	22.9	60.9	13.074
2022-06-25 23:00	0.50	5.49	6.975	1.31	204.9	0	0	977.8	21.7	67	13.071
2022-06-26 0:00	0.20	5.265	6.57	0.75	164.8	0	0	977.2	20.7	71.2	13.07
2022-06-26 1:00	0.40	5.715	7.38	0.99	197	0	0	977	20.2	73.5	13.068
2022-06-26 2:00	0.20	5.76	7.065	0.51	171.5	0	0	976.3	19.8	75.9	13.063
2022-06-26 3:00	0.10	6.345	8.055	0.46	168.4	0	0	976	18.9	80.2	13.06
2022-06-26 4:00	0.30	7.605	9.72	0.48	127	0	0	975.5	18.7	81	13.058
2022-06-26 5:00	0.20	7.695	9.585	0.95	161.3	0	0	974.9	18.9	78.2	13.064
2022-06-26 6:00	0.20	7.2	9.72	1.99	162.4	0	0	974.3	19.8	72.9	13.083
2022-06-26 7:00	0.20	6.21	8.325	2.67	182.2	0	0	974	20.2	69.5	13.089
2022-06-26 8:00	0.30	5.085	6.48	2.38	192.5	0	0	973.6	20	71.3	13.093
2022-06-26 9:00	0.60	4.41	5.445	2.15	189.4	0	0	973.3	19.4	78.5	13.263
2022-06-26 10:00	0.10	3.375	4.365	3.17	207.2	0	0	973.1	20.7	69.9	13.27
2022-06-26 11:00	0.40	2.7	3.69	3.15	212.7	0	0	972.9	22.3	63.8	13.688
2022-06-26 12:00	0.10	2.43	3.645	3.32	205.4	0	0	972.1	24.2	51.7	13.718
2022-06-26 13:00	0.20	2.385	4.59	4.94	218.7	0	0	971.5	25.5	42.7	14.028
2022-06-26 14:00	0.30	2.52	5.715	5.89	224.4	0	0	971.4	25.5	37.6	13.405
2022-06-26 15:00	0.40	2.565	6.48	6.08	233.8	0	0	972.1	24.4	37.2	13.324
2022-06-26 16:00	0.30	2.745	6.66	6.26	237.3	0	0	973.2	22.3	39.5	13.323
2022-06-26 17:00	0.20	2.34	5.535	5.71	224.2	0	0	973.9	20.5	43.1	13.325
2022-06-26 18:00	0.40	2.295	5.265	5.47	223.9	0	0	974.1	18.8	46.4	13.314

2022-06-26 19:00	0.10	2.835	9.315	4.74	215.4	0	0	974	16.8	48.5	13.138
2022-06-26 20:00	0.30	1.44	3.51	3.56	216.8	0	0	974.3	15	51.2	13.079
2022-06-26 21:00	0.30	1.44	3.24	2.81	214.5	0	0	974.3	13.6	56.6	13.067
2022-06-26 22:00	0.30	1.485	2.925	1.96	210.3	0	0	974.3	12.8	61.3	13.064
2022-06-26 23:00	0.20	1.575	3.06	2.13	210.8	0	0	974.4	12.9	63.3	13.062
2022-06-27 0:00	0.10	1.575	2.835	1.98	214.5	0	0	974.4	12.7	66.6	13.059
2022-06-27 1:00	0.30	1.665	3.33	1.49	228.2	0.2	0	974.4	11.9	75.2	13.043
2022-06-27 2:00	0.30	1.8	3.105	2.53	246	0	0	974.2	11.7	78.5	13.04
2022-06-27 3:00	0.40	1.71	2.835	2.97	255.4	0	0	974.5	11.1	83.2	13.027
2022-06-27 4:00	0.20	0.72	1.26	3.15	293.8	0	0	975.3	11	84.3	13.034
2022-06-27 5:00	0.20	0.405	0.9	2.79	314.9	0	0	976.6	10.1	81.9	13.058
2022-06-27 6:00	0.20	0.585	1.035	2.95	301.3	0	0	977.8	10.1	81.1	13.081
2022-06-27 7:00	0.10	4.995	5.67	2.69	310.4	0	0	979.2	9.5	81.8	13.1
2022-06-27 8:00	0.30	9.81	10.665	2.99	289.7	0	0	980.4	9.6	80.5	13.206
2022-06-27 9:00	0.10	14.58	20.205	3.55	288.4	0	0	981.1	10.8	72.9	13.541
2022-06-27 10:00	0.10	10.125	11.52	3.57	291.4	0	0	981.6	12.6	61.6	13.823
2022-06-27 11:00	0.20	9.45	17.64	3.39	288.9	0	0	981.9	14.1	54.5	13.988
2022-06-27 12:00	0.30	6.12	7.2	3.1	301.8	0	0	982.2	16	45.5	13.783
2022-06-27 13:00	0.20	4.77	5.985	2.73	310.5	0	0	982.4	17	40	13.329
2022-06-27 14:00	0.20	6.57	14.895	3.21	300.3	0	0	982.4	18.1	37.2	13.328
2022-06-27 15:00	0.20	7.515	17.91	3.18	294.3	0	0	982.5	18.4	36	13.327
2022-06-27 16:00	0.30	5.445	6.39	2.71	297.8	0	0	982.6	18.2	38.1	13.327
2022-06-27 17:00	0.10	5.58	6.345	2.59	282.7	0	0	982.6	18.1	39.2	13.324
2022-06-27 18:00	0.30	5.22	6.075	2.6	284.3	0	0	982.5	18	38.6	13.303
2022-06-27 19:00	0.30	5.535	6.165	1.45	257.7	0	0	982.4	17.6	39.6	13.139
2022-06-27 20:00	0.30	5.715	6.525	0.54	189.3	0	0	982.6	14.3	55.6	13.079
2022-06-27 21:00	0.30	6.21	7.425	0.66	170.1	0	0	982.8	10.4	70.8	13.063
2022-06-27 22:00	0.30	10.035	22.725	0.93	178.2	0	0	982.7	10.1	67.8	13.058
2022-06-27 23:00	0.10	8.82	14.94	1.08	183.8	0	0	982.8	9.5	68.6	13.054
2022-06-28 0:00	0.00	9.45	10.71	1.22	202.6	0	0	983.1	9.7	70.2	13.047
2022-06-28 1:00	0.10	11.655	12.735	1.43	194.3	0	0	983.2	9.8	72.1	13.045
2022-06-28 2:00	0.40	11.835	12.645	1.85	181.9	0	0	982.6	9.3	72.4	13.034
2022-06-28 3:00	0.30	11.16	12.06	2.23	182.7	0	0	981.9	9.4	70.4	13.026
2022-06-28 4:00	0.10	9.9	10.665	2.3	179.9	0	0	981.3	9.3	66.9	13.029
2022-06-28 5:00	0.00	8.55	9.54	2.45	187.7	0	0	981.1	10.2	61.1	13.051
2022-06-28 6:00	0.20	10.215	20.97	2.9	192	0	0	980.9	11.7	57.7	13.095
2022-06-28 7:00	0.20	11.07	25.515	3.19	212.2	0	0	981	14	55.5	13.155
2022-06-28 8:00	0.20	8.82	10.17	3.14	216.9	0	0	980.7	16.3	53.6	13.424
2022-06-28 9:00	0.40	8.505	10.395	2.76	219.1	0	0	980.5	17.8	52.6	13.607
2022-06-28 10:00	0.30	7.29	10.44	3.25	242.2	0	0	980.4	19.9	48.9	13.71
2022-06-28 11:00	0.30	7.155	10.62	2.75	237.3	0	0	980.3	20	50.5	13.94
2022-06-28 12:00	0.50	8.505	15.93	3.85	227.9	0.2	0	980.7	18.1	64.9	14.029
2022-06-28 13:00	0.30	8.235	10.08	4.29	247.5	0	0	980.2	18.8	63	13.46
2022-06-28 14:00	0.10	5.985	9.585	4.19	267.9	0.1	0	980.1	18.6	58.1	13.326
2022-06-28 15:00	0.20	4.185	4.815	2.26	230.3	0	0	979.8	17.2	64.3	13.302
2022-06-28 16:00	0.10	4.725	6.3	2.5	214.8	0	0	979.6	17.8	61.5	13.295
2022-06-28 17:00	0.20	5.805	7.155	1.7	244.9	2.8	0	979.6	17	69.7	13.518
2022-06-28 18:00	0.10	6.165	8.055	1.68	250.6	2.5	0	980	14.6	86.8	13.102
2022-06-28 19:00	0.30	5.895	8.775	1.63	239	0.7	0	980.6	13.3	85.6	13.076
2022-06-28 20:00	0.20	5.31	8.28	1.33	274.3	0.5	0	981.3	12.9	86.6	13.072
2022-06-28 21:00	0.30	5.31	7.875	0.71	271.5	1.3	0	982	12.7	87.4	13.071
2022-06-28 22:00	0.10	4.005	6.525	1.64	307	0	0	982.9	12.1	84.2	13.067
2022-06-28 23:00	0.30	2.565	5.13	1.38	321.6	0	0	983.8	10.9	82.7	13.058
2022-06-29 0:00	0.10	3.06	6.57	0.8	230	0	0	984.4	8.8	85	13.052
2022-06-29 1:00	0.30	3.375	7.47	0.46	242.5	0	0	984.9	7.3	86	13.048
2022-06-29 2:00	0.30	1.665	3.6	0.34	235.1	0	0	985.2	6.1	84.9	13.043
2022-06-29 3:00	0.10	1.62	2.925	0.46	176.4	0	0	985.6	4	86.3	13.039
2022-06-29 4:00	0.30	1.395	2.88	0.45	177.3	0	0	985.9	3.9	88	13.038
2022-06-29 5:00	0.10	1.17	1.98	0.83	173.9	0	0	986.6	5	88.2	13.056
2022-06-29 6:00	0.10	1.53	2.52	1.24	196.4	0	0	987.2	8.1	85.6	13.107
2022-06-29 7:00	0.20	1.575	2.43	1.32	197.3	0	0	987.6	10.3	81.7	13.248
2022-06-29 8:00	0.10	1.89	3.15	2.55	234.9	0	0	988	12.8	70.5	13.437
2022-06-29 9:00	0.10	1.575	3.015	2.57	255	0	0	988.1	14.4	58.2	13.763
2022-06-29 10:00	0.10	1.26	2.7	2.84	275.1	0	0	988.1	15.7	50.5	13.951
2022-06-29 11:00	0.10	1.125	2.16	2.59	274.7	0	0	988	16.7	43.2	14.036
2022-06-29 12:00	0.10	1.125	2.115	2.23	272.8	0	0	988	17.7	39.2	13.528
2022-06-29 13:00	0.40	1.17	2.115	2.27	271.7	0	0	987.7	18.1	37.7	13.327
2022-06-29 14:00	0.30	1.26	2.16	2.49	258.3	0	0	987.5	19.1	36	13.327
2022-06-29 15:00	0.20	1.305	1.98	2.24	240	0	0	987	19.6	35.2	13.325
2022-06-29 16:00	0.50	1.35	2.16	1.91	247.6	0	0	987	19.6	36.2	13.324
2022-06-29 17:00	0.20	1.44	2.295	1.76	227.9	0	0	987	19.1	38.1	13.324
2022-06-29 18:00	0.10	1.485	2.25	2.13	206.7	0	0	987.2	18.8	40.3	13.307
2022-06-29 19:00	0.30	1.485	2.16	0.69	149.1	0	0	987.2	16.9	52.1	13.131
2022-06-29 20:00	0.10	2.07	3.24	0.68	117.3	0	0	987	14.3	65.4	13.078
2022-06-29 21:00	0.50	2.745	5.445	0.73	110.1	0	0	986.9	12.6	66.4	13.069
2022-06-29 22:00	0.20	2.835	4.68	0.36	127.9	0	0	986.7	10.3	75.5	13.066
2022-06-29 23:00	0.50	3.33	5.265	1.2	180	0	0	986.6	10.7	70.2	13.059
2022-06-30 0:00	0.50	3.105	4.5	1.09	182	0	0	986.7	9.8	72.8	13.053
2022-06-30 1:00	0.40	2.97	4.185	0.83	170.1	0	0	986.3	9.2	75.8	13.052
2022-06-30 2:00	0.10	3.015	4.32	1.29	168.7	0	0	985.6	9.3	75.1	13.044
2022-06-30 3:00	0.10	3.24	4.725	1.85	175.1	0	0	985.1	9.2	76.5	13.035
2022-06-30 4:00	0.40	3.24	4.68	2.03	171.5	0	0	984.6	10.1	73.5	13.039
2022-06-30 5:00	0.30	3.195	4.815	2.33	163	0	0	983.5	11.8	68.1	13.056
2022-06-30 6:00	0.50	3.78	5.445	2.92	161.4	0	0	982.7	13	66	13.097
2022-06-30 7:00	0.20	3.87	6.03	3.36	161.3	0.1	0	981.4	13.9	61.2	13.091
2022-06-30 8:00	0.40	3.69	5.895	2.83	157.9	0	0	980.3	14.2	62.5	13.173
2022-06-30 9:00	0.60	4.41	8.01	4.69	155.5	0	0	978	15	62.3	13.333
2022-06-30 10:00	0.30	4.815	9.45	5.82	167.9	0	0	977.1	16.1	65.8	13.542
2022-06-30 11:00	0.30	4.095	6.255	4.39	165.3	0.1	0	976.8	14	78.7	13.162
2022-06-30 12:00	0.20	4.995	7.11	3.44	164.9	8.3	0	976.2	13	85.5	13.069

2022-06-30 13:00	0.40	5.4	8.685	3.18	154.1	11.2	0	975	13	88.8	13.067
2022-06-30 14:00	0.20	5.85	8.01	3.41	168.5	1	0	973.4	14.4	90.2	13.189
2022-06-30 15:00	0.10	7.065	10.035	4.29	172.2	0	0	972.6	15.2	89	13.119
2022-06-30 16:00	0.20	7.11	9.585	3.98	179.4	0	0	972.2	16	89	13.184
2022-06-30 17:00	0.20	8.01	10.305	3.09	186.4	0	0	972	17.9	87.6	13.25
2022-06-30 18:00	0.40	8.685	11.385	3.54	192.9	0	0	971.7	19.9	81.7	13.283
2022-06-30 19:00	0.20	8.775	11.7	2.87	185.9	0	0	971.3	20.1	81.6	13.125
2022-06-30 20:00	0.10	9.495	12.78	2.16	189.1	0	0	971.2	19.3	85.2	13.052
2022-06-30 21:00	0.20	10.89	14.355	1.94	184.8	0	0	971.3	18.9	86.2	13.043
2022-06-30 22:00	0.40	12.465	16.11	2.21	197.4	0.5	0	971.1	18.9	87	13.043
2022-06-30 23:00	0.40	11.88	15.345	3.14	216.2	0	0	971.4	19.3	83.3	13.043
2022-07-01 0:00	0.30	10.8	14.175	2.72	212.8	0	0	971.7	18.9	82.7	13.044
2022-07-01 1:00	0.20	9.405	12.735	2.64	238.2	0	0	971.9	18.2	82.4	13.046
2022-07-01 2:00	0.20	7.47	10.665	3.18	275.4	0	0	972.3	17.3	78.1	13.045
2022-07-01 3:00	0.20	6.435	9.495	2.56	283.8	0	0	972.4	15.8	82	13.046
2022-07-01 4:00	0.30	6.21	9.45	2.47	279	0	0	973.4	14.8	84.7	13.048
2022-07-01 5:00	0.20	4.905	7.29	2.68	296.4	0	0	974.5	14.7	82	13.069
2022-07-01 6:00	0.10	4.095	6.3	2.76	283.3	0	0	975.3	14.6	78.8	13.125
2022-07-01 7:00	0.30	3.645	5.445	3.27	290.7	0	0	975.8	15.1	72.8	13.214
2022-07-01 8:00	0.20	3.15	4.77	3.23	276.4	0	0	976.2	15.7	66.6	13.423
2022-07-01 9:00	0.10	2.655	4.635	3.71	262.7	0	0	976.3	16.5	56.8	13.687
2022-07-01 10:00	0.40	1.98	3.6	3.17	275.4	0	0	976.3	17.3	46.7	13.831
2022-07-01 11:00	0.20	1.62	3.105	3.48	255.6	0	0	976	18.1	42.3	13.934
2022-07-01 12:00	0.30	1.485	2.7	3.48	249.2	0	0	975.5	19	38	13.724
2022-07-01 13:00	0.40	1.575	2.925	3.81	245.5	0	0	974.9	19.8	35.8	13.327
2022-07-01 14:00	0.40	1.665	3.195	3.8	249.8	0	0	974.4	20.5	33.7	13.326
2022-07-01 15:00	0.20	1.8	3.555	3.85	236.5	0	0	973.7	20.7	33.2	13.325
2022-07-01 16:00	0.20	1.665	3.06	3.98	222	0	0	972.9	21.2	31.4	13.322
2022-07-01 17:00	0.30	1.8	3.6	4.47	237.4	0	0	972.7	20.9	32.7	13.323
2022-07-01 18:00	0.40	2.7	5.94	4.8	260.2	0.2	0	973.4	19.3	39.2	13.203
2022-07-01 19:00	0.40	2.79	5.805	2.84	325.7	0	0	975	13.1	66.1	13.094
2022-07-01 20:00	0.10	1.98	3.375	0.92	358.4	0	0	975.1	11.8	73.6	13.065
2022-07-01 21:00	0.20	2.835	5.265	0.73	146	0	0	975	9.6	82.8	13.062
2022-07-01 22:00	0.20	2.79	5.04	0.85	151.3	0	0	974	8.5	84.4	13.058
2022-07-01 23:00	0.30	2.61	4.455	1.63	177	0	0	973.4	8.9	83.4	13.047
2022-07-02 0:00	0.10	2.745	4.545	1.95	180.2	0	0	972.9	9.1	80.1	13.039
2022-07-02 1:00	0.20	2.745	4.32	1.58	191.7	0	0	972.4	8.8	75.6	13.036
2022-07-02 2:00	0.20	2.565	3.825	1.56	198.5	0	0	972.2	9	69.3	13.032
2022-07-02 3:00	0.20	2.61	4.05	1.74	203.2	0	0	972.2	9	69.4	13.028
2022-07-02 4:00	0.30	2.745	4.365	2.03	208.4	0	0	972.3	9	69.2	13.025
2022-07-02 5:00	0.30	2.61	4.185	2.67	219	0	0	972.8	10.4	63.8	13.047
2022-07-02 6:00	0.30	2.16	3.825	3.8	237.6	0	0	973.2	12.1	56.9	13.074
2022-07-02 7:00	0.10	1.71	3.6	4.6	257.5	0	0	973.5	13.7	53.4	13.153
2022-07-02 8:00	0.10	1.395	3.555	5.42	276.5	0	0	974.3	13.9	54.6	13.38
2022-07-02 9:00	0.10	1.26	3.15	4.79	278.3	0	0	974.9	14.5	53.8	13.522
2022-07-02 10:00	0.20	1.17	3.96	5.11	276	0	0	975.5	15	51.6	13.675
2022-07-02 11:00	0.20	0.9	2.52	5.44	279	0	0	976	16.4	44.7	13.974
2022-07-02 12:00	0.20	0.72	1.71	4.7	271.3	0	0	976.5	17.2	41.4	13.82
2022-07-02 13:00	0.30	0.675	1.71	4.13	282.8	0	0	977.2	17.5	38.5	13.328
2022-07-02 14:00	0.20	0.765	2.025	4.15	284.7	0	0	977.7	17.9	36.4	13.326
2022-07-02 15:00	0.20	0.675	1.755	3.77	270.7	0	0	977.9	18.1	33.4	13.325
2022-07-02 16:00	0.30	0.585	1.62	3.64	276.7	0	0	978.3	18	38.6	13.325
2022-07-02 17:00	0.10	0.54	1.26	3.47	281.4	0	0	978.7	17	45.4	13.302
2022-07-02 18:00	0.30	0.495	1.125	3.24	270.6	0	0	979.1	16.5	50	13.32
2022-07-02 19:00	0.30	0.495	1.035	2.71	262.6	0	0	979.5	15.7	55.6	13.178
2022-07-02 20:00	0.10	0.585	1.35	1.89	259	0	0	979.9	14.4	59.5	13.079
2022-07-02 21:00	0.30	0.675	1.62	1.33	248.2	0	0	980.5	13.6	61.6	13.075
2022-07-02 22:00	0.40	0.81	1.845	0.96	235	0	0	980.7	12	67.8	13.067
2022-07-02 23:00	0.40	0.81	1.71	1.11	237.3	0	0	981	10.9	73.1	13.061
2022-07-03 0:00	0.20	0.855	1.8	1.34	223.2	0.1	0	981.3	10	78.4	13.051
2022-07-03 1:00	0.20	0.99	1.935	1.27	243.1	0.2	0	981.8	9.6	82.8	13.042
2022-07-03 2:00	0.30	1.035	1.8	1.35	195.5	0	0	981.8	8.3	84.6	13.033
2022-07-03 3:00	0.10	1.305	2.115	1.01	193.3	0	0	982.1	8.3	85.6	13.036
2022-07-03 4:00	0.10	1.395	2.115	1.12	184.7	0	0	982.4	8.6	85.6	13.033
2022-07-03 5:00	0.10	1.62	2.34	1.51	206.8	0	0	982.7	9.7	83.3	13.052
2022-07-03 6:00	0.30	2.295	3.285	3.18	255.9	0	0	983.1	12	74.4	13.103
2022-07-03 7:00	0.20	2.385	3.33	3.3	278.3	0	0	983.6	14	67.1	13.172
2022-07-03 8:00	0.30	2.205	3.105	3.29	298.3	0	0	984.1	15.6	59.6	13.427
2022-07-03 9:00	0.20	2.16	3.24	3.57	291	0	0	984.4	16.9	53.9	13.666
2022-07-03 10:00	0.20	2.025	2.79	3.26	295.5	0	0	984.6	18	49.7	13.89
2022-07-03 11:00	0.20	1.935	2.655	3.4	302.9	0	0	984.6	18.5	45.4	14.031
2022-07-03 12:00	0.10	1.89	2.52	2.78	306.1	0	0	984.5	19.1	43.7	13.502
2022-07-03 13:00	0.10	2.025	2.835	3.06	297.3	0	0	984.6	19.1	43.1	13.326
2022-07-03 14:00	0.30	2.07	2.745	3.04	287.7	0	0	985	19.4	42.1	13.325
2022-07-03 15:00	0.10	1.98	2.655	2.73	303	0	0	985.1	19.9	39.8	13.325
2022-07-03 16:00	0.30	2.025	2.565	2.02	310.6	0.1	0	985.2	18.9	47.8	13.324
2022-07-03 17:00	0.20	1.8	2.34	2.1	311.8	0	0	985	20.2	39.5	13.324
2022-07-03 18:00	0.30	2.07	3.735	1.86	307.1	0	0	985.2	20.1	40	13.296
2022-07-03 19:00	0.30	1.98	2.7	1.01	277.2	0	0	985.1	19.1	45.3	13.12
2022-07-03 20:00	0.10	2.52	3.6	0.26	83.6	0	0	984.9	15.4	70.9	13.065
2022-07-03 21:00	0.30	2.79	4.05	0.43	183.3	0	0	985.2	11.5	77.7	13.05
2022-07-03 22:00	0.30	2.79	3.915	0.38	226.8	0	0	985.3	10	78.9	13.049
2022-07-03 23:00	0.20	2.835	4.095	0.35	191.5	0	0	985.3	8.8	82.1	13.05
2022-07-04 0:00	0.30	2.97	4.095	0.53	207	0	0	985.3	8.6	80.3	13.051
2022-07-04 1:00	0.20	3.195	4.275	0.75	203	0	0	985.3	9	76.7	13.052
2022-07-04 2:00	0.30	3.24	4.455	0.95	185.5	0	0	985.5	8.4	78	13.043
2022-07-04 3:00	0.20	3.42	4.23	0.85	193.1	0	0	985.6	9.5	73.9	13.043
2022-07-04 4:00	0.30	3.285	4.095	0.74	203.4	0	0	985.8	9.8	73	13.042
2022-07-04 5:00	0.30	3.15	3.87	0.79	198.1	0	0	986.2	10.6	72.8	13.07
2022-07-04 6:00	0.20	3.195	3.96	1.04	216.4	0	0	986.3	11.5	73.4	13.112

2022-07-04 7:00	0.30	3.195	4.095	1.25	246.4	0	0	986.3	13.1	66.6	13.237
2022-07-04 8:00	0.10	3.195	4.005	0.96	329.8	0	0	986.3	16.7	55.2	13.432
2022-07-04 9:00	0.20	3.06	3.645	1.04	320.3	0	0	986.2	19.2	48.4	13.718
2022-07-04 10:00	0.10	3.285	5.13	1.57	254.7	0	0	985.7	21.1	40.8	13.986
2022-07-04 11:00	0.30	3.24	4.005	2.16	238.9	0	0	985.5	22.2	37.4	14.029
2022-07-04 12:00	0.40	3.645	5.85	2.14	219.6	0	0	985.2	22.8	35.1	13.605
2022-07-04 13:00	0.30	3.285	3.96	2.06	238	0	0	984.6	24	31.1	13.325
2022-07-04 14:00	0.50	3.15	3.6	1.74	245.5	0	0	984.1	24.4	30	13.324
2022-07-04 15:00	0.30	3.24	4.455	1.49	233.3	0	0	983.6	24.7	30.3	13.324
2022-07-04 16:00	0.40	3.195	3.645	1	254	0	0	983.3	24.2	33.7	13.323
2022-07-04 17:00	0.20	3.15	3.6	0.59	353.2	0	0	982.8	24.2	36.2	13.323
2022-07-04 18:00	0.50	3.33	3.96	0.43	310.6	0	0	982.8	23.5	45.4	13.247
2022-07-04 19:00	0.20	3.6	4.41	0.35	77.3	0	0	982.6	20.7	59.6	13.096
2022-07-04 20:00	0.20	4.005	5.13	0.4	109.1	0	0	982.4	19.2	66.1	13.077
2022-07-04 21:00	0.20	3.915	4.68	0.36	61.4	0	0	982.4	17.1	68.5	13.076
2022-07-04 22:00	0.20	4.365	5.175	0.26	73.5	0	0	982.2	15.3	77.7	13.076
2022-07-04 23:00	0.10	5.04	6.03	0.36	100.7	0	0	981.8	14.3	79.6	13.073
2022-07-05 0:00	0.20	4.77	5.76	0.33	83.8	0	0	981.6	13.8	81.2	13.069
2022-07-05 1:00	0.10	4.95	6.075	0.29	134	0	0	981.1	14	81.4	13.069
2022-07-05 2:00	0.30	5.31	6.39	0.47	147.6	0	0	980.6	14	81.2	13.064
2022-07-05 3:00	0.10	6.255	7.335	0.66	174.7	0	0	980.3	14.4	81.4	13.059
2022-07-05 4:00	0.30	7.065	8.055	0.62	186.7	0	0	980.1	14.6	84.1	13.06
2022-07-05 5:00	0.10	7.605	9.09	0.4	106.2	0	0	980.1	14.7	86.7	13.063
2022-07-05 6:00	0.20	10.215	11.7	0.59	250.4	5.4	0	980.1	15.3	90.6	13.066
2022-07-05 7:00	0.20	9.765	10.98	0.49	35.8	0	0	980	15.6	91.7	13.109
2022-07-05 8:00	0.20	10.035	10.89	0.62	351.5	0.1	0	980	16.1	90.7	13.154
2022-07-05 9:00	0.20	9.45	10.845	1.71	23	0	0	979.9	15.7	89	13.262
2022-07-05 10:00	0.40	8.46	9.855	2.18	34.6	0	0	979.7	15.6	86.9	13.387
2022-07-05 11:00	0.10	7.2	8.595	1.85	37.7	0.3	0	979.8	15.1	87.3	13.22
2022-07-05 12:00	0.30	6.48	8.955	1.66	41.9	1.1	0	979.8	14.4	90.1	13.226
2022-07-05 13:00	0.30	4.455	6.12	1.6	56.6	0.3	0	979.4	15.2	89.1	13.508
2022-07-05 14:00	0.50	3.555	4.68	1.32	40.5	0.1	0	979.3	16.1	86.9	13.447
2022-07-05 15:00	0.10	4.275	5.985	1.32	8.2	0	0	979.4	16	87.3	13.277
2022-07-05 16:00	0.40	5.58	7.425	1.41	359.7	0	0	980	15.4	87.5	13.165
2022-07-05 17:00	0.10	4.995	7.29	2.03	358.1	0.1	0	980.7	13.7	89	13.106
2022-07-05 18:00	0.20	3.51	5.715	2.19	4.2	0.1	0	981.4	11.8	88	13.08
2022-07-05 19:00	0.20	3.15	5.175	1.87	11.2	0	0	982.2	11	86.8	13.056
2022-07-05 20:00	0.30	2.97	4.905	1.62	25.1	0	0	982.6	10.4	87.3	13.052
2022-07-05 21:00	0.20	3.42	5.355	1.45	5.1	0	0	983.3	10.4	87.3	13.044
2022-07-05 22:00	0.20	3.015	4.635	1.61	8.6	0	0	983.7	10.1	86.7	13.042
2022-07-05 23:00	0.30	1.845	3.24	1.34	4.8	0	0	984.6	9.4	85.7	13.038
2022-07-06 0:00	0.30	1.98	3.51	0.97	7.8	0	0	985.2	9.3	85.7	13.037
2022-07-06 1:00	0.20	2.115	4.68	0.61	328.4	0	0	985.3	8.5	86.5	13.037
2022-07-06 2:00	0.10	1.935	3.96	0.87	349.5	0	0	985.7	8.4	87.7	13.034
2022-07-06 3:00	0.20	1.845	3.555	0.99	352.7	0	0	986	8.3	88.6	13.032
2022-07-06 4:00	0.20	1.44	2.835	0.95	17.5	0	0	986.4	8.4	89	13.034
2022-07-06 5:00	0.30	1.215	2.07	0.76	350	0	0	986.8	8.3	86.8	13.056
2022-07-06 6:00	0.40	1.08	2.025	0.86	26.5	0	0	987.4	8.1	86.3	13.087
2022-07-06 7:00	0.30	1.035	2.07	0.95	357.8	0	0	987.8	10.4	76.3	13.136
2022-07-06 8:00	0.10	1.035	2.115	1.26	29.8	0	0	988	12.5	65.1	13.397
2022-07-06 9:00	0.20	1.125	2.7	1.39	45.5	0	0	987.9	14.1	60.2	13.7
2022-07-06 10:00	0.20	1.08	2.475	1.47	35.7	0	0	988	15.6	53.6	13.933
2022-07-06 11:00	0.30	1.17	2.115	1.52	35.4	0	0	987.5	16.5	50.3	13.93
2022-07-06 12:00	0.20	1.215	1.71	1.23	2.5	0	0	987.1	17.5	48.5	13.787
2022-07-06 13:00	0.20	1.17	1.62	1.52	352.5	0	0	986.9	18.2	44.4	13.327
2022-07-06 14:00	0.50	1.125	1.62	1.51	10.5	0	0	986.7	18.6	40.8	13.326
2022-07-06 15:00	0.40	1.035	1.53	0.86	355.5	0	0	986.5	19	41	13.325
2022-07-06 16:00	0.20	1.035	1.485	1.24	4	0	0	986.3	19	40	13.324
2022-07-06 17:00	0.50	1.08	1.53	0.8	252.5	0	0	985.9	19.5	38.6	13.324
2022-07-06 18:00	0.20	1.125	1.755	0.7	270	0	0	985.6	19.9	38.3	13.317
2022-07-06 19:00	0.40	1.8	2.88	0.26	322.2	0	0	985.3	19.4	50.8	13.141
2022-07-06 20:00	0.20	3.195	5.265	0.29	67.4	0	0	985.1	14.7	73.8	13.073
2022-07-06 21:00	0.20	4.32	7.29	0.35	275.8	0	0	985.3	10.9	83.1	13.065
2022-07-06 22:00	0.00	4.455	8.01	0.36	200	0	0	985.1	9.4	82.5	13.063
2022-07-06 23:00	0.30	4.455	8.415	0.34	161.5	0	0	985	7.9	84.3	13.06
2022-07-07 0:00	0.20	4.59	8.64	0.34	151.1	0	0	984.7	6.6	85.7	13.055
2022-07-07 1:00	0.20	4.77	8.865	0.34	143.6	0	0	984.6	5.6	86.3	13.054
2022-07-07 2:00	0.30	4.275	7.47	0.34	201.1	0	0	984.4	5.6	85.3	13.051
2022-07-07 3:00	0.50	3.825	6.21	0.41	169.2	0	0	984.2	6	86.9	13.045
2022-07-07 4:00	1.20	3.825	5.58	0.58	185.1	0	0	983.8	7.9	85.5	13.042
2022-07-07 5:00	1.10	3.465	4.815	0.55	187.7	0	0	983.6	9.4	83.2	13.074
2022-07-07 6:00	0.30	3.195	4.32	1.19	172.2	0	0	983.3	11.1	81.5	13.118
2022-07-07 7:00	0.20	3.105	4.545	1.55	177.4	0	0	983.1	13	74.4	13.223
2022-07-07 8:00	0.20	3.24	4.68	1.48	212.8	0	0	982.9	14.6	71	13.296
2022-07-07 9:00	0.10	3.24	4.5	1.35	180.1	0	0	981.9	15.3	72.3	13.266
2022-07-07 10:00	0.30	3.735	4.815	0.79	232.1	0	0	981.4	16.4	70.5	13.426
2022-07-07 11:00	0.10	5.265	6.255	1.47	252	0	0	981	18.1	63.9	13.619
2022-07-07 12:00	0.10	5.67	6.705	2.99	232.3	0	0	980.5	19.5	53	13.887
2022-07-07 13:00	0.10	4.005	4.905	3.03	252	0	0	980.3	20.4	45.6	14.03
2022-07-07 14:00	0.20	4.05	4.77	2.63	251.6	0	0	980	21	45.1	13.559
2022-07-07 15:00	0.10	4.05	4.815	2.58	283.8	0	0	980.1	20.3	49.2	13.301
2022-07-07 16:00	0.20	3.6	4.725	1.77	326.9	0.1	0	980.7	18.1	62.5	13.169
2022-07-07 17:00	0.30	3.645	4.5	1.37	333.3	0	0	981	16.1	75.3	13.135
2022-07-07 18:00	0.30	3.96	4.95	1.72	332.4	0	0	981.2	16.1	72.6	13.146
2022-07-07 19:00	0.10	4.23	5.4	1.43	314.1	0	0	981.8	15.6	73.6	13.075
2022-07-07 20:00	0.10	3.15	3.915	1.86	321	0	0	982.5	15.2	74.6	13.07
2022-07-07 21:00	0.20	1.89	2.52	1.31	333.6	0	0	983.4	14.1	79.2	13.069
2022-07-07 22:00	0.20	2.205	2.97	1.29	307.3	0	0	984	13.9	80.8	13.064
2022-07-07 23:00	0.20	2.115	2.79	0.79	336	0	0	984.6	13.3	84.8	13.055
2022-07-08 0:00	0.20	2.385	3.15	0.87	334.5	0	0	985.3	12.3	86	13.048

2022-07-08 1:00	0.30	2.115	2.97	0.8	341	0	0	985.9	10.6	84.2	13.041
2022-07-08 2:00	0.20	1.665	2.52	0.85	337.1	0	0	986.4	8.8	83.2	13.035
2022-07-08 3:00	0.20	1.755	2.925	0.76	347.6	0	0	986.7	7.5	85.9	13.031
2022-07-08 4:00	0.30	1.89	3.105	1.21	312.5	0	0	987.2	7	86.7	13.024
2022-07-08 5:00	0.20	1.8	3.105	1.23	329.5	0	0	987.9	7.2	84.8	13.048
2022-07-08 6:00	0.30	1.62	2.52	1.49	353.3	0	0	988.6	7.6	82.7	13.102
2022-07-08 7:00	0.40	1.17	1.755	1.42	349.9	0	0	989.1	8.9	73.2	13.129
2022-07-08 8:00	0.30	0.99	1.62	2.18	349.5	0	0	989.5	11.1	63.1	13.409
2022-07-08 9:00	0.40	0.855	1.53	2.45	351.5	0	0	989.6	12.5	57.8	13.688
2022-07-08 10:00	0.10	0.675	1.44	2.22	344.8	0	0	989.8	13.5	53	13.753
2022-07-08 11:00	0.10	0.585	1.26	2.2	338.5	0	0	989.8	14.8	49.5	14.028
2022-07-08 12:00	0.20	0.63	1.08	2.3	336.1	0	0	989.9	15.6	47.6	13.71
2022-07-08 13:00	0.30	0.675	1.26	2.41	326	0	0	989.8	16.4	45.7	13.324
2022-07-08 14:00	0.30	0.72	1.215	2.15	333.9	0	0	989.7	17.3	43.6	13.325
2022-07-08 15:00	0.20	0.765	1.395	2.19	325.1	0	0	989.7	18.1	41.4	13.325
2022-07-08 16:00	0.20	0.81	1.44	2.18	320.7	0	0	989.5	18.6	41	13.324
2022-07-08 17:00	0.20	0.765	1.215	1.57	337.5	0	0	989.4	18.7	41.7	13.324
2022-07-08 18:00	0.20	0.765	1.26	1.09	1.6	0	0	989.2	18.4	43.7	13.318
2022-07-08 19:00	0.30	0.81	1.35	0.45	38	0	0	989.1	17.2	54.2	13.15
2022-07-08 20:00	0.20	1.035	1.62	0.33	89.1	0	0	989	13.5	67.9	13.07
2022-07-08 21:00	0.10	1.665	2.88	0.41	187.2	0	0	989.2	10.2	80.6	13.061
2022-07-08 22:00	0.50	1.575	2.565	0.34	216.3	0	0	989.1	9.8	76.2	13.061
2022-07-08 23:00	0.70	1.8	2.835	0.57	202.3	0	0	989.1	9.6	74.8	13.054
2022-07-09 0:00	0.40	1.89	3.06	0.84	189.6	0	0	989.1	9	75.7	13.046
2022-07-09 1:00	0.40	2.025	3.06	0.68	179.9	0	0	989	8	79.1	13.042
2022-07-09 2:00	0.10	1.935	3.06	0.71	171.5	0	0	989	7.4	81.5	13.038
2022-07-09 3:00	0.20	1.845	2.88	0.82	186.8	0	0	988.8	7.1	82	13.032
2022-07-09 4:00	0.40	1.8	2.835	0.74	182.2	0	0	988.9	6.6	83.2	13.033
2022-07-09 5:00	0.10	1.755	2.61	0.85	186.9	0	0	988.8	7.9	82.3	13.06
2022-07-09 6:00	0.20	1.755	2.655	1.09	212.3	0	0	988.7	10.5	78.7	13.11
2022-07-09 7:00	0.10	2.385	3.51	1.71	255.4	0	0	988.7	14.7	67.4	13.161
2022-07-09 8:00	0.10	2.475	3.285	1.2	322.4	0	0	988.6	17.9	57.1	13.418
2022-07-09 9:00	0.20	3.015	3.825	1.1	296.8	0	0	988.5	19.5	52	13.696
2022-07-09 10:00	0.20	2.835	3.51	0.97	334.3	0	0	988.3	21.5	45.3	13.965
2022-07-09 11:00	0.30	3.33	3.915	1.73	292.2	0	0	988.2	23	42.1	14.029
2022-07-09 12:00	0.20	4.5	5.085	1.62	330.8	0	0	987.9	23.5	40.9	13.676
2022-07-09 13:00	0.10	6.435	7.11	1.99	316.9	0	0	987.6	24.1	39.8	13.325
2022-07-09 14:00	0.40	9.405	10.035	2.5	309.2	0	0	987.2	24.9	36.6	13.325
2022-07-09 15:00	0.40	11.475	12.15	2.25	312.9	0	0	986.9	25.4	34.7	13.324
2022-07-09 16:00	0.30	13.635	14.355	2.05	328.3	0	0	986.6	25.4	33.7	13.323
2022-07-09 17:00	0.30	13.86	14.715	2.08	322.8	0	0	986.1	25.2	34.7	13.321
2022-07-09 18:00	0.20	12.555	13.23	1.45	338.8	0	0	985.9	24.7	36.3	13.317
2022-07-09 19:00	0.20	11.385	11.925	0.54	345.8	0	0	985.9	23.3	45.2	13.156
2022-07-09 20:00	0.10	11.745	12.78	0.32	61.6	0	0	985.8	18.9	65.9	13.077
2022-07-09 21:00	0.30	12.15	13.095	0.36	61	0	0	985.8	15.1	74.9	13.078
2022-07-09 22:00	0.20	12.465	13.59	0.34	79.6	0	0	985.6	13.3	79	13.072
2022-07-09 23:00	0.30	12.96	14.13	0.55	233.5	0	0	985.6	12.5	78.6	13.068
2022-07-10 0:00	0.30	13.815	14.625	0.34	67.5	0	0	985.3	12.2	81.2	13.065
2022-07-10 1:00	0.30	14.985	16.245	0.84	207.9	0	0	985	11.5	81.2	13.057
2022-07-10 2:00	0.40	15.975	16.92	0.83	200.9	0	0	984.8	12	79.5	13.056
2022-07-10 3:00	0.10	17.775	18.765	0.95	199	0	0	984.5	12.2	80.3	13.06
2022-07-10 4:00	0.20	14.4	15.435	0.92	193.4	0	0	984.4	11.8	80.6	13.06
2022-07-10 5:00	0.40	9.81	10.665	1.25	190.2	0	0	984.2	13.1	75.9	13.106
2022-07-10 6:00	0.30	4.86	5.625	1.99	218.4	0	0	984	16.1	61.6	13.187
2022-07-10 7:00	0.20	3.24	4.275	2.44	229.3	0	0	983.6	18.1	53.1	13.277
2022-07-10 8:00	0.20	3.15	4.32	3.01	244.7	0	0	983.2	19.9	50.2	13.488
2022-07-10 9:00	0.30	4.68	5.67	3.27	226.7	0	0	982.9	20.9	45.5	13.599
2022-07-10 10:00	0.20	5.04	6.12	3.17	217.7	0	0	981.9	22.5	42.1	13.936
2022-07-10 11:00	0.20	5.22	6.66	3.89	196.2	0	0	980.4	24.6	37	14.028
2022-07-10 12:00	0.30	5.625	7.425	4.42	193.9	0	0	979.3	24.6	40.7	13.673
2022-07-10 13:00	0.20	6.255	8.415	4.01	212.6	0	0	978.4	24.9	44.6	13.325
2022-07-10 14:00	0.20	6.03	7.875	4.22	219.8	0	0	977.9	24.3	51	13.323
2022-07-10 15:00	0.30	4.86	6.075	4.18	210.5	0	0	977.5	22.2	63	13.324
2022-07-10 16:00	0.20	5.985	6.975	4.34	204.5	0	0	977.2	20.4	72.5	13.325
2022-07-10 17:00	0.20	6.84	8.1	3.37	208.3	0	0	976.4	20.5	70.9	13.297
2022-07-10 18:00	0.10	7.695	9.405	2.76	200.2	0	0	976	20.7	72.4	13.297
2022-07-10 19:00	0.30	8.865	10.395	3.18	219.4	0	0	975.7	20.9	70.6	13.123
2022-07-10 20:00	0.10	8.505	10.17	3.12	221.6	0	0	975.6	20.5	67.9	13.075
2022-07-10 21:00	0.10	8.1	9.405	1.6	186.5	0	0	974.8	19.2	74	13.074
2022-07-10 22:00	0.30	8.145	9.72	1.47	189.4	0	0	974.3	18.6	77.9	13.074
2022-07-10 23:00	0.20	7.605	9.18	1.98	191.8	0	0	973.9	19.4	72.6	13.073
2022-07-11 0:00	0.20	8.145	10.26	1.67	194.4	3.2	0	973.3	17.6	81.8	13.068
2022-07-11 1:00	0.30	8.46	10.44	0.8	167.6	0	0	972.5	16.3	89.4	13.067
2022-07-11 2:00	0.20	7.56	10.035	1.28	173.2	0.2	0	972.1	16	88.4	13.061
2022-07-11 3:00	0.10	6.75	9.225	1.21	154.6	2.9	0	971.3	15.4	88.3	13.06
2022-07-11 4:00	0.40	7.02	10.8	1.47	156	5.4	0	970.4	14.7	89.9	13.058
2022-07-11 5:00	0.30	7.02	11.115	2.16	164	0.1	0	969.4	14.7	89.6	13.062
2022-07-11 6:00	0.20	6.345	9.135	2.1	176.1	0	0	968.9	14.9	90.3	13.091
2022-07-11 7:00	0.40	6.21	8.64	2.02	179.9	0	0	968.3	16.3	89.2	13.201
2022-07-11 8:00	0.20	6.435	8.55	2.36	196	0	0	967.8	18.2	85	13.26
2022-07-11 9:00	0.20	6.66	8.91	2.05	189.9	0	0	967.3	18.5	84.6	13.244
2022-07-11 10:00	0.30	6.705	8.73	2.64	197.4	0	0	966.9	19.9	79.9	13.402
2022-07-11 11:00	0.20	6.84	8.91	2.47	218	0	0	966.6	20.5	78.4	13.291
2022-07-11 12:00	0.20	6.93	8.505	2.76	229.5	0	0	966.3	20.7	79.1	13.298
2022-07-11 13:00	0.20	5.985	7.515	3.36	226.6	0	0	965.9	21.7	75.2	13.498
2022-07-11 14:00	0.30	4.32	5.895	3.61	247.3	0	0	965.4	23	67.1	13.649
2022-07-11 15:00	0.20	4.275	5.445	3.1	252.4	0	0	965	23.4	62.7	14.027
2022-07-11 16:00	0.20	4.095	5.4	2.8	270.7	0	0	964.7	23.6	58	13.812
2022-07-11 17:00	0.30	2.52	3.915	3.78	293.8	0	0	965.1	21.2	66.5	13.287
2022-07-11 18:00	0.30	1.8	2.655	3.08	286.4	0	0	965.2	19.9	73.1	13.234

2022-07-11 19:00	0.30	1.35	2.295	2.73	323.4	0	0	965.8	18.1	81.8	13.101
2022-07-11 20:00	0.40	2.115	2.97	2.36	331	0	0	966.6	15.2	88.6	13.075
2022-07-11 21:00	0.10	2.79	3.69	1.94	333.6	0	0	967.3	14.3	90.7	13.074
2022-07-11 22:00	0.30	6.075	6.885	2.24	331	0	0	968	13.5	89.3	13.069
2022-07-11 23:00	0.30	12.15	13.365	2	336.4	0	0	968.6	12	87.8	13.045
2022-07-12 0:00	0.20	8.955	11.16	1.71	325.1	0	0	969	11.1	87.6	13.044
2022-07-12 1:00	0.30	6.57	9.135	1.83	315.8	0	0	969.1	11	87.8	13.043
2022-07-12 2:00	0.20	6.345	8.865	1.57	314.3	0	0	969.5	11.1	87.7	13.039
2022-07-12 3:00	0.20	6.435	9.135	1.53	317.2	0	0	969.4	11.1	87.3	13.037
2022-07-12 4:00	0.10	6.57	9.36	1.74	309.7	0	0	969.6	10.9	87.1	13.036
2022-07-12 5:00	0.20	6.615	9.135	1.96	314.3	0	0	970	10.6	86.5	13.052
2022-07-12 6:00	0.30	6.48	8.37	2.03	321.5	0	0	970.8	10.1	86.1	13.075
2022-07-12 7:00	0.30	6.03	7.695	1.94	320	0	0	971.5	9.9	85.8	13.146
2022-07-12 8:00	0.30	5.58	6.84	2.36	319.2	0	0	972	10.5	83.2	13.396
2022-07-12 9:00	0.40	5.625	7.02	2.53	315.9	0	0	972.3	12.2	78.8	13.72
2022-07-12 10:00	0.40	5.445	6.705	2.36	329.5	0	0	972.8	14.1	71.8	13.978
2022-07-12 11:00	0.00	5.4	6.57	2.32	328	0	0	973.5	16.2	65.7	13.99
2022-07-12 12:00	0.30	5.13	6.345	2.09	339.8	0	0	973.8	17.9	58.3	13.336
2022-07-12 13:00	0.20	4.95	6.075	2.39	342.2	0	0	974.1	19.2	54	13.325
2022-07-12 14:00	0.30	4.545	5.535	2.32	332.3	0	0	974.6	20	48.4	13.326
2022-07-12 15:00	0.40	4.23	5.31	2.62	321.1	0	0	975.2	20.2	46.8	13.324
2022-07-12 16:00	0.20	3.465	4.59	2.49	332.7	0	0	975.5	20.3	43.4	13.323
2022-07-12 17:00	0.10	3.015	3.69	2.78	315.4	0	0	976	20.2	40.5	13.325
2022-07-12 18:00	0.10	2.115	2.745	2.15	319.9	0	0	976.4	19.5	40.7	13.315
2022-07-12 19:00	0.30	1.665	2.34	1.68	324.4	0	0	976.8	18.6	44.3	13.175
2022-07-12 20:00	0.20	1.44	2.16	1.03	326.9	0	0	977.4	16.2	52.4	13.076
2022-07-12 21:00	0.40	1.845	2.88	0.6	322.4	0	0	978.2	14	62.3	13.066
2022-07-12 22:00	0.10	2.43	4.14	0.56	307.1	0	0	978.6	12.6	68.2	13.059
2022-07-12 23:00	0.30	2.43	4.005	0.62	308.7	0	0	979.1	11.6	69.9	13.055
2022-07-13 0:00	0.20	2.52	4.365	0.76	332	0	0	979.9	10.5	72.2	13.05
2022-07-13 1:00	0.20	2.745	4.815	0.83	306.3	0	0	980.6	9.6	73.9	13.047
2022-07-13 2:00	0.20	2.7	4.41	0.68	299.2	0	0	981.1	8.9	77.1	13.044
2022-07-13 3:00	0.30	2.745	4.455	0.9	288.8	0	0	981.4	8.2	78.5	13.036
2022-07-13 4:00	0.30	2.61	3.915	1.09	291.5	0	0	981.7	7.4	80.3	13.035
2022-07-13 5:00	0.10	2.61	3.825	1.24	292.2	0	0	982.3	7.8	79.5	13.067
2022-07-13 6:00	0.20	2.205	3.06	1.44	313.3	0	0	982.8	9.7	74.4	13.102
2022-07-13 7:00	0.20	1.935	2.61	2.05	312.4	0	0	983.2	12.2	66.2	13.152
2022-07-13 8:00	0.20	1.71	2.25	2.03	315.4	0	0	983.4	14.2	58.6	13.419
2022-07-13 9:00	0.20	1.71	2.745	2.18	327.8	0	0	983.5	16.1	52.6	13.751
2022-07-13 10:00	0.30	1.755	2.43	2.34	335.1	0	0	983.6	17.6	49.8	13.967
2022-07-13 11:00	0.40	1.8	2.475	2.25	344	0	0	983.7	18.8	46.2	14.032
2022-07-13 12:00	0.30	1.935	2.52	2.1	335.2	0	0	983.8	19.7	43.7	13.505
2022-07-13 13:00	0.20	2.115	2.745	2.1	348.1	0	0	983.8	20.4	42.5	13.325
2022-07-13 14:00	0.20	2.25	2.745	1.68	346.9	0	0	983.6	20.9	41.7	13.325
2022-07-13 15:00	0.20	2.295	2.97	1.92	344.9	0	0	983.5	21.1	41.4	13.323
2022-07-13 16:00	0.30	2.43	2.925	2.03	354.8	0	0	983.7	21.5	38.5	13.323
2022-07-13 17:00	0.30	2.475	3.06	2.38	79.2	0	0	984.1	19.8	46.5	13.323
2022-07-13 18:00	0.50	2.43	2.79	1.79	106.5	0	0	984.4	18.7	52.3	13.321
2022-07-13 19:00	0.00	2.565	3.195	0.63	348.6	0	0	984.7	17.5	60.2	13.136
2022-07-13 20:00	0.50	2.52	3.285	0.58	308.3	0	0	985.1	15.3	69.7	13.076
2022-07-13 21:00	0.40	2.97	4.05	0.64	306.7	0	0	985.6	13.9	72.4	13.07
2022-07-13 22:00	0.20	3.195	4.545	0.39	88.9	0	0	985.8	11.4	82.6	13.057
2022-07-13 23:00	0.20	3.87	5.94	0.32	245.7	0	0	986.3	10.1	84	13.056
2022-07-14 0:00	0.30	3.555	5.355	0.36	340.8	0	0	986.4	9.8	85.6	13.054
2022-07-14 1:00	0.10	3.195	4.095	0.53	8.6	0	0	986.7	11.3	80.4	13.052
2022-07-14 2:00	0.10	3.06	3.78	0.52	348.3	0	0	986.9	11.4	79	13.045
2022-07-14 3:00	0.20	3.06	4.005	0.33	214	0	0	987	10.5	80.9	13.039
2022-07-14 4:00	0.30	3.285	4.725	0.33	215.4	0	0	987.3	8.2	83.5	13.035
2022-07-14 5:00	0.30	3.015	4.455	0.31	210	0	0	987.8	8	83.3	13.057
2022-07-14 6:00	0.20	3.15	3.825	0.37	246.7	0	0	988.2	11.9	74.9	13.096
2022-07-14 7:00	0.10	2.52	3.015	0.34	70.9	0	0	988.6	15.7	56.9	13.132
2022-07-14 8:00	0.30	2.025	2.475	0.76	337.8	0	0	988.9	17.7	46.7	13.4
2022-07-14 9:00	0.20	1.845	2.79	1.6	7.7	0	0	989	18.9	40.4	13.736
2022-07-14 10:00	0.30	1.71	1.89	1.66	309.6	0	0	989	19.8	36.4	13.962
2022-07-14 11:00	0.50	1.665	1.98	1.6	317	0	0	988.8	20	35.6	14.03
2022-07-14 12:00	0.30	1.665	1.98	1.46	298.7	0	0	988.5	20.6	35.1	13.511
2022-07-14 13:00	0.40	1.71	1.89	1.25	332	0	0	988.2	21.2	32.6	13.326
2022-07-14 14:00	0.40	2.52	6.165	1.49	286.3	0	0	987.7	21.9	31.8	13.324
2022-07-14 15:00	0.60	1.98	2.34	1.1	278.5	0	0	987.2	22.3	30.8	13.323
2022-07-14 16:00	0.30	2.115	2.475	1.02	345.3	0	0	986.7	23.1	30.5	13.322
2022-07-14 17:00	0.30	2.295	2.52	1.23	307.1	0	0	986.4	23.1	30.7	13.321
2022-07-14 18:00	0.50	2.61	3.825	0.64	322.8	0	0	986.5	22.9	32.7	13.298
2022-07-14 19:00	0.20	2.655	3.195	0.21	40.5	0	0	986.6	19.8	60.6	13.127
2022-07-14 20:00	0.10	3.6	4.86	0.26	31.2	0	0	986.8	16.3	71.9	13.075
2022-07-14 21:00	0.10	3.87	5.04	0.38	126.7	0	0	987.2	12.9	77.9	13.075
2022-07-14 22:00	0.10	4.05	5.445	0.33	251.1	0	0	987.3	11.7	79.3	13.075
2022-07-14 23:00	0.10	3.735	5.13	0.28	83.1	0	0	987.4	10.1	82.7	13.07
2022-07-15 0:00	0.10	4.05	5.895	0.36	149.7	0	0	987.3	8.6	84.2	13.062
2022-07-15 1:00	0.60	4.41	6.255	0.58	210.5	0	0	987.2	8.4	81.1	13.052
2022-07-15 2:00	0.60	4.95	6.525	0.4	217.6	0	0	987.1	8.7	79.5	13.051
2022-07-15 3:00	0.30	4.905	6.57	0.65	210.9	0	0	987.3	7.7	82.7	13.04
2022-07-15 4:00	0.30	4.725	5.985	0.73	196.3	0	0	987.4	8	82.1	13.038
2022-07-15 5:00	0.30	4.77	5.985	0.92	189.9	0	0	987.5	9	80.5	13.06
2022-07-15 6:00	0.50	4.86	5.85	1.31	188.4	0	0	987.5	12	75.4	13.126
2022-07-15 7:00	0.20	4.59	5.445	1.34	184.5	0	0	987.2	15	66.8	13.179
2022-07-15 8:00	0.40	4.185	4.905	1.24	186.7	0	0	987	18.4	56.6	13.414
2022-07-15 9:00	0.20	5.22	8.955	1.73	183.7	0	0	986.9	20.7	48.6	13.604
2022-07-15 10:00	0.30	5.04	7.875	2.67	212.3	0	0	986.9	22.2	41.2	13.944
2022-07-15 11:00	0.40	5.175	5.94	3.12	229	0	0	986.6	22.9	36.9	14.028
2022-07-15 12:00	0.40	5.04	5.715	2.87	205.7	0	0	986.2	23.2	36.6	13.587

2022-07-15 13:00	0.30	4.995	5.58	2.71	212.9	0	0	986	22.8	38	13.324
2022-07-15 14:00	0.30	4.545	5.535	2.71	224	0	0	985.6	22.4	39.8	13.323
2022-07-15 15:00	0.30	4.05	4.725	2.58	200	0	0	985	22.6	38.1	13.324
2022-07-15 16:00	0.40	4.365	5.175	2.72	207.1	0	0	984.1	23	40	13.325
2022-07-15 17:00	0.30	5.265	6.165	2.77	197.6	0	0	983.4	23.4	37.6	13.323
2022-07-15 18:00	0.30	5.94	6.66	2.47	197.1	0	0	983.3	22.7	38.6	13.285
2022-07-15 19:00	0.30	5.85	6.84	1.99	200.8	0	0	983.3	21.6	42.6	13.099
2022-07-15 20:00	0.10	5.715	6.66	1.27	185.4	0	0	983.1	20.1	50.4	13.07
2022-07-15 21:00	0.20	6.03	7.065	1.11	188.9	0	0	983.1	18.8	55.2	13.071
2022-07-15 22:00	0.10	6.03	6.975	1.45	203.3	0	0	983	17.9	57.4	13.071
2022-07-15 23:00	0.10	5.94	6.975	1.81	219.5	0	0	983	18	56.5	13.069
2022-07-16 0:00	0.30	6.12	7.29	1.9	224.6	0	0	982.9	17.5	57.8	13.064
2022-07-16 1:00	0.20	5.895	7.02	1.93	228.3	0	0	982.7	16.9	58.2	13.061
2022-07-16 2:00	0.30	5.76	6.66	1.38	208.4	0	0	982.5	15.8	61.1	13.056
2022-07-16 3:00	0.30	5.715	6.705	1.34	202.5	0	0	982.2	14.9	64.3	13.054
2022-07-16 4:00	0.00	5.715	6.615	1.21	209.8	0	0	982.1	14.8	63.5	13.052
2022-07-16 5:00	0.10	5.895	6.93	1.84	220.7	0	0	982.2	15.7	62.4	13.077
2022-07-16 6:00	0.20	5.985	7.29	1.88	228.3	0	0	982.5	16.1	63.4	13.106
2022-07-16 7:00	0.40	6.03	7.29	2.82	241.1	0	0	982.6	17.2	61	13.219
2022-07-16 8:00	0.10	6.21	7.605	2.5	250.9	0	0	982.7	19	57.2	13.437
2022-07-16 9:00	0.20	7.2	8.37	2.16	233.8	0	0	982.5	20.4	55.9	13.544
2022-07-16 10:00	0.20	9.315	11.7	1.66	238.8	0	0	982.3	20.9	57.1	13.585
2022-07-16 11:00	0.30	22.635	24.12	1.83	210.5	0	0	982.2	24.2	49.8	14.02
2022-07-16 12:00	0.50	34.92	36.45	1.56	230	0	0	981.9	25.7	45.8	13.959
2022-07-16 13:00	0.60	45.54	46.665	1.14	263.1	0	0	981.4	26.4	43.6	13.326
2022-07-16 14:00	0.50	51.84	53.055	1.17	300	0	0	981	26.3	44.7	13.323
2022-07-16 15:00	0.30	41.175	42.3	2.24	240.6	0	0	981	26.3	45.6	13.323
2022-07-16 16:00	0.60	20.16	20.835	2.89	211.2	0	0	981.1	24	54	13.323
2022-07-16 17:00	0.20	14.4	15.03	2.67	212.4	0	0	981.1	23.7	58.1	13.324
2022-07-16 18:00	0.20	11.88	12.645	2.25	224.8	0	0	981.1	23.7	57.9	13.318
2022-07-16 19:00	0.40	8.01	8.73	1.2	210.8	0	0	981.1	22.7	62.1	13.154
2022-07-16 20:00	0.20	8.46	10.305	0.42	152.2	0	0	981.2	19.4	75.9	13.076
2022-07-16 21:00	0.30	8.955	10.26	0.36	84.1	0	0	981.4	16.7	87.2	13.076
2022-07-16 22:00	0.30	9.72	11.16	0.5	152.3	0	0	981.4	15.4	90.2	13.076
2022-07-16 23:00	0.10	10.71	12.42	0.53	126	0	0	981.4	14.8	91.2	13.068
2022-07-17 0:00	0.10	13.59	14.76	0.27	169.4	0	0	981.4	13.9	90.4	13.051
2022-07-17 1:00	0.10	13.77	15.525	0.64	180.8	0	0	981.3	12.9	90	13.056
2022-07-17 2:00	0.20	8.73	9.855	0.88	184.3	0	0	981.2	13.6	91.9	13.055
2022-07-17 3:00	0.20	6.975	7.83	0.54	204.1	0	0	981.3	12.6	90.7	13.047
2022-07-17 4:00	0.20	6.795	7.92	0.63	168.1	0	0	981.5	12.4	91.4	13.042
2022-07-17 5:00	0.30	4.05	4.5	1.07	187.1	0	0	981.7	13.5	92.1	13.068
2022-07-17 6:00	0.30	7.02	7.65	1.07	192.1	0	0	982	15	91.9	13.117
2022-07-17 7:00	0.20	10.395	11.34	1.51	179.7	0	0	982.2	18.4	84.4	13.18
2022-07-17 8:00	0.20	14.85	15.795	1.43	143	0	0	981.9	21.8	72.3	13.402
2022-07-17 9:00	0.10	20.475	21.33	1.62	193.5	0	0	981.6	25.2	52.6	13.674
2022-07-17 10:00	0.30	23.445	24.165	2	183.7	0	0	981.2	27	44.1	13.95
2022-07-17 11:00	0.70	22.86	23.76	2.31	172.9	0	0	980.7	28.1	38.8	14.026
2022-07-17 12:00	0.50	25.92	26.91	2	190.2	0	0	980.4	28.8	35.2	13.697
2022-07-17 13:00	0.60	28.26	29.16	1.62	172.4	0	0	980.2	29.3	31.7	13.324
2022-07-17 14:00	0.50	31.77	32.535	1.94	223.3	0	0	979.9	29.7	30.8	13.323
2022-07-17 15:00	0.40	37.305	41.895	1.71	222.6	0	0	979.5	30.1	29.1	13.323
2022-07-17 16:00	0.70	34.74	35.82	1.47	193.3	0	0	979.1	30.2	28.8	13.321
2022-07-17 17:00	0.60	29.115	29.97	1.5	182.8	0	0	978.7	29.7	30.1	13.321
2022-07-17 18:00	0.50	22.86	23.58	1.03	149.8	0	0	978.4	28.1	36.6	13.303
2022-07-17 19:00	0.10	21.33	21.96	0.24	48.1	0	0	978	25.1	58	13.144
2022-07-17 20:00	0.20	22.545	23.58	0.28	62.7	0	0	977.7	21.5	69.2	13.077
2022-07-17 21:00	0.20	23.94	25.425	0.22	266.1	0	0	977.7	19.2	76.6	13.077
2022-07-17 22:00	0.20	24.03	25.695	0.3	339.5	0	0	977.6	17.4	82.1	13.076
2022-07-17 23:00	0.10	23.625	25.695	0.23	11.3	0	0	977.6	16.1	86.3	13.074
2022-07-18 0:00	0.60	23.085	24.885	0.34	133.5	0	0	977.5	15.2	88.1	13.073
2022-07-18 1:00	0.30	23.94	25.83	0.53	171.9	0	0	977.1	14.8	87.4	13.072
2022-07-18 2:00	0.20	21.87	23.175	1.1	177.6	0	0	976.6	15.6	84.6	13.068
2022-07-18 3:00	0.20	21.96	23.22	0.95	185.3	0	0	976.5	15.2	85	13.062
2022-07-18 4:00	0.10	25.02	26.235	0.86	196.8	0	0	976.5	15	85.3	13.057
2022-07-18 5:00	0.30	29.115	30.375	0.9	208.4	0	0	976.6	15.3	82.9	13.075
2022-07-18 6:00	0.20	31.005	31.95	0.92	205	0	0	976.2	16.7	78.1	13.122
2022-07-18 7:00	0.20	25.29	33.345	1.51	235	0	0	976.1	19.8	68.9	13.191
2022-07-18 8:00	0.30	20.25	48.555	2.37	213.8	0	0	975.6	23	59.4	13.425
2022-07-18 9:00	0.20	10.035	17.01	3.15	222.2	0	0	975	24.7	51.7	13.612
2022-07-18 10:00	0.10	11.745	29.115	3.36	215.3	0	0	974.1	25.7	47.2	13.836
2022-07-18 11:00	0.30	10.62	14.805	3.42	216	0	0	973.3	27	44.2	14.028
2022-07-18 12:00	0.60	14.4	25.065	3.51	230.2	0	0	972.6	28.5	36.6	13.758
2022-07-18 13:00	0.40	15.3	25.47	3.3	231.2	0	0	971.7	29.2	36.3	13.323
2022-07-18 14:00	0.30	14.04	23.94	3.04	221.1	0	0	971	29.6	37.7	13.323
2022-07-18 15:00	0.60	9.63	11.925	3.4	224.3	0	0	970.2	29.5	39.4	13.323
2022-07-18 16:00	0.30	7.38	9.18	3.48	225.8	0	0	969.5	29.8	40.3	13.322
2022-07-18 17:00	0.20	7.965	15.39	3.24	219.8	0	0	968.7	29.7	42.7	13.321
2022-07-18 18:00	0.30	7.335	13.68	3.4	237.6	0	0	968.5	29.4	43.7	13.314
2022-07-18 19:00	0.30	6.165	7.425	2.7	227.9	0	0	968.3	27.5	48.9	13.123
2022-07-18 20:00	0.30	5.67	9.54	3.82	286.3	1.2	0	970.1	23.4	63.5	13.078
2022-07-18 21:00	0.70	5.76	9.045	1.39	156.3	1.2	0	971.4	17.5	90.1	13.078
2022-07-18 22:00	0.40	6.75	11.7	1.23	206.9	0	0	971	17	91.4	13.078
2022-07-18 23:00	0.30	10.08	14.445	1.03	228.6	0	0	971.5	16.1	91	13.077
2022-07-19 0:00	0.50	14.22	17.595	0.75	206.2	0	0	971.7	15.4	90.9	13.075
2022-07-19 1:00	0.50	14.265	17.55	0.59	237	0	0	971.7	14.8	91.4	13.073
2022-07-19 2:00	0.20	15.21	18.945	0.62	250.7	0	0	971.7	14.5	91.5	13.07
2022-07-19 3:00	0.20	17.505	20.655	0.61	263.4	0	0	971.8	14.5	91.3	13.064
2022-07-19 4:00	0.20	16.335	18.63	0.48	189.5	0	0	972.1	13.4	90.8	13.061
2022-07-19 5:00	0.20	12.06	15.03	0.35	253.5	0	0	972.8	13.4	91.7	13.074
2022-07-19 6:00	0.30	14.535	17.325	0.77	252.2	0	0	973.2	15	92.3	13.12

2022-07-19 7:00	0.10	24.165	27.135	1.53	306.5	0	0	974.1	16.6	91.4	13.133
2022-07-19 8:00	0.30	20.745	22.5	0.94	324.2	0	0	974.5	17	90.8	13.164
2022-07-19 9:00	0.20	18.765	20.835	1.43	275.3	0	0	974.5	18	86.5	13.395
2022-07-19 10:00	0.20	13.68	15.12	2.18	263.8	0	0	974.4	19.1	76.5	13.522
2022-07-19 11:00	0.20	11.295	12.96	2.43	265.2	0	0	974.5	20.9	66.3	13.784
2022-07-19 12:00	0.20	10.08	11.43	2.21	300.7	0	0	974.4	22.5	57.8	14.03
2022-07-19 13:00	0.40	8.46	9.81	2.55	291.9	0	0	974.3	23.4	52	13.585
2022-07-19 14:00	0.20	9.36	17.73	2.01	296	0	0	973.8	24.4	47.4	13.325
2022-07-19 15:00	0.30	7.29	9.765	1.67	303.8	0	0	973.5	24.9	45.4	13.324
2022-07-19 16:00	0.30	7.29	8.325	1.14	311.1	0	0	973	24.9	46.5	13.323
2022-07-19 17:00	0.60	7.65	8.37	0.88	330.8	0	0	972.7	24.3	47.9	13.322
2022-07-19 18:00	0.20	8.775	9.45	0.82	22.9	0	0	972.5	22.8	59	13.269
2022-07-19 19:00	0.30	9.045	9.72	0.52	51.9	0	0	972.7	21.5	67.3	13.107
2022-07-19 20:00	0.20	9.36	10.08	0.68	59.6	0	0	973	20.5	68.7	13.077
2022-07-19 21:00	0.20	9.495	10.44	0.65	77.3	0	0	972.9	19.7	72.3	13.077
2022-07-19 22:00	0.20	9.405	10.305	0.59	101	0	0	972.7	19.3	73.5	13.077
2022-07-19 23:00	0.20	9.225	10.17	0.63	106.4	0	0	972.4	18.8	76.6	13.076
2022-07-20 0:00	0.40	9.585	10.665	1.14	104.5	0	0	971.7	18.7	74.6	13.073
2022-07-20 1:00	0.20	9.45	10.575	1.19	104.8	0	0	970.9	19.1	72.8	13.072
2022-07-20 2:00	0.10	10.125	11.385	1.09	110	0	0	970.4	18.8	74.4	13.066
2022-07-20 3:00	0.30	12.105	13.59	1.24	107.4	0	0	969.8	18.7	76.2	13.065
2022-07-20 4:00	0.20	14.49	16.02	1.44	126.7	0	0	969.2	18.6	78.3	13.064
2022-07-20 5:00	0.30	16.92	18.675	1.41	117.1	0	0	968.6	17.8	87.8	13.071
2022-07-20 6:00	0.20	16.83	18.855	1.48	115.9	0	0	967.9	18.4	88	13.102
2022-07-20 7:00	0.20	16.38	18.36	2.05	135.8	0	0	967.6	20.5	83.3	13.205
2022-07-20 8:00	0.40	15.435	17.55	1.92	143.3	0	0	967.3	22.2	78.4	13.333
2022-07-20 9:00	0.60	14.94	16.875	1.91	139.3	0	0	966.7	22.7	77.6	13.295
2022-07-20 10:00	0.50	15.255	17.55	2	137.4	1.7	0	966	22.2	80.5	13.178
2022-07-20 11:00	0.30	15.57	17.955	3.02	107.1	3.3	0	963.8	20.8	89.9	13.135
2022-07-20 12:00	0.40	14.175	16.065	2.79	145.6	0	0	963.5	21.6	88.9	13.293
2022-07-20 13:00	0.40	10.26	12.105	3.49	143	0	0	962.8	22.7	82.8	13.555
2022-07-20 14:00	0.10	5.4	7.335	3.52	144.6	0	0	962.7	23.3	76.6	13.495
2022-07-20 15:00	0.50	6.975	8.73	4	141.9	0.1	0	961.5	23.9	77	14.019
2022-07-20 16:00	0.10	10.035	12.735	2.57	146.9	4	0	961.2	24.1	76	13.832
2022-07-20 17:00	0.70	9.405	14.94	1.95	174.4	5.2	0	961.5	20.4	87.5	13.132
2022-07-20 18:00	0.40	6.795	11.43	1.57	182.7	0.2	0	961.8	19.5	89.3	13.109
2022-07-20 19:00	0.20	7.38	11.34	1.09	178.2	0	0	961.4	19.3	90.5	13.094
2022-07-20 20:00	0.10	8.64	14.04	1.19	135.3	0	0	960.8	18.8	91.7	13.075
2022-07-20 21:00	0.30	7.875	12.285	0.81	107.6	0	0	960.2	18.5	91.6	13.074
2022-07-20 22:00	0.20	7.83	11.52	0.59	114.4	0	0	959.8	18.2	91.8	13.075
2022-07-20 23:00	0.40	8.865	14.04	0.67	322.8	0.1	0	959.4	18.1	92.1	13.069
2022-07-21 0:00	0.40	9.135	13.365	0.83	312.8	0.1	0	958.8	18.1	92.6	13.067
2022-07-21 1:00	0.20	6.93	9.72	0.67	218.3	0	0	958.3	17.7	92.5	13.063
2022-07-21 2:00	0.10	6.57	8.55	0.67	209.1	0	0	957.9	17.6	92.8	13.057
2022-07-21 3:00	0.20	9.45	13.95	1.27	228.4	0	0	957.4	17.4	92.4	13.053
2022-07-21 4:00	0.30	10.44	15.39	1.51	231.5	0	0	957.4	17.6	92.1	13.048
2022-07-21 5:00	0.10	10.08	13.86	1.9	234.9	0	0	957.5	18	92.3	13.054
2022-07-21 6:00	0.20	3.285	4.815	2.6	247.1	0.2	0	957.6	18.2	91.2	13.072
2022-07-21 7:00	0.20	1.035	1.98	3.99	272.8	0.8	0	958.2	17.4	87.9	13.115
2022-07-21 8:00	0.00	1.215	2.565	3.45	278.4	1.5	0	958.9	16.6	89	13.122
2022-07-21 9:00	0.30	1.665	2.79	3.38	273.6	0	0	959.5	16.4	88.9	13.149
2022-07-21 10:00	0.10	1.575	2.52	3.73	270.9	0	0	960.4	16	88.5	13.233
2022-07-21 11:00	0.30	1.35	2.295	3.85	273.7	0.1	0	961.2	16	88.3	13.255
2022-07-21 12:00	0.10	0.855	1.53	3.96	270.9	0	0	962.1	16.1	88.5	13.31
2022-07-21 13:00	0.30	2.88	3.6	4.18	267.6	0	0	962.8	16.8	88.2	13.337
2022-07-21 14:00	0.10	7.74	8.64	4.51	271.6	0	0	963.7	17.6	86.4	13.437
2022-07-21 15:00	0.20	9	10.215	4.28	283.6	0	0	964.7	18.1	83.6	13.43
2022-07-21 16:00	0.40	10.125	11.835	4.11	291.8	0	0	965.5	19	76	13.63
2022-07-21 17:00	0.40	13.275	15.21	2.45	299	0	0	966	20.4	73.5	13.975
2022-07-21 18:00	0.30	16.56	18.54	1.45	316.7	0	0	966.7	20.8	73.7	13.896
2022-07-21 19:00	0.20	16.515	18.765	0.5	293.6	0	0	967	19.4	83.7	13.148
2022-07-21 20:00	0.40	14.76	17.865	1.3	274.5	1.4	0	967.6	18.1	85.3	13.075
2022-07-21 21:00	0.10	14.175	16.83	1.48	262.6	0	0	968.4	16.7	86.1	13.074
2022-07-21 22:00	0.30	12.285	15.75	1.28	268.7	0	0	968.8	15.6	88.4	13.073
2022-07-21 23:00	0.30	11.7	15.93	0.68	170	0	0	968.7	14.2	90.4	13.062
2022-07-22 0:00	0.20	11.565	15.165	1.16	179	0	0	969	13.9	90.3	13.057
2022-07-22 1:00	0.00	11.385	13.905	0.84	180.5	0	0	969.2	13.5	89.4	13.052
2022-07-22 2:00	0.30	12.87	15.705	0.58	192.6	0	0	969.5	13.2	88.9	13.05
2022-07-22 3:00	0.20	15.12	17.73	1.07	185.2	0	0	969.7	13.3	89.6	13.044
2022-07-22 4:00	0.20	17.235	20.385	1.16	186.7	0	0	970.2	13.2	89.8	13.039
2022-07-22 5:00	0.30	17.865	21.06	1.28	192.6	0	0	970.9	13.6	88.6	13.063
2022-07-22 6:00	0.10	15.435	18.405	2.2	217.7	0	0	971.4	15.2	82.8	13.09
2022-07-22 7:00	0.20	11.655	14.22	2.66	232.1	0	0	971.7	17.2	74.6	13.126
2022-07-22 8:00	0.20	8.01	10.305	2.64	230	0	0	971.6	19.5	67.1	13.371
2022-07-22 9:00	0.40	5.355	8.01	3.2	237.9	0	0	971.5	21.6	59.6	13.68
2022-07-22 10:00	0.20	4.23	6.75	3.67	228	0	0	971.6	23.1	54.2	13.953
2022-07-22 11:00	0.20	3.375	5.625	4.08	237.4	0	0	971.7	24.1	50.5	14.03
2022-07-22 12:00	0.30	3.465	6.075	3.18	242.9	2	0	971.3	23	58.7	13.687
2022-07-22 13:00	0.30	3.24	5.625	3.81	218.5	0	0	970.9	24.5	50.5	13.324
2022-07-22 14:00	0.20	3.735	5.94	2.66	202.7	0	0	970.8	24.6	51.1	13.324
2022-07-22 15:00	0.40	4.23	6.615	3.63	247.4	0	0	970.4	25.9	41.9	13.322
2022-07-22 16:00	0.40	3.15	5.805	4.15	224.5	0	0	970.4	26	37.5	13.322
2022-07-22 17:00	0.40	3.195	5.175	2.43	310.7	0.3	0	971.2	21.7	57.7	13.262
2022-07-22 18:00	0.40	3.24	4.635	1.19	296.9	0	0	972	18.5	74.5	13.135
2022-07-22 19:00	0.40	4.14	6.39	1.9	305.8	2.4	0	972.6	16.7	81	13.079
2022-07-22 20:00	0.20	5.13	7.56	1.53	187.4	5.1	0	972.4	15.5	88.3	13.078
2022-07-22 21:00	0.20	4.86	7.335	1.24	168.4	0	0	972.3	15	88.7	13.078
2022-07-22 22:00	0.10	4.68	6.57	0.97	195.9	0	0	972.5	14.8	87.9	13.077
2022-07-22 23:00	0.20	5.535	7.38	0.8	198.4	0	0	972.6	14.8	87.5	13.076
2022-07-23 0:00	0.30	6.615	8.505	0.87	206.4	0	0	972.7	14.9	87.2	13.073

2022-07-23 1:00	0.10	7.425	9.405	1.32	215.1	0	0	972.9	14.6	87.4	13.069
2022-07-23 2:00	0.40	7.83	9.99	1.92	232.5	0	0	973.1	15	86.2	13.067
2022-07-23 3:00	0.20	7.065	9.09	1.4	222.3	0	0	973.4	14.4	87.1	13.059
2022-07-23 4:00	0.10	6.57	8.325	1.39	206.4	0	0	973.9	14	87.7	13.042
2022-07-23 5:00	0.30	6.255	8.01	1.49	219.1	0	0	974.5	14.4	87.1	13.069
2022-07-23 6:00	0.10	5.895	7.965	2.4	238.9	0	0	974.8	15.5	83.7	13.091
2022-07-23 7:00	0.20	5.22	7.155	2.8	263.4	0	0	975.4	16.9	79.7	13.133
2022-07-23 8:00	0.20	4.14	5.625	2.91	259.5	0	0	975.6	18.3	75.1	13.363
2022-07-23 9:00	0.20	3.105	4.32	3.1	259.3	0	0	975.4	20	66.9	13.596
2022-07-23 10:00	0.20	2.475	3.555	3.66	260.6	0	0	975.6	21.1	60.8	13.641
2022-07-23 11:00	0.20	2.295	3.33	3.14	270.1	0	0	975.9	21.8	58.9	14.017
2022-07-23 12:00	0.30	2.25	3.33	3.07	249.8	0	0	976	22.2	57	13.894
2022-07-23 13:00	0.10	2.16	3.195	3.37	248.3	0	0	976.4	23.2	54.1	13.323
2022-07-23 14:00	0.40	2.115	3.105	2.94	268.4	0	0	976.5	23.2	52.9	13.324
2022-07-23 15:00	0.20	1.935	2.88	2.83	258.1	0	0	976	24.1	50.6	13.323
2022-07-23 16:00	0.20	1.845	2.745	3.01	253.2	0	0	975.9	24.9	47.3	13.321
2022-07-23 17:00	0.30	2.025	3.015	2.48	252.2	0	0	975.8	25	46.9	13.321
2022-07-23 18:00	0.20	2.16	3.24	1.5	256.4	0	0	975.4	24.3	48.6	13.298
2022-07-23 19:00	0.20	2.7	4.185	0.66	252.4	0	0	975.2	23.1	56.4	13.147
2022-07-23 20:00	0.20	4.14	6.3	0.68	183.8	0	0	975.4	19.8	68.4	13.078
2022-07-23 21:00	0.30	3.465	4.77	0.88	192.6	0	0	975.9	19.3	67.3	13.077
2022-07-23 22:00	0.30	4.275	5.985	0.77	175.9	0	0	975.9	18.8	70.8	13.076
2022-07-23 23:00	0.20	4.86	6.975	0.81	154.9	0	0	975.4	18	75.9	13.075
2022-07-24 0:00	0.20	4.32	6.075	0.66	155.7	0	0	974.3	17.8	74.6	13.073
2022-07-24 1:00	0.20	4.185	5.805	1.82	179.8	0	0	974.1	17.3	74.5	13.072
2022-07-24 2:00	0.10	4.14	5.67	0.96	194.2	0.6	0	973.8	17.1	76.9	13.073
2022-07-24 3:00	0.20	5.31	7.335	0.67	104	0.6	0	972.8	15.9	88.4	13.067
2022-07-24 4:00	0.30	5.355	7.47	0.61	172.4	0.1	0	972.4	15.5	91.3	13.065
2022-07-24 5:00	0.20	4.77	6.39	0.64	157.1	0.2	0	972.2	15.6	91.4	13.064
2022-07-24 6:00	0.20	4.68	5.85	0.36	135.5	0	0	971.7	16.3	91.2	13.1
2022-07-24 7:00	0.20	6.03	7.605	1.54	232.3	0	0	971.5	18.2	83.6	13.19
2022-07-24 8:00	0.40	7.29	9.045	2.68	245.8	0	0	971.3	19.7	77.5	13.334
2022-07-24 9:00	0.30	6.75	8.1	2.22	218.7	0	0	971.4	20	76.5	13.397
2022-07-24 10:00	0.20	6.255	7.56	2.6	211.2	0	0	971.2	21	71.4	13.443
2022-07-24 11:00	0.30	6.03	7.245	3.33	217.7	0	0	971	21.4	67.8	13.814
2022-07-24 12:00	0.20	5.265	6.39	3.35	240.6	0	0	970.6	22.4	62.5	14.029
2022-07-24 13:00	0.30	4.59	5.625	2.55	265.2	0	0	970.2	23.1	60	13.666
2022-07-24 14:00	0.20	3.78	4.905	2.57	275.6	0	0	969.8	23.9	54.1	13.324
2022-07-24 15:00	0.50	3.51	4.59	2.27	267.5	0	0	969.1	24.7	48.8	13.324
2022-07-24 16:00	0.10	3.375	4.275	1.86	289.7	0	0	968.9	24.9	48.5	13.321
2022-07-24 17:00	0.30	3.375	4.725	2.09	321.1	0.9	0	968.9	23	55.8	13.21
2022-07-24 18:00	0.40	3.105	4.86	1.43	311.3	1	0	970.3	17.8	83.9	13.09
2022-07-24 19:00	0.10	2.16	3.015	1.32	342.8	0	0	969.9	16.9	89.2	13.083
2022-07-24 20:00	0.20	3.33	4.725	2.3	320.1	0.9	0	970.6	16.2	88.7	13.077
2022-07-24 21:00	0.10	4.95	6.885	2.23	320.2	0	0	971	14.7	89	13.078
2022-07-24 22:00	0.10	4.86	6.84	2.34	302.2	0.2	0	971.4	13.9	87.7	13.054
2022-07-24 23:00	0.10	4.095	5.895	2.15	310.6	1.2	0	971.7	13.2	86.9	13.044
2022-07-25 0:00	0.30	4.635	6.975	2.35	294.2	0.7	0	972	12.9	87.8	13.041
2022-07-25 1:00	0.30	4.77	7.92	1.87	267.9	0	0	972.4	12.8	87.1	13.047
2022-07-25 2:00	0.10	4.14	6.66	2.11	278.3	0.1	0	972.5	12.2	86.6	13.035
2022-07-25 3:00	0.20	3.735	6.075	1.78	269.6	0	0	972.7	11.9	86.6	13.036
2022-07-25 4:00	0.40	4.185	7.065	2.23	263.2	0	0	972.8	11.7	86.9	13.031
2022-07-25 5:00	0.30	4.41	7.605	2.34	268.7	0	0	973.1	11.7	87.2	13.034
2022-07-25 6:00	0.10	3.42	5.4	2.68	275.8	0	0	973.7	12.2	87.1	13.078
2022-07-25 7:00	0.30	1.89	3.06	3.11	275.7	0	0	974.3	12.4	86.2	13.126
2022-07-25 8:00	0.20	1.035	1.71	3.21	276.8	0	0	974.4	12.6	85.8	13.211
2022-07-25 9:00	0.30	0.765	1.305	3.33	270	0	0	974.7	13.6	83.9	13.386
2022-07-25 10:00	0.60	0.855	1.35	3.39	268.6	0	0	975.3	14.1	82.6	13.416
2022-07-25 11:00	0.20	1.17	1.755	3.46	278.1	0	0	975.7	14.8	80	13.488
2022-07-25 12:00	0.10	0.855	1.53	3.97	264.2	0	0	975.9	16.1	75	13.751
2022-07-25 13:00	0.30	0.945	1.62	4.14	266.9	0	0	976	17.4	68.1	14.032
2022-07-25 14:00	0.50	1.26	2.25	4.07	256.7	0	0	976.1	17.7	62.4	13.729
2022-07-25 15:00	0.20	1.8	2.925	4.4	258.9	0	0	976	19	56.2	13.324
2022-07-25 16:00	0.50	1.98	2.835	2.86	277.4	0	0	976.6	16.8	68.5	13.324
2022-07-25 17:00	0.10	2.25	3.51	3.12	268.2	0	0	976.7	18.1	62.3	13.324
2022-07-25 18:00	0.10	2.34	3.555	2.13	268.6	0	0	976.8	18	63	13.253
2022-07-25 19:00	0.20	2.565	3.825	1.02	241.2	0	0	976.7	17.3	69.6	13.091
2022-07-25 20:00	0.20	2.79	4.14	0.94	218	0	0	977.1	16.3	72.5	13.073
2022-07-25 21:00	0.40	3.42	5.175	0.67	187.9	0	0	977.5	14.8	78.7	13.072
2022-07-25 22:00	0.10	3.96	5.94	1.69	214.3	0	0	977.7	15.2	79.3	13.073
2022-07-25 23:00	0.20	4.68	6.75	1.46	233.2	0	0	977.9	14.7	80.4	13.07
2022-07-26 0:00	0.20	5.4	7.92	0.96	241.4	0	0	978.2	13.4	83.6	13.061
2022-07-26 1:00	0.10	5.355	7.83	0.7	205	0	0	978.1	12.3	85.2	13.051
2022-07-26 2:00	0.50	5.67	8.46	0.95	190	0	0	978.2	11.2	86	13.044
2022-07-26 3:00	0.20	5.985	8.775	1.18	190.6	0	0	978	10.7	85.9	13.038
2022-07-26 4:00	0.30	6.03	8.595	1.29	186.3	0	0	978	10.2	85.7	13.037
2022-07-26 5:00	0.20	5.94	7.83	1.04	190.6	0	0	978.2	10.4	84.8	13.054
2022-07-26 6:00	0.30	6.255	8.19	1.7	224.4	0	0	978.4	12.8	78.1	13.08
2022-07-26 7:00	0.10	6.3	8.28	2.89	237.7	0	0	978.5	15.3	69	13.13
2022-07-26 8:00	0.10	6.3	8.325	3.15	243.8	0	0	978.6	17.5	62.6	13.374
2022-07-26 9:00	0.10	5.985	7.515	3.26	238.2	0	0	978.6	19.7	55.9	13.653
2022-07-26 10:00	0.30	5.805	7.695	3.61	241.9	0	0	978.6	21.9	49.2	13.924
2022-07-26 11:00	0.40	5.445	6.75	4.02	256.7	0	0	978.5	22.9	44.4	14.03
2022-07-26 12:00	0.40	5.49	6.66	3.39	269.3	0	0	978.3	23.3	42.4	13.743
2022-07-26 13:00	0.20	5.265	7.065	2.93	271.2	0	0	978.2	23.6	42.1	13.324
2022-07-26 14:00	0.30	5.175	7.2	3.13	255.7	0	0	978.2	23.9	40.5	13.324
2022-07-26 15:00	0.20	4.77	6.435	2.63	263.9	0	0	978.2	24.4	40.2	13.323
2022-07-26 16:00	0.30	4.275	5.355	3.03	248.2	0	0	978	24.5	40.9	13.322
2022-07-26 17:00	0.40	4.185	5.22	1.94	226	0	0	977.7	23.7	44.1	13.322
2022-07-26 18:00	0.20	4.14	5.22	1.26	233	0	0	977.4	23.2	46.4	13.323

2022-07-26 19:00	0.30	4.005	4.905	1.23	196.7	0	0	977.5	22.2	48.8	13.161
2022-07-26 20:00	0.20	5.175	6.84	0.72	180.5	0	0	977.7	19	61.6	13.077
2022-07-26 21:00	0.20	6.48	9.045	0.42	155.7	0	0	977.9	16.3	74.2	13.077
2022-07-26 22:00	0.40	5.355	6.885	0.66	186.1	0	0	977.9	15.6	74.9	13.077
2022-07-26 23:00	0.30	5.67	7.56	0.42	148.7	0	0	977.6	14.7	78.1	13.075
2022-07-27 0:00	0.30	5.76	7.875	0.57	167.3	0	0	977.5	14	80.9	13.072
2022-07-27 1:00	0.20	5.13	6.975	0.79	175.6	0	0	977.2	13.4	81.4	13.066
2022-07-27 2:00	0.20	4.815	6.345	0.94	170.2	0	0	977	13	81.5	13.066
2022-07-27 3:00	0.30	4.77	6.48	1.16	175.9	0	0	976.9	12.9	81.7	13.062
2022-07-27 4:00	0.10	4.95	6.525	1.24	172.5	0	0	976.7	13.4	81.5	13.059
2022-07-27 5:00	0.00	4.815	6.165	1.27	174.6	0	0	976.4	13.9	81.5	13.061
2022-07-27 6:00	0.20	4.86	6.255	1.7	169.1	0	0	976.4	14.9	80.2	13.097
2022-07-27 7:00	0.10	4.545	6.12	1.71	165.7	0	0	976.1	16	77.7	13.144
2022-07-27 8:00	0.20	4.185	5.805	1.77	165.1	0	0	975.9	17.1	74.7	13.183
2022-07-27 9:00	0.20	3.69	5.355	2.25	157.1	0	0	975.4	19.2	67	13.423
2022-07-27 10:00	0.20	3.42	4.77	2.85	181.2	0	0	975	20.5	58.8	13.42
2022-07-27 11:00	0.30	3.42	4.725	2.61	162.5	0	0	974.3	21.8	58.4	13.745
2022-07-27 12:00	0.10	3.735	5.13	2.65	173.7	0	0	973.6	22.7	58.5	14.027
2022-07-27 13:00	0.20	4.05	5.85	2.78	227.3	0.1	0	973.4	21.6	64.2	13.828
2022-07-27 14:00	0.40	4.095	5.04	1.42	222.7	0.3	0	973.2	19.5	80.4	13.323
2022-07-27 15:00	0.20	4.14	5.04	2.01	162.9	0	0	973	19.7	77.5	13.294
2022-07-27 16:00	0.40	4.365	5.355	2.36	172.5	0.3	0	972.7	18.8	76.6	13.167
2022-07-27 17:00	0.40	4.365	5.4	1.51	185.8	0.3	0	972.4	17.2	86.3	13.129
2022-07-27 18:00	0.20	4.41	5.4	2.33	178.8	0	0	972.3	17.3	85.6	13.139
2022-07-27 19:00	0.30	4.275	5.31	2.58	178.8	0	0	972	17.4	86.5	13.09
2022-07-27 20:00	0.30	3.915	4.95	2.13	187.3	0	0	972.2	16.9	87.5	13.073
2022-07-27 21:00	0.30	3.96	5.31	1.8	208.2	0	0	972.4	16.7	88.5	13.073
2022-07-27 22:00	0.20	3.15	4.86	1.15	242.2	0	0	972.5	16	88.6	13.072
2022-07-27 23:00	0.30	3.78	6.345	0.48	157.3	0	0	972.5	14.2	90.7	13.058
2022-07-28 0:00	0.40	3.735	6.12	0.64	198.7	0	0	972.3	13.8	91.6	13.047
2022-07-28 1:00	0.20	3.375	5.22	0.62	197.1	0	0	972.1	13.1	91.2	13.038
2022-07-28 2:00	0.20	3.735	5.355	0.75	188.9	0	0	971.9	13	91.2	13.038
2022-07-28 3:00	0.30	4.5	6.525	0.86	175.9	0	0	971.7	12.1	90.4	13.032
2022-07-28 4:00	0.10	5.535	7.515	0.85	172.5	0	0	971.7	11.9	90.5	13.034
2022-07-28 5:00	0.20	4.365	5.445	1.39	173.2	0	0	972	12.1	91	13.043
2022-07-28 6:00	0.20	6.21	7.38	1.35	175.5	0	0	971.6	12.6	91.5	13.088
2022-07-28 7:00	0.30	8.28	10.125	1.18	165.5	0	0	971.7	13.3	91.9	13.102
2022-07-28 8:00	0.30	9.675	11.88	1.15	188.5	0	0	971.5	14.1	91.3	13.179
2022-07-28 9:00	0.30	11.385	13.41	1.35	186	0	0	971.7	15.2	87.8	13.267
2022-07-28 10:00	0.20	13.095	14.94	1.43	213.4	0	0	971.4	16.6	79.5	13.504
2022-07-28 11:00	0.10	13.815	15.39	1.6	215.8	0	0	971.2	18.8	70.1	13.723
2022-07-28 12:00	0.20	12.285	13.68	1.56	204.9	0	0	970.6	20.4	60.2	14
2022-07-28 13:00	0.20	11.52	13.005	0.82	257	1.3	0	970.2	19.4	67.2	13.867
2022-07-28 14:00	0.20	9.09	10.485	2.06	304.1	0.2	0	969.9	16.6	81.8	13.322
2022-07-28 15:00	0.30	8.28	9.72	1.66	319.7	0.1	0	970.1	16.7	80.9	13.323
2022-07-28 16:00	0.30	6.795	7.965	0.9	1.1	0	0	970.4	16.9	77.9	13.322
2022-07-28 17:00	0.40	6.615	7.515	1.26	27.4	0	0	970.5	17	75.9	13.296
2022-07-28 18:00	0.40	4.635	6.885	1.57	227.1	14.7	0	971.1	14.5	85.5	13.09
2022-07-28 19:00	0.30	4.05	6.48	1.13	215	1.5	0	970.9	13.8	90.7	13.084
2022-07-28 20:00	0.30	4.41	7.38	1.43	238.9	0	0	971.2	13.7	90.3	13.076
2022-07-28 21:00	0.10	4.59	7.425	0.81	251.7	0	0	971.2	13.4	90.2	13.075
2022-07-28 22:00	0.30	5.22	7.92	1.24	250	0	0	971.4	13.8	90.9	13.072
2022-07-28 23:00	0.20	5.31	8.1	1.49	241.6	0.1	0	971.5	13.9	90.8	13.068
2022-07-29 0:00	0.10	5.49	8.91	1.52	246.1	0	0	971.6	13.9	90.5	13.066
2022-07-29 1:00	0.10	5.805	9.495	1.2	232	0	0	971.7	13.8	90.9	13.06
2022-07-29 2:00	0.20	5.04	7.335	1.31	228.7	1.5	0	971.7	13.9	90.9	13.054
2022-07-29 3:00	0.20	3.645	5.22	1.64	214.8	0.1	0	971.4	13.8	90.4	13.049
2022-07-29 4:00	0.50	3.825	6.255	1.5	220.4	0	0	971.4	13.6	89.6	13.046
2022-07-29 5:00	0.30	3.78	6.21	1.64	195.8	0.1	0	971.5	13.5	90.4	13.05
2022-07-29 6:00	0.20	2.97	4.59	2.5	219.1	0	0	971.6	13.7	89.3	13.075
2022-07-29 7:00	0.20	1.53	2.61	2.28	247.2	0	0	972	13.8	88.6	13.115
2022-07-29 8:00	0.20	0.99	1.89	2.81	258.6	0	0	972.2	14.2	87.8	13.286
2022-07-29 9:00	0.10	0.675	1.215	3.19	259.3	0.1	0	972.7	14.7	87.1	13.365
2022-07-29 10:00	0.20	0.54	0.9	3.1	270.6	0.1	0	973.2	14.8	88.6	13.348
2022-07-29 11:00	0.10	0.63	1.125	2.88	282.3	0	0	973.9	15.3	88.6	13.446
2022-07-29 12:00	0.30	0.81	1.44	3.3	285.5	0	0	974.4	16.1	84.7	13.579
2022-07-29 13:00	0.10	0.855	1.755	3.44	292.8	0	0	974.8	17.3	78.7	13.976
2022-07-29 14:00	0.10	0.855	1.89	2.66	309.3	0.1	0	975.3	17	79.7	14.029
2022-07-29 15:00	0.20	0.72	1.44	3.42	302.2	0	0	976	17.7	74.1	13.417
2022-07-29 16:00	0.10	1.08	1.935	2.93	296.3	0.1	0	976.8	16.8	78.1	13.319
2022-07-29 17:00	0.30	1.44	2.43	2.87	302.7	0	0	977.4	16.5	78.2	13.318
2022-07-29 18:00	0.30	1.395	2.385	2.77	304.7	0	0	978.3	16.1	76.2	13.21
2022-07-29 19:00	0.20	1.89	3.015	2.19	296.3	0	0	978.9	15.6	79.5	13.106
2022-07-29 20:00	0.30	2.655	4.365	1.92	272.2	0	0	979.5	14.9	82.6	13.072
2022-07-29 21:00	0.20	3.15	5.4	1.43	257.5	0	0	980	14.3	85.6	13.072
2022-07-29 22:00	0.30	3.6	5.805	1.73	255	0	0	980.3	14.4	85.8	13.072
2022-07-29 23:00	0.10	4.05	6.435	1.53	238	0	0	980.6	14.6	86.3	13.07
2022-07-30 0:00	0.10	4.68	7.245	1.99	252.5	0	0	980.7	14.8	85.7	13.064
2022-07-30 1:00	0.30	5.31	8.055	2.15	266.1	0	0	980.8	14.8	85.5	13.061
2022-07-30 2:00	0.20	5.535	8.1	1.8	258.8	0	0	981	14.8	85.8	13.051
2022-07-30 3:00	0.30	5.445	8.055	1.37	244.9	0	0	981.1	14.6	86.6	13.05
2022-07-30 4:00	0.30	5.175	7.515	1.46	230.2	0	0	981.4	14.6	86	13.044
2022-07-30 5:00	0.20	5.085	7.29	1.91	237.1	0	0	981.8	14.8	84.4	13.047
2022-07-30 6:00	0.20	4.95	7.02	2.36	235.8	0	0	982.3	15.3	82.9	13.109
2022-07-30 7:00	0.20	4.68	6.57	2.61	238.6	0	0	982.5	16.2	80	13.181
2022-07-30 8:00	0.30	4.005	5.67	2.83	239.7	0	0	982.6	17.9	72.5	13.305
2022-07-30 9:00	0.40	3.825	5.265	3.21	236.8	0	0	982.8	19.4	67.4	13.551
2022-07-30 10:00	0.20	4.05	5.445	3.53	250.3	0	0	982.8	20.8	63.1	13.874
2022-07-30 11:00	0.20	4.005	5.445	3.63	246.6	0	0	982.7	22.3	58.9	14.026
2022-07-30 12:00	0.20	3.78	5.22	3.86	240	0	0	982.4	23.7	52.6	13.713

2022-07-30 13:00	0.10	3.645	5.13	3.54	247	0	0	982.4	24.1	51.1	13.323
2022-07-30 14:00	0.30	3.78	5.13	3.45	241.2	0	0	982.3	24.7	49.3	13.323
2022-07-30 15:00	0.10	4.005	5.49	3.38	250.8	0	0	982.2	25	49.2	13.321
2022-07-30 16:00	0.20	4.23	5.895	3.3	248.3	0	0	982.3	24.4	51.5	13.321
2022-07-30 17:00	0.30	4.32	5.94	2.7	242.7	0	0	982.4	24.1	53.6	13.32
2022-07-30 18:00	0.20	4.32	5.985	2.5	222.6	0	0	982.6	23.5	55.1	13.241
2022-07-30 19:00	0.10	4.275	5.715	1.28	202.2	0	0	982.6	22.5	59.9	13.09
2022-07-30 20:00	0.10	4.365	5.76	1.42	183.9	0	0	982.6	21.3	65.5	13.073
2022-07-30 21:00	0.20	4.635	6.165	1.25	193.7	0	0	982.7	19.7	68.6	13.072
2022-07-30 22:00	0.10	4.635	6.39	1.35	196.1	0	0	982.8	18.5	70	13.075
2022-07-30 23:00	0.30	4.77	6.75	1.54	205.2	0	0	982.9	17.8	71.4	13.074
2022-07-31 0:00	0.30	4.86	6.48	1.12	192.2	0	0	982.8	16.5	76.2	13.073
2022-07-31 1:00	0.30	5.04	6.84	1.15	185.8	0	0	982.7	15.3	81.8	13.071
2022-07-31 2:00	0.20	4.995	6.705	1.41	186.4	0	0	982.7	14.6	83.8	13.067
2022-07-31 3:00	0.30	4.995	6.75	1.59	190.8	0	0	982.6	15.1	81.9	13.064
2022-07-31 4:00	0.00	4.86	6.615	1.86	192	0	0	982.3	15.7	79.6	13.057
2022-07-31 5:00	0.20	4.815	6.435	1.9	189.5	0	0	982.1	15.9	79.3	13.069
2022-07-31 6:00	0.20	4.725	6.48	2.65	193.3	0	0	981.9	16.9	75.6	13.102
2022-07-31 7:00	0.30	4.545	6.3	2.9	199.2	0	0	981.7	18.6	70.6	13.13
2022-07-31 8:00	0.20	4.23	6.12	2.82	211.8	0	0	981.5	20.8	64.9	13.355
2022-07-31 9:00	0.10	4.05	5.85	2.68	202.1	0	0	981	22.9	59.2	13.623
2022-07-31 10:00	0.20	3.915	5.985	2.77	204.8	0	0	980.4	24.6	54.7	13.908
2022-07-31 11:00	0.30	4.05	6.12	2.82	213.5	0	0	980	26.1	49.7	14.028
2022-07-31 12:00	0.30	4.005	6.03	3.04	222.7	0	0	979.5	27.1	43.1	13.748
2022-07-31 13:00	0.30	4.32	7.11	3.27	234.6	0	0	979.1	27.2	45.6	13.323
2022-07-31 14:00	0.30	4.365	6.795	3.13	222.5	0	0	978.5	27.9	43.6	13.323
2022-07-31 15:00	0.40	4.41	6.93	3.51	208	0	0	978.3	27.6	45.4	13.322
2022-07-31 16:00	0.30	4.545	6.975	3.42	217.4	0	0	978.1	26.6	48.4	13.322
2022-07-31 17:00	0.30	4.365	6.705	3.22	206	0	0	977.5	26.3	49.3	13.309
2022-07-31 18:00	0.20	4.32	6.75	2.61	200.9	0	0	977	25.8	51	13.252
2022-07-31 19:00	0.20	4.59	6.75	2.1	205.3	0	0	977.1	24.9	54.7	13.114
2022-07-31 20:00	0.40	4.95	7.515	1.65	195.3	0	0	977	23.7	59.5	13.077
2022-07-31 21:00	0.20	5.265	7.92	1.09	210.2	0	0	976.9	22.8	64	13.076
2022-07-31 22:00	0.50	5.085	6.885	0.7	176.7	0	0	976.8	21.9	68.3	13.076
2022-07-31 23:00	0.20	5.4	7.605	0.77	168.8	0	0	976.4	20.8	71.5	13.073
2022-08-01 0:00	0.40	5.13	7.02	1.33	173.1	0	0	976	20	73.6	13.071
2022-08-01 1:00	0.30	4.725	6.48	2.14	180.4	0	0	975.4	19.5	72.6	13.067
2022-08-01 2:00	0.20	4.725	6.525	1.74	171	0	0	974.4	18.6	75.6	13.067
2022-08-01 3:00	0.40	4.68	6.345	1.9	174.9	0	0	973.6	17.8	78	13.066
2022-08-01 4:00	0.30	4.5	6.3	1.69	174.2	0	0	973.1	17.7	77.1	13.062
2022-08-01 5:00	0.10	4.365	5.85	1.99	175.4	0	0	972.5	17.6	77.1	13.066
2022-08-01 6:00	0.20	4.455	5.94	2.06	171.8	0	0	971.9	17.6	78.5	13.083
2022-08-01 7:00	0.20	4.32	5.805	2.57	180.9	0	0	971.6	18.4	74.9	13.126
2022-08-01 8:00	0.30	4.14	5.49	2.69	179.3	0	0	971.1	19.2	73	13.265
2022-08-01 9:00	0.50	3.87	5.355	2.97	181.3	0	0	970.3	21.6	65.4	13.466
2022-08-01 10:00	0.40	3.825	5.535	2.4	209.3	0.3	0	970	21.8	67.1	13.255
2022-08-01 11:00	0.60	4.455	5.805	1.4	201.4	5.8	0	969.9	19.2	86.6	13.141
2022-08-01 12:00	0.30	4.005	5.04	2.12	190.4	2.7	0	969.5	18.6	90.9	13.155
2022-08-01 13:00	0.30	3.105	3.78	2.32	213	2	0	969.3	18.8	90.2	13.187
2022-08-01 14:00	0.20	2.43	3.42	1.94	226.2	0	0	968.9	18.9	90.1	13.267
2022-08-01 15:00	0.20	2.025	2.97	2.53	227.9	0	0	968.6	19.6	88	13.386
2022-08-01 16:00	0.20	1.62	2.835	3.52	305.7	0	0	969.6	17.8	87.3	13.237
2022-08-01 17:00	0.40	0.765	1.71	3.02	316	0	0	971	14.8	87.8	13.206
2022-08-01 18:00	0.10	1.17	2.07	2.35	318.8	0	0	972	14.3	88.5	13.173
2022-08-01 19:00	0.10	1.215	2.205	2.6	317.2	0	0	973.2	13.7	88	13.072
2022-08-01 20:00	0.10	1.26	2.385	2.29	322	0	0	974.5	13	87.7	13.05
2022-08-01 21:00	0.20	1.17	2.34	1.89	328	0	0	975.4	12.8	87.6	13.041
2022-08-01 22:00	0.30	1.53	3.195	1.44	323.4	0	0	976.1	12.5	87.4	13.038
2022-08-01 23:00	0.20	1.89	3.645	1.46	324.1	0	0	976.7	12	86.7	13.036
2022-08-02 0:00	0.20	2.385	4.635	1.42	310.1	0	0	977.1	11.7	85.7	13.034
2022-08-02 1:00	0.40	3.51	7.56	0.9	289.4	0	0	977.4	11	87.3	13.033
2022-08-02 2:00	0.30	3.6	8.1	0.47	216.5	0	0	977.8	10.4	87.3	13.033
2022-08-02 3:00	0.30	3.51	7.785	0.43	219.8	0	0	978.3	10.5	89.3	13.033
2022-08-02 4:00	0.40	3.51	7.02	1.6	279	0	0	979.1	10.6	89	13.027
2022-08-02 5:00	0.30	2.835	5.13	1.76	297.2	0	0	979.6	11	88.1	13.035
2022-08-02 6:00	0.20	2.16	3.645	1.88	294.6	0	0	980.4	11.1	86.4	13.068
2022-08-02 7:00	0.20	2.205	3.735	1.91	285.6	0	0	980.8	11.9	83.6	13.187
2022-08-02 8:00	0.30	2.115	3.465	1.59	290.7	0	0	981	12.6	81.6	13.308
2022-08-02 9:00	0.10	1.935	3.06	1.55	266.1	0	0	981	14.1	75.3	13.557
2022-08-02 10:00	0.20	1.62	2.61	1.64	256.8	0	0	981.2	15.8	66.3	13.743
2022-08-02 11:00	0.10	1.575	2.385	1.68	265	0	0	981.1	17.2	57.4	13.887
2022-08-02 12:00	0.20	1.485	2.25	1.49	228.6	0	0	980.8	18.5	50.2	13.961
2022-08-02 13:00	0.30	1.485	2.34	1.66	226	0	0	980.4	19.6	48.3	13.328
2022-08-02 14:00	0.40	1.44	2.16	1.65	222.6	0	0	980.3	20.5	45.8	13.325
2022-08-02 15:00	0.20	1.395	2.34	2.12	182.6	0	0	979.9	21.1	45.2	13.323
2022-08-02 16:00	0.30	1.44	2.07	1.98	172.4	0	0	979.8	21.1	45.8	13.323
2022-08-02 17:00	0.20	1.62	2.385	1.69	166.8	0	0	979.5	20.9	48.1	13.305
2022-08-02 18:00	0.30	1.71	2.565	1.65	165	0	0	979	20.7	50.4	13.283
2022-08-02 19:00	0.30	2.25	3.555	0.82	137.5	0	0	978.6	18.5	61.5	13.107
2022-08-02 20:00	0.50	2.925	4.725	0.96	148.4	0	0	978.6	16.8	67.4	13.077
2022-08-02 21:00	0.50	3.105	5.22	1.44	128.4	0	0	978.1	15.9	69.8	13.076
2022-08-02 22:00	0.70	3.285	5.265	1.49	126.8	0	0	977.6	15.1	73.2	13.077
2022-08-02 23:00	0.50	3.465	5.94	1.64	143	0	0	977.2	15	73.5	13.074
2022-08-03 0:00	0.60	3.51	5.85	2.34	152.6	0	0	976.2	15.6	69.8	13.071
2022-08-03 1:00	0.30	3.33	5.355	1.97	139.3	0	0	974.8	14.9	73.3	13.069
2022-08-03 2:00	0.30	3.195	5.175	2.49	157.8	0	0	974.3	15.3	74.2	13.063
2022-08-03 3:00	0.20	3.06	4.995	3.28	166.1	0	0	973.4	16.2	70.9	13.057
2022-08-03 4:00	0.20	3.015	5.175	3.23	166.6	0	0	972.5	16.5	68	13.054
2022-08-03 5:00	0.30	2.655	4.77	3.54	166.4	0	0	971.2	16.6	68.5	13.056
2022-08-03 6:00	0.40	2.385	4.23	4.28	170.2	0	0	971.2	16.2	72.1	13.056

2022-08-03 7:00	0.30	2.295	4.32	4.9	171.1	0	0	970.4	16.3	70.4	13.128
2022-08-03 8:00	0.20	2.16	3.96	4.8	172.1	0	0	968.9	16.8	74.5	13.192
2022-08-03 9:00	0.20	2.565	4.275	4.45	176.9	0	0	968.6	17.3	78.7	13.11
2022-08-03 10:00	0.40	2.925	4.095	4.17	177	0	0	968	18.2	81	13.185
2022-08-03 11:00	0.10	2.88	3.6	3.79	184	0	0	967.3	19.6	80.2	13.274
2022-08-03 12:00	0.40	4.86	5.895	3.64	192.7	0	0	967.3	20.9	77.4	13.437
2022-08-03 13:00	0.20	6.255	7.83	4.89	200.9	0	0	967	23.4	69.5	13.815
2022-08-03 14:00	0.40	6.795	8.415	4.6	205.7	0	0	967.5	24.1	67.5	13.951
2022-08-03 15:00	0.40	7.92	10.17	4.57	200.1	0	0	968	24.6	67.9	13.815
2022-08-03 16:00	0.00	9.09	11.565	4.71	198.4	0	0	968.3	25.9	61.9	13.323
2022-08-03 17:00	0.20	9.36	11.97	4.36	209.8	0	0	968.3	25.4	60.6	13.32
2022-08-03 18:00	0.10	9.54	12.24	3.58	216.1	0	0	969.1	25.2	59.2	13.313
2022-08-03 19:00	0.30	4.905	6.57	3.11	295.7	1.5	0	971.3	21.4	67.5	13.105
2022-08-03 20:00	0.70	4.14	5.76	1.42	303.9	0.8	0	972.3	17.3	89	13.077
2022-08-03 21:00	0.10	4.5	5.895	1.41	294.4	0	0	972.8	17	90.8	13.076
2022-08-03 22:00	0.20	5.175	6.66	0.65	208.5	0	0	973.8	16.7	91.8	13.075
2022-08-03 23:00	0.10	4.05	5.535	1.64	330.2	0.3	0	974.5	16.6	90.9	13.073
2022-08-04 0:00	0.20	2.25	4.005	1.12	343.7	0	0	975.4	15.3	90	13.068
2022-08-04 1:00	0.30	2.25	3.915	1.39	5.4	0	0	976.2	14.9	90	13.064
2022-08-04 2:00	0.40	2.205	3.78	1.32	20.2	0	0	977.2	13.8	89.3	13.058
2022-08-04 3:00	0.30	2.61	4.68	0.68	339.2	0	0	978.2	13.6	90.6	13.052
2022-08-04 4:00	0.20	2.88	5.265	0.68	351.1	0	0	978.9	13.5	90.1	13.049
2022-08-04 5:00	0.30	3.15	5.895	0.84	341.6	0	0	979.6	13.2	90.3	13.058
2022-08-04 6:00	0.30	3.465	6.03	0.82	332.1	0	0	980.8	13.8	89.5	13.106
2022-08-04 7:00	0.20	3.195	4.41	0.97	12.3	0	0	981.6	14.5	86.1	13.181
2022-08-04 8:00	0.20	3.105	4.185	0.92	347.6	0	0	982.3	14.4	86.4	13.152
2022-08-04 9:00	0.50	2.97	4.005	1.01	348.7	0	0	982.9	15.2	80.9	13.403
2022-08-04 10:00	0.10	2.16	2.925	1.14	329	0	0	983.7	16.3	70.4	13.502
2022-08-04 11:00	0.20	1.935	2.835	1.66	333.4	0	0	984.1	17.5	61.6	13.897
2022-08-04 12:00	0.30	1.53	2.385	1.56	322.5	0	0	984.3	18.2	55.5	14.028
2022-08-04 13:00	0.10	1.395	2.16	1.58	307.4	0	0	984.5	18.6	52	13.524
2022-08-04 14:00	0.20	1.26	1.935	1.53	309.4	0	0	984.8	19	49.6	13.324
2022-08-04 15:00	0.40	1.26	2.025	1.39	321.9	0	0	985	19.4	48.3	13.324
2022-08-04 16:00	0.40	1.26	2.025	1.25	237.3	0	0	985.1	20.2	44.2	13.323
2022-08-04 17:00	0.30	1.395	2.205	1.11	273.1	0	0	985	20.7	42.8	13.322
2022-08-04 18:00	0.40	1.485	2.25	0.71	220.6	0	0	985.1	19.8	50.9	13.269
2022-08-04 19:00	0.00	1.8	3.015	0.26	64	0	0	985.4	17.5	70.5	13.113
2022-08-04 20:00	0.10	2.61	4.545	0.29	72.4	0	0	985.6	13.8	82.8	13.077
2022-08-04 21:00	0.40	4.5	8.64	0.27	143.1	0	0	985.9	11.8	87.2	13.072
2022-08-04 22:00	0.30	5.4	10.62	0.25	144.7	0	0	986.3	10.6	87.1	13.058
2022-08-04 23:00	0.40	6.3	12.375	0.25	250.2	0	0	986.9	10	86.3	13.054
2022-08-05 0:00	0.90	4.725	7.785	0.53	191.3	0	0	986.9	10.4	84.5	13.053
2022-08-05 1:00	0.40	4.32	6.75	0.57	191.8	0	0	987.2	10.6	83.7	13.045
2022-08-05 2:00	0.50	3.96	6.12	0.77	189.6	0	0	987.6	10.5	84.6	13.038
2022-08-05 3:00	0.20	4.05	6.165	0.71	202.5	0	0	988	10.1	85.2	13.033
2022-08-05 4:00	0.30	3.915	6.21	0.76	186.5	0	0	988.5	9.4	86.6	13.03
2022-08-05 5:00	0.30	3.645	5.535	0.96	177	0	0	988.8	9.9	87	13.037
2022-08-05 6:00	0.20	3.51	4.95	1.18	184.3	0	0	989.1	12.3	84.3	13.073
2022-08-05 7:00	0.20	3.465	4.905	1.55	196.2	0	0	989.5	15.8	75.2	13.121
2022-08-05 8:00	0.20	2.97	4.005	2.07	180.1	0	0	989.3	18.8	62.8	13.368
2022-08-05 9:00	0.30	2.565	3.465	2.16	185.5	0	0	989.4	20.9	51.8	13.66
2022-08-05 10:00	0.10	2.475	3.285	2.47	179.4	0	0	989.3	22.4	45.9	13.918
2022-08-05 11:00	0.10	2.97	4.995	2.8	164.9	0	0	989.2	23.1	44.9	14.027
2022-08-05 12:00	0.30	2.925	4.5	2.88	152.6	0	0	988.6	23.7	43.9	13.735
2022-08-05 13:00	0.30	2.97	4.455	3.25	163	0	0	988	24.6	42	13.324
2022-08-05 14:00	0.10	3.06	4.86	3.78	165.7	0	0	987.1	25	41.2	13.323
2022-08-05 15:00	0.30	3.06	4.77	3.69	169.9	0	0	986.6	24.9	41.4	13.322
2022-08-05 16:00	0.40	2.835	4.275	3.22	169.8	0	0	985.7	25.6	41.1	13.32
2022-08-05 17:00	0.10	3.24	4.77	3.08	159.8	0	0	984.9	25	44.8	13.311
2022-08-05 18:00	0.30	3.42	5.13	2.65	162	0	0	984.6	24.3	47.4	13.305
2022-08-05 19:00	0.30	3.375	4.815	1.76	167.6	0	0	984.6	22.2	54.7	13.103
2022-08-05 20:00	0.20	3.51	4.77	1.72	169.6	0	0	984.8	20.8	59.3	13.076
2022-08-05 21:00	0.10	3.825	5.265	1.76	172.6	0	0	984.8	19.9	63.6	13.076
2022-08-05 22:00	0.20	4.14	5.49	1.71	173.3	0	0	984.5	19.3	67.9	13.076
2022-08-05 23:00	0.20	4.365	6.075	1.89	171.4	0	0	984	18.6	72.3	13.074
2022-08-06 0:00	0.30	4.59	6.12	1.82	173.7	0	0	983.6	18	74.8	13.072
2022-08-06 1:00	0.30	4.59	6.12	1.87	172.2	0	0	982.9	17.4	76.8	13.07
2022-08-06 2:00	0.10	4.32	5.85	2.12	178	0	0	982.4	17.8	73.9	13.062
2022-08-06 3:00	0.20	4.275	5.67	2.32	175.6	0	0	981.8	17.7	72.9	13.062
2022-08-06 4:00	0.10	4.32	5.76	2.33	181.5	0	0	981.4	17.8	70.6	13.056
2022-08-06 5:00	0.20	4.365	5.58	1.82	186.9	0	0	981.7	18	70.6	13.059
2022-08-06 6:00	0.20	5.04	6.48	2.65	183.1	0	0	981.3	19.4	69.3	13.102
2022-08-06 7:00	0.30	5.94	7.74	3.3	186.3	0	0	980.7	20.5	68.5	13.162
2022-08-06 8:00	0.30	7.335	9.36	3.45	189	0	0	979.6	21.1	70.6	13.319
2022-08-06 9:00	0.30	8.37	10.53	3.92	196.1	0	0	979.2	22.9	68.3	13.492
2022-08-06 10:00	0.30	7.515	9.36	3.34	189	0	0	978.3	23.9	66	13.441
2022-08-06 11:00	0.20	7.29	9.54	3.52	203.4	0	0	978.8	24.2	65.2	13.38
2022-08-06 12:00	0.20	7.74	9.9	3.95	208	0	0	979.2	24.8	65.8	13.877
2022-08-06 13:00	0.20	8.82	10.935	4.03	196.1	0	0	978.6	25	67.1	14.026
2022-08-06 14:00	0.30	9.63	11.34	3.72	192	0	0	978.2	25.3	67.7	13.673
2022-08-06 15:00	0.20	10.575	12.24	3.12	210.8	0.2	0	978.4	24.4	74.8	13.232
2022-08-06 16:00	0.20	11.16	12.555	1.86	203.1	0	0	978.2	23.1	84.8	13.437
2022-08-06 17:00	0.10	12.285	13.995	2.48	234	0	0	978.4	23.8	79.8	13.244
2022-08-06 18:00	0.40	11.61	13.275	3.33	223.6	0	0	978.8	23	80.3	13.086
2022-08-06 19:00	0.40	9.18	10.755	3.16	243	0	0	979.1	22.8	78.7	13.081
2022-08-06 20:00	0.10	7.965	9.45	2.3	237.4	0	0	979.7	22	79.2	13.072
2022-08-06 21:00	0.20	7.56	9.72	2.29	237.9	0	0	980.4	21.6	76.4	13.07
2022-08-06 22:00	0.20	7.875	10.26	1.98	248.8	0	0	980.8	21	76.7	13.07
2022-08-06 23:00	0.20	3.375	5.67	2.7	323.2	0	0	982.1	19.3	62.7	13.068
2022-08-07 0:00	0.30	1.125	2.745	2.23	335.3	0	0	983.5	16.8	57.4	13.064

2022-08-07 1:00	0.30	0.945	2.475	1.73	337.2	0	0	984.2	15.4	58.3	13.057
2022-08-07 2:00	0.50	0.765	1.935	1.84	339.7	0	0	984.8	14.5	56.6	13.054
2022-08-07 3:00	0.20	0.675	1.62	1.76	332.9	0	0	985.3	13.8	58.3	13.053
2022-08-07 4:00	0.20	0.63	1.53	1.49	336.8	0	0	986.1	13.1	61.2	13.042
2022-08-07 5:00	0.10	0.63	1.44	1.03	337.7	0	0	986.7	11.9	66	13.05
2022-08-07 6:00	0.20	0.675	1.35	0.78	336.9	0	0	987.1	11.6	69.3	13.092
2022-08-07 7:00	0.20	0.585	1.305	1.36	336	0	0	987.7	11.7	67.3	13.175
2022-08-07 8:00	0.20	0.54	1.125	1.53	357	0	0	987.8	12.3	65.5	13.344
2022-08-07 9:00	0.40	0.54	1.08	1.41	349.5	0	0	988	12.9	64.9	13.39
2022-08-07 10:00	0.10	0.45	1.035	1.69	8.6	0	0	988.3	13.2	63.4	13.422
2022-08-07 11:00	0.30	0.405	0.81	1.56	1.1	0	0	988.2	13.3	63.9	13.451
2022-08-07 12:00	0.20	0.405	0.81	1.79	14.6	0	0	988	14.3	61	13.805
2022-08-07 13:00	0.30	0.36	0.9	1.83	34.6	0	0	987.9	15	59	14.03
2022-08-07 14:00	0.30	0.405	0.945	1.89	28.4	0	0	987.5	16	57.4	13.731
2022-08-07 15:00	0.10	0.36	0.99	1.84	35.5	0	0	987.3	17	54	13.324
2022-08-07 16:00	0.30	0.27	0.765	2.01	42.8	0	0	986.9	17.7	51.3	13.324
2022-08-07 17:00	0.20	0.27	0.765	1.67	21.9	0	0	986.6	17.4	54.3	13.324
2022-08-07 18:00	0.20	0.27	0.72	1.72	13.7	0	0	986.3	17	57.6	13.308
2022-08-07 19:00	0.30	0.315	0.9	1.12	17.5	0	0	986.4	15.7	61.9	13.135
2022-08-07 20:00	0.30	0.495	0.99	0.76	28.8	0	0	986.5	13.8	70.6	13.075
2022-08-07 21:00	0.90	0.585	1.35	0.36	63.4	0	0	986.3	12.7	77.6	13.074
2022-08-07 22:00	1.20	0.9	1.665	0.27	47.5	0	0	986.3	11.5	82.8	13.071
2022-08-07 23:00	0.60	1.305	2.475	0.32	107.4	0	0	986.1	9.9	84.8	13.064
2022-08-08 0:00	1.40	1.53	3.06	0.32	73.7	0	0	985.8	9.9	85.8	13.045
2022-08-08 1:00	0.90	1.665	2.835	0.31	52.9	0	0	985.5	9.3	85.2	13.045
2022-08-08 2:00	0.30	1.755	3.15	0.52	58.4	0	0	985	8.9	85.1	13.038
2022-08-08 3:00	0.10	1.98	3.15	0.78	36.6	0	0	985	9.3	83.6	13.032
2022-08-08 4:00	0.60	2.295	3.195	1.08	46.8	0	0	984.3	9.6	81.7	13.03
2022-08-08 5:00	0.30	2.16	3.015	0.66	50	0	0	984.2	9.8	80	13.032
2022-08-08 6:00	0.40	2.025	2.97	0.96	35.9	0	0	984.3	9.8	79.4	13.036
2022-08-08 7:00	0.30	1.89	2.835	0.94	52.9	0	0	984	10.4	78.4	13.079
2022-08-08 8:00	0.20	1.755	2.43	0.64	352	0	0	984.3	11.1	78.2	13.087
2022-08-08 9:00	0.20	1.665	2.385	1.18	52.3	0.5	0	983.7	11	79.6	13.067
2022-08-08 10:00	0.50	1.755	2.565	1.12	12.4	0.3	0	983	11.2	83.3	13.153
2022-08-08 11:00	0.30	1.845	2.61	1.36	29.6	0	0	982.9	13.1	78.4	13.414
2022-08-08 12:00	0.10	1.935	2.61	1.87	36.9	0	0	982.4	14.8	68.2	13.449
2022-08-08 13:00	0.20	2.25	2.97	1.87	44.8	0	0	981.9	16.4	59.2	13.589
2022-08-08 14:00	0.30	2.565	3.375	2.3	56	0	0	981.4	17.4	52.4	13.76
2022-08-08 15:00	0.30	2.205	2.79	2.16	20.8	0	0	981.1	18.2	49.5	14.028
2022-08-08 16:00	0.20	2.07	2.7	2.08	22	0	0	981	18.5	47.6	13.852
2022-08-08 17:00	0.20	1.98	2.655	1.67	15.5	0	0	981	18.5	48.9	13.324
2022-08-08 18:00	0.20	2.025	3.015	1.5	10.5	0	0	981.1	17.8	52.9	13.307
2022-08-08 19:00	0.40	1.755	2.34	0.84	358.2	0	0	981.7	15.8	61.7	13.108
2022-08-08 20:00	0.10	1.71	2.295	0.37	351.5	0	0	982.1	12.8	75.1	13.073
2022-08-08 21:00	0.20	1.845	2.565	0.68	0.8	0	0	982.4	11.7	75.7	13.068
2022-08-08 22:00	0.40	2.025	3.15	0.31	360	0	0	982.9	9.5	82.1	13.062
2022-08-08 23:00	0.20	2.79	5.13	0.26	211.8	0	0	983.3	7.4	83.6	13.05
2022-08-09 0:00	0.20			0.24	297.2	0	0	983.4	6.4	85.1	13.046
2022-08-09 1:00	0.20			0.19	210.4	0	0	983.4	5.5	83.8	13.044
2022-08-09 2:00	0.10			0.27	123.4	0	0	983.7	4.3	85.3	13.038
2022-08-09 3:00	0.20			0.27	157.1	0	0	983.8	3.5	85.5	13.033
2022-08-09 4:00	0.20			0.26	195.2	0	0	984.2	3	84.8	13.03
2022-08-09 5:00	0.20			0.25	169.6	0	0	984.6	3	85.9	13.039
2022-08-09 6:00	0.20			0.56	200.8	0	0	985.2	6.4	86.6	13.068
2022-08-09 7:00	0.20			1.04	171.9	0	0	985.5	11	81.1	13.118
2022-08-09 8:00	0.10			1.51	206.2	0	0	985.6	15.3	65	13.39
2022-08-09 9:00	0.20			1.84	203.8	0	0	985.3	17.9	54.6	13.688
2022-08-09 10:00	0.30			2.29	196.8	0	0	984.7	19.3	48	13.952
2022-08-09 11:00	1.10			2.67	190.4	0	0	984.1	20.8	42.9	14.031
2022-08-09 12:00	0.10			3.13	202.9	0	0	983.7	21.9	40.5	13.682
2022-08-09 13:00	0.20			3.39	190.9	0	0	983.1	22.8	39	13.326
2022-08-09 14:00	0.40			3.17	194.4	0	0	982.4	23.8	38.4	13.325
2022-08-09 15:00	0.20			3.37	189.4	0	0	981.7	24.4	39.4	13.323
2022-08-09 16:00	0.30			3.59	184.6	0	0	981	24.8	41.2	13.322
2022-08-09 17:00	0.20			3.35	182.8	0	0	980.3	24.8	43.5	13.321
2022-08-09 18:00	0.10			3.1	182.1	0	0	980	24	47.8	13.3
2022-08-09 19:00	0.40			2.6	181	0	0	979.7	22.2	55.3	13.105
2022-08-09 20:00	0.30			1.96	183.3	0	0	979.8	20.3	63	13.075
2022-08-09 21:00	0.20			2.15	194.3	0	0	979.9	19.7	61.7	13.075
2022-08-09 22:00	0.30			2.11	200.4	0	0	980.1	19.1	59.6	13.075
2022-08-09 23:00	0.20			1.76	199.2	0	0	980.1	18	62.6	13.072
2022-08-10 0:00	0.20			2.28	209.8	0	0	980.1	17.6	65	13.069
2022-08-10 1:00	0.20			1.6	210.9	0	0	980.4	16.9	68.8	13.062
2022-08-10 2:00	0.10			1.56	208.4	0	0	980.6	16.2	73.3	13.059
2022-08-10 3:00	0.20			1.36	203	0	0	980.9	15.9	76.3	13.058
2022-08-10 4:00	0.10			0.88	192.5	0	0	981	14.9	80.6	13.051
2022-08-10 5:00	0.30			0.84	194.8	0	0	981	14.2	83.6	13.056
2022-08-10 6:00	0.30			1.52	217.7	0	0	981.3	15.7	79.5	13.085
2022-08-10 7:00	0.10			2.24	238.8	0	0	981.5	17.8	71.8	13.128
2022-08-10 8:00	0.30			1.83	257.2	0	0	981.3	19.3	65.8	13.379
2022-08-10 9:00	0.20			1.73	276	0	0	980.9	21	57.6	13.661
2022-08-10 10:00	0.30			2.45	254.3	0	0	980.6	22.4	51.6	13.924
2022-08-10 11:00	0.10			3.7	260.6	0	0	980.4	23.3	47.8	14.028
2022-08-10 12:00	0.40			4.16	272.9	0	0	980.2	23.8	45.5	13.679
2022-08-10 13:00	0.50			4.74	269.2	0	0	980	23.8	43.6	13.324
2022-08-10 14:00	0.20			5.08	277.7	0	0	979.9	23.3	43.4	13.324
2022-08-10 15:00	0.40			5.14	292.3	0	0	980	23.5	38.2	13.324
2022-08-10 16:00	0.30			4.45	287.5	0	0	980.2	23.1	36.8	13.323
2022-08-10 17:00	0.40			3.55	305.2	0	0	980.5	22.2	37.4	13.321
2022-08-10 18:00	0.30			2.83	314.7	0	0	980.9	20.6	44	13.288

2022-08-10 19:00	0.30	2.57	312.1	0	0	981.6	18.4	53.4	13.098
2022-08-10 20:00	0.20	2.45	310	0	0	982.5	16.4	62.9	13.075
2022-08-10 21:00	0.20	2.37	317.1	0	0	983.3	15.4	66.8	13.076
2022-08-10 22:00	0.10	2.29	321.7	0	0	984	14.2	71.2	13.075
2022-08-10 23:00	0.20	2.2	315.3	0	0	984.5	13.7	71.7	13.071
2022-08-11 0:00	0.20	1.65	318.4	0	0	984.8	12.9	74.8	13.065
2022-08-11 1:00	0.10	0.95	245.2	0	0	985	11	79.4	13.05
2022-08-11 2:00	0.30	1.02	232.1	0	0	984.7	9.4	83.2	13.038
2022-08-11 3:00	0.10	1.81	263.7	0	0	984.6	9.4	83.4	13.03
2022-08-11 4:00	0.20	1.98	263.9	0	0	984.6	9.1	83.1	13.028
2022-08-11 5:00	0.20	1.92	264.7	0	0	984.7	8.7	82.8	13.026
2022-08-11 6:00	0.20	2.71	279.3	0	0	985	9.7	78.5	13.056
2022-08-11 7:00	0.20	3.03	296.6	0	0	985.4	11.6	68.9	13.116
2022-08-11 8:00	0.10	3.01	313.1	0	0	985.5	13.5	57.3	13.39
2022-08-11 9:00	0.10	3.23	295.9	0	0	985.9	14.6	54.1	13.708
2022-08-11 10:00	0.00	3.54	305.8	0	0	986	16.5	42.4	13.976
2022-08-11 11:00	0.20	3.27	307.1	0	0	986.3	17.9	36.3	14.031
2022-08-11 12:00	0.30	3.02	313.7	0	0	986.3	19.1	33.1	13.565
2022-08-11 13:00	0.30	3.43	309.7	0	0	986.2	19.9	31.9	13.326
2022-08-11 14:00	0.20	3.51	312.7	0	0	986.4	20.5	28.9	13.325
2022-08-11 15:00	0.30	3.18	313.2	0	0	986.3	20.9	28.4	13.324
2022-08-11 16:00	0.40	2.87	319.5	0	0	986.4	20.9	26.8	13.324
2022-08-11 17:00	0.30	2.7	322.7	0	0	986.5	20.4	28.1	13.322
2022-08-11 18:00	0.40	2.16	317.5	0	0	986.8	19.4	31.7	13.305
2022-08-11 19:00	0.20	1.55	303.9	0	0	987.2	17.5	38	13.107
2022-08-11 20:00	0.20	0.99	294.1	0	0	987.8	14.8	45.5	13.067
2022-08-11 21:00	0.40	0.6	260.2	0	0	988.1	11.9	56.7	13.056
2022-08-11 22:00	0.40	0.39	242.9	0	0	988.4	9.2	67.4	13.053
2022-08-11 23:00	0.20	0.27	227.2	0	0	988.7	7.4	74	13.047
2022-08-12 0:00	0.20	0.42	202.1	0	0	988.7	5.6	78.4	13.037
2022-08-12 1:00	0.10	0.41	202.7	0	0	988.7	4.9	80.4	13.037
2022-08-12 2:00	0.10	0.3	155.6	0	0	988.6	4.2	83.3	13.036
2022-08-12 3:00	0.40	0.46	249.5	0	0	988.6	3.8	80.6	13.024
2022-08-12 4:00	0.40	0.31	252.5	0	0	988.7	4	80.6	13.027
2022-08-12 5:00	0.30	0.28	258.7	0	0	989.2	4.8	81.2	13.032
2022-08-12 6:00	0.20	0.57	237.5	0	0	989.6	8.5	75.8	13.061
2022-08-12 7:00	0.20	1.34	278.8	0	0	989.9	13.5	63.4	13.118
2022-08-12 8:00	0.00	1.92	279.1	0	0	989.8	16.7	52.9	13.396
2022-08-12 9:00	0.10	2.49	283.5	0	0	989.5	19.4	44.7	13.746
2022-08-12 10:00	0.40	2.16	298.7	0	0	989.3	21	38.2	13.979
2022-08-12 11:00	0.50	2.22	281.5	0	0	989	21.7	36.5	14.029
2022-08-12 12:00	0.20	2.21	301.8	0	0	988.6	22.7	32.6	13.539
2022-08-12 13:00	0.30	2.27	284.1	0	0	988	22.8	33	13.324
2022-08-12 14:00	0.20	2.11	291.3	0	0	987.5	22.9	33	13.323
2022-08-12 15:00	0.50	1.82	300.2	0	0	987	23.3	32.6	13.323
2022-08-12 16:00	0.40	1.95	288.3	0	0	986.6	24	31.3	13.322
2022-08-12 17:00	0.20	1.47	305.4	0	0	986.4	23.6	32.9	13.321
2022-08-12 18:00	0.30	0.95	312.9	0	0	986.2	22.8	36.7	13.289
2022-08-12 19:00	0.20	0.23	61.3	0	0	986.2	18.9	60.2	13.095
2022-08-12 20:00	0.00	0.31	144.4	0	0	986.4	14.2	72.2	13.076
2022-08-12 21:00	0.10	0.38	112.9	0	0	986.5	12.3	78.4	13.074
2022-08-12 22:00	0.20	0.72	212.9	0	0	986.6	13.4	71.1	13.072
2022-08-12 23:00	0.20	0.7	196.5	0	0	986.6	14.9	67.7	13.069
2022-08-13 0:00	0.20	0.93	225.6	0	0	986.6	15.1	66.2	13.062
2022-08-13 1:00	0.20	0.77	193.5	0	0	986.6	14.2	68.4	13.056
2022-08-13 2:00	0.10	0.74	201.1	0	0	986.7	12.8	70.9	13.05
2022-08-13 3:00	0.20	0.95	207.6	0	0	986.9	11.6	72.8	13.034
2022-08-13 4:00	0.20	0.98	198	0	0	987	10.2	75.9	13.028
2022-08-13 5:00	0.20	0.98	200	0	0	987.3	9.4	78.2	13.032
2022-08-13 6:00	0.10	0.95	204.8	0	0	987.6	10.4	76.6	13.068
2022-08-13 7:00	0.20	1.56	217.1	0	0	987.7	14	65.5	13.139
2022-08-13 8:00	0.30	1.06	207.4	0	0	987.7	17.8	52.2	13.438
2022-08-13 9:00	0.10	1.66	209.8	0	0	987.5	19.8	47.2	13.724
2022-08-13 10:00	0.30	2.24	240.9	0	0	987.3	21	45.9	13.981
2022-08-13 11:00	0.30	2.09	255.7	0	0	987.1	21.8	42.9	14.03
2022-08-13 12:00	0.20	1.66	266.2	0	0	986.7	22.2	41.3	13.607
2022-08-13 13:00	0.20	1.33	233.6	0	0	986.3	23.6	37	13.323
2022-08-13 14:00	0.40	1.92	252.3	0	0	985.9	23.6	38.6	13.323
2022-08-13 15:00	0.40	1.47	262.7	0	0	985.6	23.5	40.2	13.324
2022-08-13 16:00	0.40	1.37	221.9	0	0	985.1	24.4	35.4	13.321
2022-08-13 17:00	0.40	1.11	144.7	0	0	984.7	24.3	36.9	13.321
2022-08-13 18:00	0.30	0.56	77.5	0	0	984.6	23.3	42.3	13.286
2022-08-13 19:00	0.00	0.23	4.9	0	0	984.6	20.4	62.5	13.101
2022-08-13 20:00	0.20	0.33	89.2	0	0	984.8	15.9	75	13.075
2022-08-13 21:00	0.30	0.36	28.9	0	0	985	13.9	80	13.074
2022-08-13 22:00	0.90	0.35	77.9	0	0	984.8	12.9	82.5	13.07
2022-08-13 23:00	0.90	0.28	91	0	0	984.7	12.1	84.5	13.066
2022-08-14 0:00	0.60	0.44	69.6	0	0	984.6	11.1	85.1	13.063
2022-08-14 1:00	0.50	0.56	49.8	0	0	984.7	11.8	83.7	13.059
2022-08-14 2:00	0.60	0.41	66.8	0	0	984.5	10.8	84.8	13.051
2022-08-14 3:00	1.00	0.4	188.8	0	0	984.4	9.8	84.9	13.048
2022-08-14 4:00	0.40	0.35	200	0	0	984.5	10	85.1	13.045
2022-08-14 5:00	0.40	0.56	228.6	0	0	984.7	10.4	83.8	13.048
2022-08-14 6:00	0.20	0.62	287.1	0	0	984.9	11.7	83.9	13.075
2022-08-14 7:00	0.30	0.58	297.3	0	0	985.1	13	83.3	13.077
2022-08-14 8:00	0.40	0.47	331.8	0	0	985.4	14.2	80.3	13.131
2022-08-14 9:00	0.10	0.61	256.2	0	0	985.5	15.7	75.4	13.195
2022-08-14 10:00	0.30	1.16	265.3	0	0	985.9	16.1	75	13.216
2022-08-14 11:00	0.30	0.44	345	0	0	986.1	16.8	73.7	13.227
2022-08-14 12:00	0.10	0.51	351.1	0	0	986.2	17.6	72.6	13.326

2022-08-14 13:00	0.10	0.86	310.4	0	0	985.8	19.1	67	13.572
2022-08-14 14:00	0.30	0.81	346.2	0	0	985.6	20.2	63.5	13.528
2022-08-14 15:00	0.30	0.93	68.5	0	0	985.4	20.7	62.5	13.447
2022-08-14 16:00	0.20	0.58	90.5	0	0	985.3	20.8	63.5	13.346
2022-08-14 17:00	0.20	0.43	23.9	0	0	985.4	20.9	65.2	13.245
2022-08-14 18:00	0.20	1.31	334.7	0	0	985.5	19.8	69.5	13.099
2022-08-14 19:00	0.40	0.81	6.7	0	0	985.5	18.3	72.3	13.066
2022-08-14 20:00	0.30	0.59	3.8	0.3	0	986	17.2	77.4	13.062
2022-08-14 21:00	0.20	0.37	342	0	0	986.4	16	88	13.059
2022-08-14 22:00	0.20	0.28	37	0	0	986.6	15.7	89.4	13.055
2022-08-14 23:00	0.10	0.42	350.6	0	0	986.6	15.5	90.6	13.049
2022-08-15 0:00	0.20	0.57	354.5	0	0	986.7	15.5	89.9	13.047
2022-08-15 1:00	0.20	0.49	358.8	0.1	0	986.7	15.2	90	13.046
2022-08-15 2:00	0.50	0.63	346	0	0	986.7	14.9	90.7	13.044
2022-08-15 3:00	0.20	0.74	341.3	0	0	986.9	14.4	91.1	13.043
2022-08-15 4:00	0.10	0.88	342.4	0	0	987.1	14.1	91	13.042
2022-08-15 5:00	0.30	0.83	335.7	0	0	987.5	13.7	90.9	13.043
2022-08-15 6:00	0.30	0.86	347.9	0	0	987.7	13.8	91	13.088
2022-08-15 7:00	0.10	0.81	351.2	0	0	988.1	15.1	87	13.176
2022-08-15 8:00	0.20	0.99	359.6	0	0	988.4	16.9	78.5	13.3
2022-08-15 9:00	0.00	1.35	347.2	0	0	988.5	17.9	68.3	13.593
2022-08-15 10:00	0.20	1.47	343.5	0	0	988.6	19.4	57.1	13.795
2022-08-15 11:00	0.10	1.49	339.8	0	0	988.6	20.3	50.9	14.016
2022-08-15 12:00	0.30	1.59	356.1	0	0	988.4	21.1	48.8	13.55
2022-08-15 13:00	0.30	1.59	0.4	0	0	988.3	21.9	43.9	13.324
2022-08-15 14:00	0.30	1.61	10.4	0	0	988.1	22.4	42.9	13.324
2022-08-15 15:00	0.10	1.69	17	0	0	988	22.5	43.7	13.321
2022-08-15 16:00	0.20	1.7	11.3	0	0	987.9	23.1	41.4	13.321
2022-08-15 17:00	0.30	1.54	5.3	0	0	987.9	23.1	40.4	13.322
2022-08-15 18:00	0.30	1.05	2.3	0	0	988.1	22.3	42.4	13.295
2022-08-15 19:00	0.30	0.25	338.6	0	0	988.3	19.8	59.6	13.096
2022-08-15 20:00	0.30	0.37	337.2	0	0	988.9	15.3	74.9	13.071
2022-08-15 21:00	0.40	0.82	3	0	0	989.3	15.1	69.7	13.072
2022-08-15 22:00	0.20	1.33	23	0	0	989.7	15.3	64.4	13.071
2022-08-15 23:00	0.30	0.87	22	0	0	990	14	70	13.066
2022-08-16 0:00	0.30	0.56	358.4	0	0	990	12.6	75.9	13.059
2022-08-16 1:00	0.10	0.44	4.4	0	0	990	11.3	80.3	13.052
2022-08-16 2:00	0.20	0.3	304.8	0	0	990	9.4	81.7	13.044
2022-08-16 3:00	0.30	0.29	231.1	0	0	990.1	7.9	82.5	13.037
2022-08-16 4:00	0.20	0.31	246.7	0	0	990.2	7	84.1	13.035
2022-08-16 5:00	0.30	0.18	243.8	0	0	990.5	6.7	83.9	13.032
2022-08-16 6:00	0.70	0.29	24.5	0	0	990.9	9.8	79.4	13.068
2022-08-16 7:00	0.20	1	29	0	0	991.2	13.9	70.4	13.126
2022-08-16 8:00	0.10	0.81	336.2	0	0	991.1	17.3	61.7	13.413
2022-08-16 9:00	0.10	0.86	23.9	0	0	991.2	20.5	54.6	13.742
2022-08-16 10:00	0.20	1.28	35.5	0	0	991.2	22.7	47.5	13.975
2022-08-16 11:00	0.30	1.53	34.2	0	0	990.9	24	40.3	14.026
2022-08-16 12:00	0.50	1.45	58.3	0	0	990.5	24.4	39.3	13.59
2022-08-16 13:00	0.40	1.56	45.2	0	0	990.2	25	38.4	13.323
2022-08-16 14:00	0.30	1.2	34.9	0	0	989.7	25.6	36.9	13.322
2022-08-16 15:00	0.30	1.31	39.4	0	0	989.4	25.5	37.3	13.319
2022-08-16 16:00	0.20	1.34	45.4	0	0	989.1	25.5	40.1	13.321
2022-08-16 17:00	0.50	1.13	42.5	0	0	988.9	25.8	37.8	13.321
2022-08-16 18:00	0.50	0.96	24.2	0	0	988.7	24.8	41.7	13.288
2022-08-16 19:00	0.20	0.35	23.4	0	0	988.8	21.5	58.3	13.094
2022-08-16 20:00	0.50	0.26	68.9	0	0	989.2	17.9	69.1	13.074
2022-08-16 21:00	0.10	0.26	23.6	0	0	989.2	15.4	78.5	13.073
2022-08-16 22:00	0.40	0.23	50.1	0	0	989	14	82.6	13.072
2022-08-16 23:00	0.30	0.34	145.1	0	0	988.9	12.4	84.5	13.062
2022-08-17 0:00	0.20	0.24	273.7	0	0	988.8	11.8	84.5	13.055
2022-08-17 1:00	0.30	0.31	111.2	0	0	988.8	11.1	85.7	13.055
2022-08-17 2:00	0.20	0.3	214.6	0	0	988.9	10.3	85.1	13.05
2022-08-17 3:00	0.20	0.36	144.6	0	0	989	9.7	85.9	13.045
2022-08-17 4:00	0.30	0.37	18.2	0	0	989.1	9.2	86.6	13.042
2022-08-17 5:00	0.40	0.33	205.9	0	0	989.3	9	85.3	13.044
2022-08-17 6:00	0.20	0.38	214.3	0	0	989.6	11.3	83.5	13.078
2022-08-17 7:00	0.20	0.37	127	0	0	989.7	16.6	73.1	13.129
2022-08-17 8:00	0.10	0.84	159.8	0	0	989.5	20.5	63.3	13.392
2022-08-17 9:00	0.10	1.04	168.1	0	0	989.3	23.6	51.6	13.696
2022-08-17 10:00	0.30	1.1	126.3	0	0	988.9	25.3	43.6	13.957
2022-08-17 11:00	0.70	1.35	181.3	0	0	988.3	25.7	41.1	14.026
2022-08-17 12:00	0.50	1.67	175	0	0	987.7	27.1	36.2	13.658
2022-08-17 13:00	0.40	1.88	132.4	0	0	987	27.3	35.2	13.323
2022-08-17 14:00	0.50	1.69	173.2	0	0	986.3	28	33.3	13.322
2022-08-17 15:00	0.40	1.47	137.7	0	0	985.7	27.9	33.3	13.322
2022-08-17 16:00	0.60	1.63	127.2	0	0	985.3	27.4	34.3	13.319
2022-08-17 17:00	0.70	0.59	130	0	0	984.8	25.8	44.6	13.253
2022-08-17 18:00	0.30	0.63	204.8	0	0	984.7	23	57.8	13.106
2022-08-17 19:00	0.20	0.57	114.7	0	0	984.6	21.2	61.8	13.074
2022-08-17 20:00	0.20	0.26	355.2	0	0	984.5	18.5	74.7	13.073
2022-08-17 21:00	0.30	0.37	67.5	0	0	984.3	16	81.1	13.072
2022-08-17 22:00	0.20	0.39	73.9	0	0	984	14.7	85.1	13.068
2022-08-17 23:00	0.40	0.34	101.9	0	0	983.8	13.6	86.7	13.059
2022-08-18 0:00	0.20	0.34	169.8	0	0	983.4	12.6	87.2	13.052
2022-08-18 1:00	0.10	0.34	101.3	0	0	983	12	87.8	13.047
2022-08-18 2:00	0.30	0.38	73.5	0	0	982.5	11.3	88.2	13.043
2022-08-18 3:00	0.50	0.39	104.2	0	0	982.2	10.8	87	13.038
2022-08-18 4:00	0.30	0.31	162.7	0	0	982.1	9.9	86.1	13.034
2022-08-18 5:00	0.50	0.36	219.4	0	0	982.2	9.8	86.9	13.038
2022-08-18 6:00	0.40	0.52	215.1	0	0	982.2	12.1	86.4	13.076

2022-08-18 7:00	0.30	0.74	213.6	0	0	982.1	16.6	75.8	13.13
2022-08-18 8:00	0.10	0.62	189.2	0	0	981.9	20.6	61.6	13.389
2022-08-18 9:00	0.20	0.99	130	0	0	981.3	23.3	53	13.69
2022-08-18 10:00	0.60	1.41	173.2	0	0	980.9	24.9	47	13.95
2022-08-18 11:00	0.50	1.59	154.7	0	0	980.4	26.3	43.1	14.028
2022-08-18 12:00	0.50	1.77	169.6	0	0	979.9	26.9	40	13.682
2022-08-18 13:00	0.60	1.55	196.1	0	0	979.3	26.7	38	13.321
2022-08-18 14:00	0.50	1.2	288.9	0	0	978.8	26	44.3	13.322
2022-08-18 15:00	0.10	1.18	47.7	0	0	978.4	26.4	42.6	13.321
2022-08-18 16:00	0.30	2.35	88.7	0	0	978.1	25.8	42.9	13.321
2022-08-18 17:00	0.20	2.5	153.8	0.1	0	978.3	23	54.7	13.206
2022-08-18 18:00	0.50	1.08	145.3	0.5	0	978.7	20.3	77.8	13.49
2022-08-18 19:00	0.20	0.35	170	0	0	978.7	19.1	86.2	13.114
2022-08-18 20:00	0.10	0.71	178.4	0	0	979.1	17.5	87.9	13.076
2022-08-18 21:00	0.30	0.54	147.2	0	0	979	16.9	87.6	13.073
2022-08-18 22:00	0.20	0.85	224.9	0	0	978.8	17	83.9	13.07
2022-08-18 23:00	0.40	0.73	221.3	0	0	979	16.5	85.7	13.061
2022-08-19 0:00	0.20	0.69	202.6	0	0	978.9	16.3	85.1	13.059
2022-08-19 1:00	0.10	0.73	203	0	0	978.8	15.9	84.1	13.054
2022-08-19 2:00	0.20	0.92	191.9	0	0	978.9	16	83.7	13.05
2022-08-19 3:00	0.20	0.94	181.3	0.3	0	979	15.8	85.9	13.048
2022-08-19 4:00	0.10	0.7	170.8	0	0	979	15.5	86.1	13.047
2022-08-19 5:00	0.10	1.08	175.3	0	0	979.3	15.7	86.6	13.046
2022-08-19 6:00	0.10	1.07	170.3	0.1	0	979.4	15.8	90	13.076
2022-08-19 7:00	0.10	1.31	171.6	0	0	979.8	16.5	90.3	13.094
2022-08-19 8:00	0.50	1.69	176.3	0	0	979.8	17.7	87.6	13.189
2022-08-19 9:00	0.40	2.35	183.1	0	0	979.9	18.4	84.4	13.318
2022-08-19 10:00	0.20	1.73	186.9	1.5	0	980.5	18	86.5	13.225
2022-08-19 11:00	0.20	1.66	184.3	0.6	0	980.5	17.4	90.6	13.26
2022-08-19 12:00	0.30	1.63	167.7	0	0	980.1	18.6	87	13.473
2022-08-19 13:00	0.10	1.93	157.4	0	0	979.7	20.8	80.6	13.74
2022-08-19 14:00	0.10	2.6	172.2	0	0	979.1	22.8	70.6	13.997
2022-08-19 15:00	0.10	2.22	144.1	0	0	978.8	23	72.5	13.827
2022-08-19 16:00	0.30	2.01	155.2	10	0	978.7	20.7	81.7	13.136
2022-08-19 17:00	0.80	1.53	143.3	0	0	978.3	20.5	86.1	13.375
2022-08-19 18:00	0.10	1.74	249.5	5.5	0	979	20.2	85.8	13.116
2022-08-19 19:00	0.60	2.34	173.2	15.4	0	979.5	17.2	89.8	13.067
2022-08-19 20:00	0.30	2.26	175.7	5.2	0	980.2	17.4	90.9	13.063
2022-08-19 21:00	0.30	1.15	200.1	0	0	980.7	16.7	91.3	13.059
2022-08-19 22:00	0.40	1.15	180.8	0	0	980.9	16.8	92	13.053
2022-08-19 23:00	0.10	0.67	186.5	0	0	980.8	16.8	92.2	13.049
2022-08-20 0:00	0.30	1.17	191.4	0	0	981.4	16.6	92.7	13.046
2022-08-20 1:00	0.20	0.86	258	0.8	0	982	17	92.8	13.044
2022-08-20 2:00	0.10	1.33	311.3	0.1	0	982.1	16.8	92.2	13.042
2022-08-20 3:00	0.40	1.02	321.4	0	0	982.4	16.2	92	13.043
2022-08-20 4:00	0.30	0.65	18.9	1.7	0	982.6	15.7	92	13.043
2022-08-20 5:00	0.10	0.5	341.4	0	0	982.8	15.5	92.3	13.041
2022-08-20 6:00	0.30	0.58	28.3	0.9	0	983.4	15.5	92.3	13.042
2022-08-20 7:00	0.40	0.88	56.8	1	0	983.5	15.4	92.2	13.05
2022-08-20 8:00	0.60	1.29	63.7	0.5	0	983.2	15.6	92.4	13.068
2022-08-20 9:00	0.20	1.04	32.2	3.1	0	983.5	15.8	92.2	13.054
2022-08-20 10:00	0.40	0.84	22.1	1.2	0	983.2	15.7	92.3	13.05
2022-08-20 11:00	0.30	1.23	113.9	0	0	983.4	15.9	92.5	13.073
2022-08-20 12:00	0.40	0.6	174.3	0.6	0	983.7	16.3	92.2	13.063
2022-08-20 13:00	0.20	0.89	171.9	1	0	983.5	16.5	91.5	13.089
2022-08-20 14:00	0.50	1.07	156.6	0	0	983.6	16.7	90.2	13.154
2022-08-20 15:00	0.30	0.77	163.6	0	0	983.4	17.7	85	13.39
2022-08-20 16:00	0.20	0.5	99.8	0	0	983.3	18.3	84.3	13.251
2022-08-20 17:00	0.20	1.03	268.9	0	0	983.5	18.4	84.9	13.266
2022-08-20 18:00	0.40	0.58	305.8	0	0	983.7	18.2	86.1	13.136
2022-08-20 19:00	0.40	0.45	55.3	0	0	983.6	17.4	90	13.047
2022-08-20 20:00	0.10	0.32	7.1	0	0	984	16.9	91.8	13.025
2022-08-20 21:00	0.20	0.31	33	0	0	984	16.6	92.3	13.02
2022-08-20 22:00	0.10	0.43	296.7	0	0	983.9	15.8	92.2	13.026
2022-08-20 23:00	0.40	0.35	226.6	0	0	983.9	15.1	92.4	13.024
2022-08-21 0:00	0.40	0.35	123.8	0	0	983.8	14.5	92	13.022
2022-08-21 1:00	0.30	0.32	157.6	0	0	983.6	13.4	91	13.022
2022-08-21 2:00	0.30	0.36	228.6	0	0	983.7	12.8	90.7	13.023
2022-08-21 3:00	0.20	0.27	185.6	0	0	983.8	11.7	89.8	13.021
2022-08-21 4:00	0.50	0.32	201.1	0	0	983.8	10.8	88.7	13.014
2022-08-21 5:00	0.40	0.43	298.8	0	0	984.1	10.6	90.2	13.009
2022-08-21 6:00	0.60	0.36	259.1	0	0	984.6	12.2	91.4	13.042
2022-08-21 7:00	0.20	0.56	338.7	0	0	984.7	13.5	92	13.178
2022-08-21 8:00	0.10	0.68	346.2	0	0	984.8	14.7	90.8	13.379
2022-08-21 9:00	0.30	0.88	22.7	0	0	984.8	17.1	80.1	13.714
2022-08-21 10:00	0.20	0.89	343.5	0	0	984.8	19.1	68.5	13.801
2022-08-21 11:00	0.20	1.08	293.1	0	0	984.5	19.9	63.2	13.604
2022-08-21 12:00	0.30	1.17	314.5	0	0	984	21.4	53.8	13.73
2022-08-21 13:00	0.20	1.3	333.3	0	0	983.7	21.7	52.8	13.319
2022-08-21 14:00	0.30	1.49	331.7	0	0	983.1	22.2	50.9	13.32
2022-08-21 15:00	0.40	1.58	311.5	0	0	982.7	23	46.7	13.316
2022-08-21 16:00	0.30	1.24	300.9	0	0	982.5	23	45.5	13.318
2022-08-21 17:00	0.40	1.33	304.6	0	0	982.4	22.9	47	13.319
2022-08-21 18:00	0.30	0.59	335.2	0	0	982.2	21.5	56.5	13.233
2022-08-21 19:00	0.20	0.26	339.7	0	0	982.3	18.6	73.9	13.079
2022-08-21 20:00	0.20	0.32	198.5	0	0	982.4	14.4	86.4	13.067
2022-08-21 21:00	0.20	0.32	205.9	0	0	982.5	12.7	87.8	13.061
2022-08-21 22:00	0.20	0.26	216.1	0	0	982.6	11.8	87.5	13.055
2022-08-21 23:00	0.10	0.27	228.4	0	0	982.7	10.8	87.5	13.054
2022-08-22 0:00	0.20	0.32	222.4	0	0	982.9	10.4	87.4	13.05

2022-08-22 1:00	0.10	0.34	210.2	0	0	982.4	9.8	87.6	13.049
2022-08-22 2:00	0.40	0.29	239.6	0	0	982.2	9.1	87.1	13.045
2022-08-22 3:00	0.10	0.29	211.9	0	0	982.3	8.6	86.9	13.04
2022-08-22 4:00	0.20	0.31	225.6	0	0	982.5	8.1	86.1	13.037
2022-08-22 5:00	0.20	0.36	209.9	0	0	982.7	7.7	87.5	13.038
2022-08-22 6:00	0.40	0.49	227.6	0	0	983.1	9.8	88.3	13.068
2022-08-22 7:00	0.30	0.93	193.7	0	0	983.3	14.3	83.2	13.12
2022-08-22 8:00	0.10	1.27	255.9	0	0	983.3	18.6	65.8	13.419
2022-08-22 9:00	0.20	1.3	262.5	0	0	983.1	21.1	55.3	13.765
2022-08-22 10:00	0.40	1.31	260.3	0	0	983.1	22.9	46.5	13.962
2022-08-22 11:00	0.50	1.11	305.4	0	0	982.9	23.8	42.4	14.027
2022-08-22 12:00	0.40	1.1	292.7	0	0	982.5	24.5	40.5	13.573
2022-08-22 13:00	0.40	1.38	246.7	0	0	982.2	25.2	38.1	13.323
2022-08-22 14:00	0.50	1.13	322.5	0	0	981.9	25.8	36.6	13.322
2022-08-22 15:00	0.40	1.16	322.1	0	0	981.7	25.5	38.7	13.322
2022-08-22 16:00	0.60	1.11	313.2	0	0	981.4	25.8	36.8	13.32
2022-08-22 17:00	0.20	1.34	26.3	0	0	981.4	25.2	39.5	13.319
2022-08-22 18:00	0.30	0.49	12.8	0	0	981.4	23.1	56.8	13.197
2022-08-22 19:00	0.20	0.63	352.9	0	0	981.5	19.7	75.5	13.075
2022-08-22 20:00	0.40	1.58	5.1	0	0	982.3	19.5	72.6	13.07
2022-08-22 21:00	0.30	1.46	4.7	0	0	982.9	17.9	75.5	13.073
2022-08-22 22:00	0.30	1.8	10.2	0	0	983.1	16.2	77.8	13.069
2022-08-22 23:00	0.10	1.72	7	0	0	983.1	14.7	80.6	13.067
2022-08-23 0:00	0.30	1.55	7.6	0	0	983	13.5	83.2	13.052
2022-08-23 1:00	0.10	1.25	2.7	0	0	982.8	12.8	84.9	13.048
2022-08-23 2:00	0.30	1.02	5.6	0	0	982.6	12.5	85.2	13.043
2022-08-23 3:00	0.30	0.88	0.2	0	0	982.4	12	86.2	13.038
2022-08-23 4:00	0.40	0.85	356.8	0	0	982.5	11.9	86	13.037
2022-08-23 5:00	0.30	0.8	353.4	0	0	982.4	11.8	86.4	13.038
2022-08-23 6:00	0.20	0.63	6.5	0	0	982.2	11.7	87.3	13.051
2022-08-23 7:00	0.20	0.68	332.2	0	0	982.3	11.9	87.4	13.088
2022-08-23 8:00	0.10	0.74	328.6	0	0	982.4	12.2	87.1	13.127
2022-08-23 9:00	0.20	1.03	316.2	0	0	982.5	12.6	85.9	13.19
2022-08-23 10:00	0.20	0.98	271.3	0	0	982.1	13.3	83.5	13.327
2022-08-23 11:00	0.20	1.02	305.4	0	0	981.9	14.9	77.8	13.504
2022-08-23 12:00	0.20	1.48	273.2	0	0	981.6	16.7	72	13.788
2022-08-23 13:00	0.30	1.65	278.9	0	0	981.2	18.1	68.2	13.984
2022-08-23 14:00	0.20	1.56	310.1	0	0	980.9	18.7	66.9	13.9
2022-08-23 15:00	0.10	1.86	305.9	0	0	980.7	19.2	66.1	13.323
2022-08-23 16:00	0.40	2.2	302.1	0	0	980.7	18.5	69	13.324
2022-08-23 17:00	0.20	2	302.1	0	0	980.9	17.7	72.5	13.269
2022-08-23 18:00	0.20	2.01	304.6	0	0	981.1	16.9	74.8	13.106
2022-08-23 19:00	0.50	1.4	300.7	0	0	981.4	16	78.2	13.072
2022-08-23 20:00	0.20	1	305.3	0	0	981.9	15.6	80.3	13.067
2022-08-23 21:00	0.30	0.93	327.3	0	0	982.3	15.2	81.5	13.062
2022-08-23 22:00	0.40	0.72	332	0	0	982.3	14.9	82.8	13.056
2022-08-23 23:00	0.30	0.65	325.7	0	0	982.6	14.6	84	13.049
2022-08-24 0:00	0.10	0.5	322.7	0	0	982.6	13.8	86.7	13.046
2022-08-24 1:00	0.20	0.6	330.3	0	0	982.7	13.8	86.8	13.045
2022-08-24 2:00	0.20	0.58	322.7	0	0	983	13.7	87.3	13.044
2022-08-24 3:00	0.30	0.99	334.5	0	0	983.3	13.6	86.4	13.043
2022-08-24 4:00	0.20	0.85	339.8	0	0	983.7	13.4	85.4	13.043
2022-08-24 5:00	0.40	0.87	323.9	0	0	984.1	13.2	85.5	13.043
2022-08-24 6:00	0.30	0.91	320.2	0	0	984.6	13.2	85.7	13.05
2022-08-24 7:00	0.20	1.08	334	0	0	985.1	13.4	84.3	13.09
2022-08-24 8:00	0.30	1.08	348.1	0	0	985.6	14.7	75.5	13.347
2022-08-24 9:00	0.20	1.57	355	0	0	985.9	16.2	65.8	13.602
2022-08-24 10:00	0.30	1.7	325.5	0	0	986.1	16.9	59.9	13.691
2022-08-24 11:00	0.50	1.76	324.2	0	0	986	17.7	55.9	13.89
2022-08-24 12:00	0.10	1.43	330.4	0	0	986	18.7	52.3	13.91
2022-08-24 13:00	0.30	1.59	331.2	0	0	986	19.3	51.3	13.323
2022-08-24 14:00	0.20	1.69	339.7	0	0	986	19.1	53.6	13.323
2022-08-24 15:00	0.20	1.73	341.1	0	0	986	18.8	56.3	13.323
2022-08-24 16:00	0.10	1.8	341.9	0	0	986.2	17.8	61.6	13.323
2022-08-24 17:00	0.30	1.8	357.1	0	0	986.6	15.9	68	13.298
2022-08-24 18:00	0.50	1.39	352.2	0	0	986.9	14.2	72	13.117
2022-08-24 19:00	0.20	1.18	349.4	0	0	987.3	13.1	75.3	13.061
2022-08-24 20:00	0.20	0.63	354.3	0	0	987.7	12.1	78.3	13.055
2022-08-24 21:00	0.20	0.37	259.8	0	0	988	11.3	82.1	13.048
2022-08-24 22:00	0.10	0.19	309.3	0	0	988.1	10.2	84.1	13.041
2022-08-24 23:00	0.30	0.25	321.5	0	0	988.4	9.1	85.3	13.037
2022-08-25 0:00	0.20	0.28	343.6	0	0	988.4	9.3	85.3	13.034
2022-08-25 1:00	0.30	0.33	132.5	0	0	988.3	7.6	86.5	13.032
2022-08-25 2:00	0.30	0.21	125.4	0	0	988.2	8.3	87.3	13.038
2022-08-25 3:00	1.20	0.31	62.5	0	0	988.1	8	87	13.038
2022-08-25 4:00	0.20	0.54	36.6	0	0	988	8.1	87.3	13.032
2022-08-25 5:00	0.50	0.82	29	0	0	988.1	8.3	86.7	13.028
2022-08-25 6:00	0.30	0.7	37.4	0	0	988.4	8.6	86.1	13.033
2022-08-25 7:00	0.10	0.75	25.7	0	0	988.8	8.8	85.2	13.036
2022-08-25 8:00	0.30	0.99	44.9	0	0	988.5	9.5	84	13.104
2022-08-25 9:00	0.20	1.07	56.6	0	0	988.1	10.8	80.9	13.173
2022-08-25 10:00	0.40	1.38	37	0	0	987.9	11.8	76.8	13.201
2022-08-25 11:00	0.40	1.57	30.6	0	0	987.7	12.2	75.2	13.228
2022-08-25 12:00	0.40	1.5	29.7	0	0	987.3	12.5	72.8	13.26
2022-08-25 13:00	0.30	1.6	13.5	0	0	987	12.5	71.1	13.274
2022-08-25 14:00	0.30	1.73	24.4	0	0	986.5	12.2	71.3	13.187
2022-08-25 15:00	0.30	1.34	39.4	0	0	986.1	11.9	72.4	13.08
2022-08-25 16:00	0.30	1.31	47.6	0	0	985.8	10.8	78.9	13.034
2022-08-25 17:00	0.30	1.16	49.5	0.1	0	985.7	9.8	85.3	13.009
2022-08-25 18:00	0.20	1.08	85.3	0.5	0	985.5	9.7	88.6	13.004

2022-08-25 19:00	0.10	0.51	36.7	0.5	0	985.5	9.9	88.2	13.01
2022-08-25 20:00	0.40	0.47	4.9	0	0	985.8	10.1	88.3	13.013
2022-08-25 21:00	0.20	0.41	358.7	0	0	985.5	10	88.4	13.005
2022-08-25 22:00	0.30	0.41	14.2	0	0	985.1	9.9	88.6	13.008
2022-08-25 23:00	0.00	0.71	349.8	0	0	985.1	9.6	88.5	13.003
2022-08-26 0:00	0.30	0.68	339.7	0	0	985.1	9.4	88.3	13.001
2022-08-26 1:00	0.10	0.41	340.9	0	0	984.8	8.6	87.5	12.999
2022-08-26 2:00	0.30	0.65	336.8	0	0	984.4	7.5	88.4	12.996
2022-08-26 3:00	0.30	0.56	319.2	0	0	984.2	6.6	87.9	12.996
2022-08-26 4:00	0.30	0.67	234.9	0	0	984.3	5	87	12.989
2022-08-26 5:00	0.10	0.29	233.3	0	0	984.3	3.6	86.1	12.993
2022-08-26 6:00	0.30	0.46	326.9	0	0	984.5	5.2	88.3	13.021
2022-08-26 7:00	0.30	0.71	355.6	0	0	984.9	7.2	84.8	13.093
2022-08-26 8:00	0.30	0.92	15.3	0	0	985.1	10.6	75.7	13.443
2022-08-26 9:00	0.20	1.06	35.4	0	0	985.1	12.9	65.5	13.796
2022-08-26 10:00	0.20	1.01	340.5	0	0	985	14.3	55.8	13.862
2022-08-26 11:00	0.10	1.19	254.7	0	0	984.7	15.4	49.4	13.867
2022-08-26 12:00	0.60	1.49	205.8	0	0	984.1	16.5	44.4	13.662
2022-08-26 13:00	0.30	1.17	337.4	0	0	983.7	17.6	40.9	13.322
2022-08-26 14:00	0.30	1.63	287.2	0	0	983.5	18.3	38.9	13.322
2022-08-26 15:00	0.50	1.68	239.3	0	0	983.1	19.2	39.2	13.319
2022-08-26 16:00	0.40	1.86	288.5	0	0	982.8	18.9	41.2	13.32
2022-08-26 17:00	0.10	1.51	273.7	0	0	983	17.8	48.1	13.236
2022-08-26 18:00	0.20	1.5	258.6	0	0	983.1	16.5	57.1	13.09
2022-08-26 19:00	0.10	0.66	233.2	0	0	983.4	15.1	64.1	13.066
2022-08-26 20:00	0.30	0.36	162.8	0	0	983.8	14.1	74.8	13.063
2022-08-26 21:00	0.10	0.58	79.9	0	0	983.8	13.5	79.5	13.06
2022-08-26 22:00	0.30	0.81	143.6	0	0	983.6	13.6	75.4	13.058
2022-08-26 23:00	0.20	0.61	173.3	0	0	983.4	13.8	75.8	13.051
2022-08-27 0:00	0.50	0.64	180.9	0	0	983.4	13.4	78.6	13.046
2022-08-27 1:00	0.70	0.77	181.4	0	0	983.2	12.4	81.8	13.044
2022-08-27 2:00	0.80	0.91	180.2	0	0	983.1	12.4	82.8	13.045
2022-08-27 3:00	0.30	0.97	178.1	0	0	983	11.7	84.3	13.041
2022-08-27 4:00	0.20	1.18	177.7	0	0	982.9	11	85.9	13.036
2022-08-27 5:00	0.20	1.14	180.2	0	0	983.2	10.4	86.3	13.033
2022-08-27 6:00	0.40	1.27	179.2	0	0	983.5	10.7	86.5	13.067
2022-08-27 7:00	0.20	1.46	194.5	0	0	983.7	13.8	80.5	13.14
2022-08-27 8:00	0.20	1.87	217.8	0	0	983.4	16.7	71.2	13.442
2022-08-27 9:00	0.20	1.7	216.9	0	0	983.3	19.2	63.8	13.768
2022-08-27 10:00	0.20	1.88	205.1	0	0	983	21.3	59.1	13.972
2022-08-27 11:00	0.20	2.18	210.5	0	0	982.6	22.9	55.7	14.027
2022-08-27 12:00	0.20	2.95	225.2	0	0	982.4	24.1	52.8	13.55
2022-08-27 13:00	0.20	3.12	203.1	0	0	981.8	25	50	13.322
2022-08-27 14:00	0.30	2.75	206	0	0	981.3	25.6	47.9	13.322
2022-08-27 15:00	0.20	2.65	205.1	0	0	980.9	25.6	47	13.321
2022-08-27 16:00	0.40	2.4	197.4	0	0	980.6	26	46	13.32
2022-08-27 17:00	0.40	2.44	189.7	0	0	980.5	25.7	48.6	13.319
2022-08-27 18:00	0.20	1.71	180.3	0	0	980.2	23.8	56.5	13.19
2022-08-27 19:00	0.30	1.14	178.4	0	0	980.6	21.3	67.3	13.071
2022-08-27 20:00	0.20	0.88	165.3	0	0	980.9	19.4	75.1	13.065
2022-08-27 21:00	0.30	1.4	178.4	0	0	981.1	18.8	77	13.07
2022-08-27 22:00	0.40	1.64	176.3	0	0	981	18.6	77.8	13.066
2022-08-27 23:00	0.30	1.77	173.9	0	0	980.9	18	79.1	13.06
2022-08-28 0:00	0.00	2.09	175.3	0	0	980.8	16.7	81.6	13.055
2022-08-28 1:00	0.30	2.22	173.9	0	0	980.7	16.3	78.6	13.051
2022-08-28 2:00	0.10	2.56	174.8	0	0	980.4	16.3	74.3	13.049
2022-08-28 3:00	0.20	2.43	174.2	0	0	980.3	16.2	73.2	13.046
2022-08-28 4:00	0.20	2.52	175.4	0	0	980	16.5	71.6	13.045
2022-08-28 5:00	0.20	2.86	175.2	0	0	979.8	16.6	72.2	13.045
2022-08-28 6:00	0.20	2.82	175.1	0	0	980	16.7	73.6	13.065
2022-08-28 7:00	0.20	3.44	178.1	0	0	980.1	17.6	74.1	13.1
2022-08-28 8:00	0.30	2.93	182.5	0	0	980.4	17.9	77.6	13.183
2022-08-28 9:00	0.30	3.05	179.8	0	0	980.3	19	75	13.253
2022-08-28 10:00	0.20	2.85	174.6	0	0	980.3	19.2	75.9	13.228
2022-08-28 11:00	0.20	2.94	177.3	0	0	980	20.2	73.4	13.364
2022-08-28 12:00	0.00	3.15	183.6	0	0	979.7	21.3	70.3	13.302
2022-08-28 13:00	0.30	2.41	185.8	0	0	979.3	22.7	67.4	13.452
2022-08-28 14:00	0.30	2.66	185	0	0	978.7	24	64.3	13.438
2022-08-28 15:00	0.20	2.74	186.1	0	0	978.4	24.6	60.4	13.418
2022-08-28 16:00	0.20	3.5	185.2	0	0	978.2	24.2	55.3	13.321
2022-08-28 17:00	0.30	2.46	183.8	0	0	978.2	23.1	60.8	13.155
2022-08-28 18:00	0.30	1.8	171.2	0	0	977.8	21.9	67	13.091
2022-08-28 19:00	0.40	1.41	166.3	0	0	977.6	20.5	72.5	13.062
2022-08-28 20:00	0.30	1.52	172.1	0	0	977.8	19.6	73	13.058
2022-08-28 21:00	0.50	2.03	172.4	0	0	977.6	18.9	71.7	13.053
2022-08-28 22:00	0.50	1.56	172.1	0	0	977.1	18.3	73.2	13.051
2022-08-28 23:00	0.40	1.57	172.5	0	0	976.7	17.6	77.1	13.046
2022-08-29 0:00	0.30	1.47	170	0	0	976.4	17.5	79.9	13.043
2022-08-29 1:00	0.50	2.04	161.7	0	0	975.8	17.9	79	13.043
2022-08-29 2:00	0.20	1.91	154.2	0	0	975	18.5	78.5	13.043
2022-08-29 3:00	0.20	2.29	162.2	0.1	0	974.7	18.3	82	13.041
2022-08-29 4:00	0.30	1.77	164	0.4	0	974.5	17.7	89.1	13.041
2022-08-29 5:00	0.40	2.38	158.9	0.1	0	974.1	17.7	90.5	13.04
2022-08-29 6:00	0.40	2.92	164.7	0	0	973.8	18	90.8	13.044
2022-08-29 7:00	0.30	1.27	154.3	0	0	972.9	18.3	91.3	13.076
2022-08-29 8:00	0.30	1.98	164.7	0	0	972.7	18.9	90.1	13.117
2022-08-29 9:00	0.50	2.25	168.5	0	0	972.1	19.6	89.4	13.257
2022-08-29 10:00	0.20	3.04	166.3	0	0	971.4	21.8	81.5	13.716
2022-08-29 11:00	0.20	3.25	179.4	0	0	971.3	24	72	13.768
2022-08-29 12:00	0.20	3.29	190.3	0	0	971.6	25.1	66.6	13.854

2022-08-29 13:00	0.30	3.18	199.7	0	0	971.4	25.6	63.5	13.625
2022-08-29 14:00	0.20	2.93	182.6	0	0	970.8	25.9	62.1	13.318
2022-08-29 15:00	0.30	2.11	175.9	0	0	970	25.2	65.2	13.211
2022-08-29 16:00	0.10	1.6	152.7	0.9	0	969.1	23.1	76.6	13.059
2022-08-29 17:00	0.50	3.2	151.9	3	0	968.9	19.9	86.3	13.053
2022-08-29 18:00	0.90	1.83	174	0.5	0	969.1	18.6	88.7	13.132
2022-08-29 19:00	0.30	1.9	169.7	0	0	969.3	18.2	89.9	13.069
2022-08-29 20:00	0.70	1.64	162.4	0	0	969.8	17.7	91.1	13.052
2022-08-29 21:00	0.70	1.97	170.6	0	0	970	17.9	91.8	13.05
2022-08-29 22:00	0.20	2.28	177	0	0	969.9	17.9	91.7	13.048
2022-08-29 23:00	0.30	2.01	181.7	0	0	969.6	17.6	90.2	13.046
2022-08-30 0:00	0.10	1.61	194.5	0	0	969.2	16.8	88.4	13.043
2022-08-30 1:00	0.40	1.26	198.6	0	0	968.7	15.9	90.5	13.043
2022-08-30 2:00	0.50	1.81	205.2	0	0	968.7	15.9	89	13.043
2022-08-30 3:00	0.40	1.93	203.4	0	0	968.6	15.8	88.5	13.04
2022-08-30 4:00	0.40	1.99	191.1	0	0	968.3	15.7	88.5	13.04
2022-08-30 5:00	0.30	1.9	185	0	0	968.1	15.6	89.5	13.04
2022-08-30 6:00	0.20	2.54	184.7	0	0	968	15.9	89.3	13.054
2022-08-30 7:00	0.10	2.74	193.5	0	0	967.8	17.2	85.8	13.168
2022-08-30 8:00	0.30	3.01	198.5	0	0	967.7	17.7	83.7	13.223
2022-08-30 9:00	0.20	2.93	190.3	0	0	967.5	18.3	81.8	13.281
2022-08-30 10:00	0.20	3.06	195.4	0	0	967.4	18.9	80.6	13.37
2022-08-30 11:00	0.40	3.26	232.3	0.2	0	967.1	18.4	85	13.585
2022-08-30 12:00	0.20	3.57	215.3	0	0	966.8	19.9	76.1	13.808
2022-08-30 13:00	0.20	4.3	230.3	0.1	0	966.7	20	72.6	13.969
2022-08-30 14:00	0.10	4.41	275.5	0.7	0	967.7	15.7	85.7	13.699
2022-08-30 15:00	0.40	2.93	271.6	1	0	968.2	14.8	87	13.307
2022-08-30 16:00	0.10	3.46	276.4	0	0	968.4	15.7	82.7	13.319
2022-08-30 17:00	0.20	4.36	287.1	0	0	969.4	13.8	82.3	13.162
2022-08-30 18:00	0.30	2.84	289.6	0	0	970.3	12	85.4	13.033
2022-08-30 19:00	0.20	1.97	270.1	0.1	0	970.8	11.7	87	13.023
2022-08-30 20:00	0.20	2.36	258.4	0	0	971.3	11.6	86.2	13.032
2022-08-30 21:00	0.30	2.26	265.3	0	0	971.5	11.2	85	13.023
2022-08-30 22:00	0.40	1.84	269.1	0	0	971.7	10.9	85.3	13.022
2022-08-30 23:00	0.50	1.49	262.9	0	0	971.7	10.7	85.3	13.02
2022-08-31 0:00	0.20	0.81	229.2	0	0	971.4	9.8	86.2	13.015
2022-08-31 1:00	0.10	0.71	196	0	0	971.2	8.6	87.3	13.015
2022-08-31 2:00	0.20	0.66	184.7	0	0	970.8	8.6	88.5	13.017
2022-08-31 3:00	0.10	1.19	177	0	0	970.4	8.9	88.3	13.009
2022-08-31 4:00	0.30	1.33	257.8	1.5	0	970.5	9.2	87.7	12.991
2022-08-31 5:00	0.20	0.95	341.4	0.1	0	971.1	9.4	86.5	12.997
2022-08-31 6:00	0.30	1.03	270.8	0.1	0	971.6	8.9	85.3	13.007
2022-08-31 7:00	0.10	2.21	281.4	0	0	971.8	9.4	83.1	13.093
2022-08-31 8:00	0.30	3.14	294.3	0	0	972.1	9.9	78.2	13.237
2022-08-31 9:00	0.30	2.93	287.6	0	0	972.4	9.8	77.1	13.302
2022-08-31 10:00	0.50	3.02	293.5	0	0	972.5	10.3	75.4	13.469
2022-08-31 11:00	0.20	2.87	304.4	0	0	972.6	10.9	70.5	13.492
2022-08-31 12:00	0.20	2.77	306.9	0.6	0	972.8	10.5	76.4	13.497
2022-08-31 13:00	0.10	3.06	296.5	0.2	0	973.2	10	80.2	13.55
2022-08-31 14:00	0.40	3.44	301.6	0.7	0	974	8.5	83.3	13.238
2022-08-31 15:00	0.30	2.99	305.2	1.2	0	974.7	7.4	83.1	13.097
2022-08-31 16:00	0.50	2.42	315.5	0.1	0	975.5	7	82.3	13.22
2022-08-31 17:00	0.30	1.56	312.8	0.3	0	976.2	6.5	83	13.061
2022-08-31 18:00	0.10	0.95	259.3	0	0	976.4	6.7	83.6	13.017
2022-08-31 19:00	0.30	1.14	228.4	0.1	0	976.5	6.5	86.1	13.005
2022-08-31 20:00	0.60	1.38	223.9	0	0	976.6	6.6	86.1	13.008
2022-08-31 21:00	0.30	1.51	230.3	0	0	976.5	6.9	85.2	13.008
2022-08-31 22:00	0.10	1.81	241.6	0	0	976.7	7	84.8	12.999
2022-08-31 23:00	0.20	1.89	252.5	0	0	976.7	6.9	84.3	12.995
2022-09-01 0:00	0.30	1.89	264.3	0	0	977	7	83	12.992
2022-09-01 1:00	0.50	1.82	262.3	0	0	977.2	7	82	12.991
2022-09-01 2:00	0.30	1.59	253.5	0	0	977.5	6.9	81.5	12.988
2022-09-01 3:00	0.10	1.8	247.8	0	0	977.9	6.6	82.2	12.986
2022-09-01 4:00	0.20	1.85	252.7	0	0	978.3	6.3	82	12.982
2022-09-01 5:00	0.00	1.71	249.4	0	0	978.8	5.1	82.9	12.975
2022-09-01 6:00	0.40	2.13	255.4	0	0	979.7	4.8	82.3	12.983
2022-09-01 7:00	0.10	2.74	260.9	0	0	980.5	6.3	76.7	13.055
2022-09-01 8:00	0.20	2.79	275.5	0	0	980.8	8.5	67.4	13.428
2022-09-01 9:00	0.30	2.89	289.1	0	0	981.2	10.4	56.5	13.832
2022-09-01 10:00	0.30	2.89	278.6	0	0	981.3	11.9	49.6	13.958
2022-09-01 11:00	0.30	3.04	271.4	0	0	981.4	13.3	43.8	14.008
2022-09-01 12:00	0.30	3.08	239.4	0	0	981.4	14.4	42.7	13.359
2022-09-01 13:00	0.40	2.76	243.4	0	0	981.2	15.4	40.7	13.325
2022-09-01 14:00	0.30	3	222.4	0	0	980.9	16.2	42.5	13.325
2022-09-01 15:00	0.20	2.89	225.5	0	0	980.7	16.9	43.3	13.323
2022-09-01 16:00	0.20	2.88	235.4	0	0	980.4	17.3	42.2	13.322
2022-09-01 17:00	0.30	2.24	215	0	0	980.3	16.9	44.4	13.312
2022-09-01 18:00	0.30	1.13	195.1	0	0	980.2	15.7	54	13.247
2022-09-01 19:00	0.20	0.63	157.3	0	0	980.1	12.5	69.6	13.056
2022-09-01 20:00	0.10	0.94	173	0	0	980.2	11.2	74	13.039
2022-09-01 21:00	0.10	1.11	177.2	0	0	980	10.4	77.1	13.038
2022-09-01 22:00	0.30	1.36	176.5	0	0	979.7	10.5	78.1	13.034
2022-09-01 23:00	0.40	0.64	167.8	0	0	979.6	10.8	80.3	13.035
2022-09-02 0:00	0.30	0.43	96.7	0	0	979.5	9.8	84.4	13.033
2022-09-02 1:00	0.40	0.74	120.7	0	0	979.3	10.3	85.9	13.029
2022-09-02 2:00	0.20	1.56	174	0	0	979.1	11.4	85.7	13.024
2022-09-02 3:00	0.30	1.34	161.4	0	0	979	12.2	85.1	13.027
2022-09-02 4:00	0.30	1.65	165.8	0	0	978.8	12.7	85.2	13.034
2022-09-02 5:00	0.60	2.1	170.8	0	0	978.6	12.9	86.1	13.037
2022-09-02 6:00	0.60	2.26	174.2	0	0	978.7	13.5	86.5	13.05

2022-09-02 7:00	0.30	2.52	180.1	0	0	978.8	16.2	81.3	13.119
2022-09-02 8:00	0.10	3.38	182.3	0	0	978.2	19.8	72.4	13.433
2022-09-02 9:00	0.30	3.36	183.1	0	0	977.7	23.2	63.7	13.771
2022-09-02 10:00	0.20	4.29	181.5	0	0	977.3	25.4	56	13.974
2022-09-02 11:00	0.50	5.12	187.1	0	0	976.8	26.5	51.1	14.026
2022-09-02 12:00	0.50	5.08	189.5	0	0	976.2	27	53.6	13.529
2022-09-02 13:00	0.20	4.68	194.9	0	0	976.1	27.1	54.2	13.32
2022-09-02 14:00	0.10	4.67	192.7	0	0	975.7	27.8	52.5	13.316
2022-09-02 15:00	0.30	4.92	192	0	0	975.3	28	52.6	13.317
2022-09-02 16:00	0.50	4.64	189.3	0	0	975.3	28.1	51.4	13.319
2022-09-02 17:00	0.20	4.67	186.9	0	0	975.4	27.6	52.6	13.313
2022-09-02 18:00	0.20	3.82	187.5	0	0	975.8	26.3	57.8	13.149
2022-09-02 19:00	0.30	3.83	184.2	0	0	975.9	25.3	60.5	13.065
2022-09-02 20:00	0.40	3.66	190.2	0	0	976.2	24.8	59.1	13.061
2022-09-02 21:00	0.30	3.49	195.8	1.3	0	976.9	22.9	66.9	13.059
2022-09-02 22:00	0.50	3.26	223.1	2.6	0	978.3	20.1	81.4	13.061
2022-09-02 23:00	0.40	2.77	215.9	1.2	0	978.9	19	87.7	13.056
2022-09-03 0:00	0.20	2.62	206.5	3.5	0	979.5	19	89.5	13.051
2022-09-03 1:00	0.40	2.15	303.2	5.6	0	980.1	16.8	86.9	13.052
2022-09-03 2:00	0.20	0.54	326.7	0	0	981.1	14.4	88.4	13.051
2022-09-03 3:00	0.20	1.45	321.4	0	0	981.7	14.3	88.3	13.046
2022-09-03 4:00	0.40	1.94	338.3	0	0	983.1	11.7	82.3	13.027
2022-09-03 5:00	0.20	2.03	324.4	0	0	984.2	10.2	79.8	13.023
2022-09-03 6:00	0.20	1.96	331	0	0	985.4	9.1	78.8	13.031
2022-09-03 7:00	0.10	1.99	322.7	0	0	987.2	8.5	77.7	13.086
2022-09-03 8:00	0.20	2.95	331.3	0	0	988.2	9.3	70.8	13.483
2022-09-03 9:00	0.20	2.68	330.9	0	0	989.2	9	71.7	13.389
2022-09-03 10:00	0.20	2.8	330.9	0	0	989.8	9.2	69.5	13.584
2022-09-03 11:00	0.40	2.76	326.1	0	0	990.3	10.1	66.7	13.673
2022-09-03 12:00	0.30	2.6	327.1	0	0	990.9	10.7	64.1	14.005
2022-09-03 13:00	0.20	2.21	335.4	0	0	991.3	11.7	60.7	13.936
2022-09-03 14:00	0.10	2.3	340.7	0	0	991.9	11.5	61.1	13.324
2022-09-03 15:00	0.30	2.31	345.3	0	0	992.2	11.7	61.2	13.324
2022-09-03 16:00	0.20	1.68	346	0	0	992.6	11.6	62.3	13.321
2022-09-03 17:00	0.30	1.44	344.4	0	0	993	11.3	63.4	13.273
2022-09-03 18:00	0.20	1.1	355.5	0	0	993.5	10.8	65.9	13.082
2022-09-03 19:00	0.30	1	356.4	0	0	993.9	10	68	13.042
2022-09-03 20:00	0.20	0.98	8.8	0	0	994.2	9.6	68.7	13.04
2022-09-03 21:00	0.30	0.71	13.2	0	0	994.6	9.3	70.2	13.04
2022-09-03 22:00	0.40	0.51	28.1	0	0	994.5	8.1	74.6	13.034
2022-09-03 23:00	0.20	0.28	324	0	0	994.6	5.8	83.1	13.031
2022-09-04 0:00	0.20	0.27	82.2	0	0	994.5	3.8	85.9	13.028
2022-09-04 1:00	0.20	0.29	156.6	0	0	994.7	2.6	85.8	13.019
2022-09-04 2:00	0.20	0.19	8.1	0	0	995	2	85	13.019
2022-09-04 3:00	0.20	0.26	76	0	0	995.1	1	85.5	13.013
2022-09-04 4:00	0.30	0.34	87.5	0	0	995.2	0	87.4	13.009
2022-09-04 5:00	0.70	0.25	65	0	0	995.4	0	86.8	13.012
2022-09-04 6:00	0.40	0.29	73	0	0	995.8	0.9	87.8	13.032
2022-09-04 7:00	0.70	0.76	101.4	0	0	996.3	4.3	86	13.11
2022-09-04 8:00	0.30	1.22	98	0	0	996.1	8.5	75.2	13.484
2022-09-04 9:00	0.40	1.98	105.9	0	0	995.8	10.7	63.6	13.859
2022-09-04 10:00	0.30	1.68	93.4	0	0	995.5	12.2	55.5	13.985
2022-09-04 11:00	0.30	1.62	90.3	0	0	995	13.7	48.6	13.981
2022-09-04 12:00	0.20	1.39	77.6	0	0	994.3	15.1	44.1	13.331
2022-09-04 13:00	0.30	1.42	44.5	0	0	993.7	16.3	39.5	13.325
2022-09-04 14:00	0.20	1.4	86.4	0	0	992.6	17.4	37.6	13.324
2022-09-04 15:00	0.50	1.37	102	0	0	991.7	18	36.8	13.323
2022-09-04 16:00	0.50	1.46	129.5	0	0	991.4	18.1	36.1	13.322
2022-09-04 17:00	0.60	1.04	108.5	0	0	991.1	17.7	36.7	13.321
2022-09-04 18:00	0.30	0.53	94.2	0	0	990.9	15.2	51.4	13.195
2022-09-04 19:00	0.10	0.32	69.2	0	0	991.2	10.9	69.5	13.052
2022-09-04 20:00	0.30	0.57	104.8	0	0	991.2	8.9	72.1	13.045
2022-09-04 21:00	0.20	0.7	113.9	0	0	991	8	70.1	13.039
2022-09-04 22:00	0.30	0.42	110.6	0	0	990.8	6.5	75.2	13.037
2022-09-04 23:00	0.10	0.26	60.1	0	0	991	3.9	83.9	13.034
2022-09-05 0:00	0.10	0.41	137.1	0	0	990.8	2.4	85.6	13.028
2022-09-05 1:00	0.30	0.24	48.2	0	0	990.9	2	85.7	13.029
2022-09-05 2:00	0.30	0.23	96.2	0	0	990.9	1.5	85.3	13.025
2022-09-05 3:00	0.20	0.24	90.3	0	0	990.9	0.9	85.4	13.021
2022-09-05 4:00	0.40	0.26	91.6	0	0	991	0.4	85.9	13.016
2022-09-05 5:00	0.30	0.24	73.2	0	0	991.1	0.2	85.7	13.015
2022-09-05 6:00	0.30	0.23	62.4	0	0	991.6	1.3	86.5	13.036
2022-09-05 7:00	1.20	0.53	102.6	0	0	992	5.7	81.2	13.132
2022-09-05 8:00	0.20	0.7	138.1	0	0	992.1	10.9	71.9	13.483
2022-09-05 9:00	0.10	0.8	127.4	0	0	992.1	14.9	55.2	13.824
2022-09-05 10:00	0.20	0.93	293	0	0	992.1	17.1	43.1	13.984
2022-09-05 11:00	0.40	1.49	121.7	0	0	991.6	18.6	39.2	14.028
2022-09-05 12:00	0.40	1.12	182.7	0	0	991.3	19.7	36.6	13.404
2022-09-05 13:00	0.50	1.53	168.9	0	0	990.8	21.1	31.9	13.323
2022-09-05 14:00	0.20	1.42	166.5	0	0	990.3	21.8	30.1	13.323
2022-09-05 15:00	0.10	1.2	164.9	0	0	990	22.3	26.7	13.32
2022-09-05 16:00	0.20	1.11	141.2	0	0	989.7	22.2	28.8	13.317
2022-09-05 17:00	0.40	0.73	128	0	0	989.5	21.2	33.7	13.318
2022-09-05 18:00	0.20	0.76	119.4	0	0	989.3	18.5	47.8	13.181
2022-09-05 19:00	0.10	0.61	123.3	0	0	989.4	14.6	64.4	13.066
2022-09-05 20:00	0.60	0.57	79.4	0	0	989.8	12.9	67.8	13.062
2022-09-05 21:00	0.20	0.45	102.6	0	0	989.8	9.7	79.9	13.057
2022-09-05 22:00	0.30	0.3	149.7	0	0	989.7	8.1	83.8	13.052
2022-09-05 23:00	0.20	0.17	5.3	0	0	989.7	7.4	83.6	13.048
2022-09-06 0:00	0.20	0.26	152.9	0	0	989.8	6.4	84.2	13.041

2022-09-06 1:00	0.30	0.3	169.7	0	0	989.8	5.3	85.3	13.036
2022-09-06 2:00	0.20	0.18	271.2	0	0	989.7	5.5	84.4	13.028
2022-09-06 3:00	0.10	0.28	106.6	0	0	989.7	4.8	85.3	13.027
2022-09-06 4:00	0.20	0.26	187.9	0	0	989.8	4.5	84.9	13.024
2022-09-06 5:00	0.30	0.29	87.7	0	0	990	3.8	86.2	13.02
2022-09-06 6:00	0.30	0.3	113.2	0	0	990.7	4.1	86.5	13.043
2022-09-06 7:00	0.80	0.39	61.5	0	0	991	7.6	85.7	13.154
2022-09-06 8:00	0.70	0.64	147.4	0	0	990.8	12.7	76.6	13.444
2022-09-06 9:00	0.20	1.26	167.5	0	0	990.7	17.3	56.1	13.749
2022-09-06 10:00	0.20	1.66	175.4	0	0	990.5	19.8	44.8	13.967
2022-09-06 11:00	0.30	1.69	140.7	0	0	990.2	20.9	43.3	14.026
2022-09-06 12:00	0.50	1.85	146.7	0	0	989.6	22.2	38.7	13.573
2022-09-06 13:00	0.40	1.99	137.6	0	0	989.2	23.1	34.7	13.324
2022-09-06 14:00	0.30	1.65	156.9	0	0	988.5	23.9	34.1	13.323
2022-09-06 15:00	0.30	1.59	143.8	0	0	988	24.1	35.2	13.321
2022-09-06 16:00	0.50	1.43	138.4	0	0	987.6	23.5	38.3	13.321
2022-09-06 17:00	0.30	0.9	144	0	0	987.5	22.6	44.2	13.32
2022-09-06 18:00	0.30	0.4	112.2	0	0	987.3	19.9	56.3	13.173
2022-09-06 19:00	0.30	0.68	124.4	0	0	987.3	16.5	69.1	13.068
2022-09-06 20:00	0.50	0.87	133.6	0	0	987.4	16.3	65.2	13.061
2022-09-06 21:00	0.40	0.72	140.4	0	0	987.2	14.7	71.1	13.056
2022-09-06 22:00	0.20	0.36	169.6	0	0	987	11.6	81.3	13.055
2022-09-06 23:00	0.90	0.49	186.1	0	0	986.7	12	80.8	13.053
2022-09-07 0:00	0.60	0.84	216.4	0	0	986.6	12.2	78.6	13.045
2022-09-07 1:00	0.30	0.78	190.8	0	0	986.3	10.8	81.9	13.04
2022-09-07 2:00	0.40	0.84	182.7	0	0	986	9.9	83.2	13.036
2022-09-07 3:00	0.20	0.74	191.2	0	0	985.8	8.8	84.5	13.032
2022-09-07 4:00	0.20	0.82	198.2	0	0	986.1	8.2	85.4	13.029
2022-09-07 5:00	0.30	0.88	199.3	0	0	986.1	8.2	86.6	13.026
2022-09-07 6:00	0.10	1.14	185.5	0	0	986	8.3	85.4	13.043
2022-09-07 7:00	0.20	1.17	211.9	0	0	986.2	11.3	80.5	13.148
2022-09-07 8:00	0.10	1.97	257.1	0	0	986.2	14.4	69.4	13.449
2022-09-07 9:00	0.30	1.47	285.8	0	0	986.2	17.3	62.5	13.819
2022-09-07 10:00	0.10	1.57	264.7	0	0	986.3	18.8	59.7	13.835
2022-09-07 11:00	0.30	1.58	305.3	0	0	986.2	19.4	60.3	14.028
2022-09-07 12:00	0.10	1.52	280.1	0	0	985.9	20.8	56.9	13.576
2022-09-07 13:00	0.10	1.52	319.7	0	0	985.4	22.5	52	13.323
2022-09-07 14:00	0.30	1.45	313.7	0	0	985	23.6	44	13.322
2022-09-07 15:00	0.60	1.34	322.9	0	0	984.7	24.1	34.7	13.319
2022-09-07 16:00	0.40	1.11	336.3	0	0	984.4	24	37.5	13.318
2022-09-07 17:00	0.40	1.01	333.1	0	0	984.3	23.3	39.1	13.318
2022-09-07 18:00	0.20	0.32	335.8	0	0	984.2	21.1	53.8	13.214
2022-09-07 19:00	0.10	0.21	223.7	0	0	984.3	15.8	73.2	13.064
2022-09-07 20:00	0.20	0.32	90.1	0	0	984.5	12.6	81.7	13.055
2022-09-07 21:00	0.20	0.46	257.6	0	0	984.3	11.5	81.6	13.05
2022-09-07 22:00	0.20	0.29	199.4	0	0	984.3	10.1	83.6	13.047
2022-09-07 23:00	0.20	0.35	128.2	0	0	984.2	8.7	85.7	13.041
2022-09-08 0:00	0.30	0.44	164	0	0	984.2	7.7	85.8	13.035
2022-09-08 1:00	0.20	0.44	149.1	0	0	984	6.3	85.9	13.034
2022-09-08 2:00	0.30	0.32	131.6	0	0	983.9	5.4	86	13.031
2022-09-08 3:00	0.30	0.23	110	0	0	984	5	84.7	13.028
2022-09-08 4:00	0.20	0.31	88.2	0	0	984.1	4.4	85.8	13.024
2022-09-08 5:00	0.20	0.32	112	0	0	984	3.7	85.8	13.021
2022-09-08 6:00	0.30	0.2	112.5	0	0	983.9	4.6	86	13.039
2022-09-08 7:00	0.70	0.44	113.6	0	0	983.8	9.7	82.9	13.127
2022-09-08 8:00	0.30	0.99	143.9	0	0	983.5	14.8	75.1	13.468
2022-09-08 9:00	0.10	1.73	151.6	0	0	982.8	19.3	61.4	13.765
2022-09-08 10:00	0.10	2.39	167.6	0	0	982.1	22.4	43.6	13.97
2022-09-08 11:00	0.30	2.72	182.1	0	0	981.2	23.6	33.4	14.014
2022-09-08 12:00	0.80	2.72	183	0	0	980.6	24.1	33.3	13.353
2022-09-08 13:00	0.40	3.02	186.8	0	0	979.6	24.6	33.9	13.319
2022-09-08 14:00	0.20	3.2	191.9	0	0	978.5	25.1	33.9	13.318
2022-09-08 15:00	0.30	3.2	187.4	0	0	977.8	25.2	35.3	13.317
2022-09-08 16:00	0.30	3.04	187.1	0	0	977.4	24.8	36	13.315
2022-09-08 17:00	0.20	1.3	155.8	0	0	977	22.6	45.3	13.286
2022-09-08 18:00	0.30	0.91	145.8	0	0	977	20.7	53.7	13.084
2022-09-08 19:00	0.70	1.54	152.7	0	0	976.6	19.7	56.6	13.051
2022-09-08 20:00	0.60	2.17	164.5	0	0	975.9	19.7	56.3	13.051
2022-09-08 21:00	0.30	1.54	184.4	0	0	976	19.2	59.3	13.051
2022-09-08 22:00	0.20	1.86	175.9	0	0	975.9	18.1	65.1	13.05
2022-09-08 23:00	0.20	1.38	166.6	0	0	976	17.4	68	13.048
2022-09-09 0:00	0.40	1.85	176.5	0	0	975.9	16.3	72.4	13.045
2022-09-09 1:00	0.20	2.03	174.5	0	0	975.9	16.3	71.5	13.047
2022-09-09 2:00	0.10	2.62	175.1	0	0	975.6	16.8	71.1	13.044
2022-09-09 3:00	0.20	2.51	177.7	0	0	975.6	17.1	71.2	13.043
2022-09-09 4:00	0.40	2.57	182.3	0	0	975.6	17.9	69.9	13.042
2022-09-09 5:00	0.50	2.32	186.5	0	0	975.8	17.6	72.4	13.042
2022-09-09 6:00	0.10	2.21	184	0	0	976.3	17.4	75.7	13.056
2022-09-09 7:00	0.30	2.59	186.5	0	0	976.9	18.4	74.2	13.143
2022-09-09 8:00	0.30	3.09	196	0	0	977.4	20	70.7	13.383
2022-09-09 9:00	0.40	2.86	196.3	0	0	977.5	21.7	67.2	13.683
2022-09-09 10:00	0.20	2.77	197	0	0	977.8	22.9	64.6	13.654
2022-09-09 11:00	0.30	2.73	189.9	0	0	977.8	23.3	65	13.973
2022-09-09 12:00	0.40	3.09	192.4	0	0	977.7	23.6	64.4	14.01
2022-09-09 13:00	0.40	3.2	202.7	0	0	977.4	24.7	60.6	13.346
2022-09-09 14:00	0.20	2.91	224.6	0	0	977.4	25.3	59.4	13.321
2022-09-09 15:00	0.30	3.2	205.9	0	0	977.5	26.3	53.1	13.32
2022-09-09 16:00	0.20	2.69	197	0	0	977.4	26.9	51.6	13.318
2022-09-09 17:00	0.30	2.69	181.5	0	0	977.9	26.2	48.8	13.319
2022-09-09 18:00	0.30	1.56	173.1	0	0	978.1	23.8	56.2	13.148

2022-09-09 19:00	0.20	0.58	156.2	0	0	978.5	21	67.1	13.052
2022-09-09 20:00	0.20	1.24	172.4	0	0	979.1	19.7	72.2	13.049
2022-09-09 21:00	0.10	1.87	177.6	0	0	979.6	20.2	68.9	13.047
2022-09-09 22:00	0.20	1.87	181.4	0	0	979.9	19.9	68.2	13.045
2022-09-09 23:00	0.30	2.16	182.5	0	0	980	18.9	71.2	13.043
2022-09-10 0:00	0.30	1.37	175.6	0	0	980.3	17.9	75.6	13.043
2022-09-10 1:00	0.40	1.2	175.3	0	0	980.8	16.5	80.3	13.043
2022-09-10 2:00	0.40	1.27	169.8	0	0	980.9	15.5	82.1	13.042
2022-09-10 3:00	0.50	2.07	174	0	0	981.1	15.4	81.8	13.042
2022-09-10 4:00	0.40	1.7	180.7	0	0	981.5	15.1	83.1	13.042
2022-09-10 5:00	0.30	0.81	189.9	0	0	982.1	14.5	85.6	13.041
2022-09-10 6:00	0.10	0.53	209.1	0	0	982.4	14.9	85.1	13.047
2022-09-10 7:00	0.40	0.79	268	0	0	982.7	15.9	83	13.107
2022-09-10 8:00	0.30	1.21	287.3	0	0	983.6	16.8	80.2	13.196
2022-09-10 9:00	0.20	1.15	241	0	0	984	17.3	78	13.194
2022-09-10 10:00	0.40	1.64	254.4	0	0	984.3	17.9	75.5	13.279
2022-09-10 11:00	0.10	1.53	313.5	0	0	984.7	17.4	77.8	13.197
2022-09-10 12:00	0.30	1.76	315.7	0	0	985.1	15.7	82.3	13.105
2022-09-10 13:00	0.20	1.68	313.5	0	0	985.4	14.3	88.1	13.052
2022-09-10 14:00	0.30	1.12	328.7	0.1	0	985.5	13.7	89.2	13.044
2022-09-10 15:00	0.20	0.88	339.5	1.7	0	985.6	13.6	90.1	13.039
2022-09-10 16:00	0.30	0.98	341.6	0.1	0	985.4	13.5	90.4	13.042
2022-09-10 17:00	0.50	0.82	316.9	1	0	985.8	13.5	90.5	13.015
2022-09-10 18:00	0.30	0.73	314.2	0.9	0	986	13.6	90.5	13.013
2022-09-10 19:00	0.30	0.64	341.2	0.6	0	986.3	13.6	90.9	13.013
2022-09-10 20:00	0.00	0.54	359.1	0.1	0	986.6	13.6	90.9	13.013
2022-09-10 21:00	0.20	0.69	344.3	0	0	986.6	13.4	91.1	13.013
2022-09-10 22:00	0.40	0.91	337.5	0	0	986.8	13.3	91.2	13.011
2022-09-10 23:00	0.30	0.67	344.6	0	0	987.1	13.4	91.2	13.005
2022-09-11 0:00	0.20	0.99	336.8	0	0	987.1	13.3	91.1	13
2022-09-11 1:00	0.10	0.96	356	0	0	986.8	13.2	91.5	13.004
2022-09-11 2:00	0.30	1.03	359.2	0	0	986.5	13.1	91.2	13.002
2022-09-11 3:00	0.30	0.97	336.5	1	0	986.7	13	89.9	12.998
2022-09-11 4:00	0.30	0.8	350.3	0.8	0	986.6	12.8	89.8	12.998
2022-09-11 5:00	0.20	0.95	347.6	0	0	986.7	12.7	90	12.999
2022-09-11 6:00	0.30	0.97	340.5	0	0	987.1	12.7	90.5	13.009
2022-09-11 7:00	0.10	0.95	351.7	0	0	987.1	12.9	90.5	13.058
2022-09-11 8:00	0.20	1.34	6	0	0	986.7	13.1	89.6	13.084
2022-09-11 9:00	0.40	1.3	7.9	0	0	987	13.5	88.5	13.17
2022-09-11 10:00	0.10	1.27	354.5	0	0	987.1	14	86.7	13.226
2022-09-11 11:00	0.20	1.32	349.7	0	0	987	14.4	83.6	13.273
2022-09-11 12:00	0.20	1.26	346	0	0	986.8	14.4	82.9	13.247
2022-09-11 13:00	0.10	1.35	356.5	0	0	986.4	14.6	80.6	13.308
2022-09-11 14:00	0.30	1.43	11.2	0	0	985.9	15.5	74.5	13.485
2022-09-11 15:00	0.40	1.56	28.5	0	0	985.4	16.4	70.5	13.751
2022-09-11 16:00	0.30	1.76	34.5	0	0	985	17.2	66.1	13.736
2022-09-11 17:00	0.30	1.05	55.4	0	0	984.7	16.9	68	13.351
2022-09-11 18:00	0.20	0.31	57.7	0	0	984.6	15.2	79.1	13.134
2022-09-11 19:00	0.40	0.29	37.1	0	0	984.4	12.9	86	13.08
2022-09-11 20:00	0.10	0.25	98.7	0	0	984.2	11.5	87.3	13.072
2022-09-11 21:00	0.20	0.27	102.2	0	0	983.8	9.9	87.3	13.055
2022-09-11 22:00	0.20	0.33	35.3	0	0	983.6	9	87.6	13.043
2022-09-11 23:00	0.10	0.24	135.2	0	0	983.4	8.4	87.1	13.039
2022-09-12 0:00	0.10	0.28	96.7	0	0	983.1	7.5	87.2	13.033
2022-09-12 1:00	0.30	0.31	63.2	0	0	982.6	7.7	88.5	13.032
2022-09-12 2:00	1.00	0.4	346.8	0	0	982.3	9.3	88.9	13.029
2022-09-12 3:00	0.30	0.43	353.4	0	0	982	9.6	88.6	13.019
2022-09-12 4:00	0.20	0.47	75.9	0	0	981.9	9.1	88.2	13.012
2022-09-12 5:00	0.70	0.32	61.5	0	0	981.6	8.3	89	13.002
2022-09-12 6:00	0.50	0.38	136.7	0	0	981.7	7.9	88.7	13.013
2022-09-12 7:00	0.70	0.63	77.9	0	0	981.5	9.3	89.7	13.124
2022-09-12 8:00	0.30	0.98	66	0	0	981.4	12.2	88.9	13.384
2022-09-12 9:00	0.20	1.25	79.1	0	0	981.1	14.1	82.7	13.7
2022-09-12 10:00	0.30	1.42	52.2	0	0	980.7	16.7	69.3	13.896
2022-09-12 11:00	0.30	1.63	97.4	0	0	980.3	18.5	57.9	13.886
2022-09-12 12:00	0.10	1.94	141.3	0	0	979.7	19.5	59.1	13.316
2022-09-12 13:00	0.10	1.81	134.5	0	0	979	19.5	61.7	13.317
2022-09-12 14:00	0.30	1.64	168.4	0	0	978.5	21	57.1	13.314
2022-09-12 15:00	0.20	1.59	148.5	0	0	978.1	21.2	57.1	13.308
2022-09-12 16:00	0.20	1.3	144.6	0	0	977.8	21.2	57.1	13.313
2022-09-12 17:00	0.40	0.96	148.1	0	0	977.7	20.5	59.4	13.309
2022-09-12 18:00	0.30	0.66	129.7	0	0	977.6	17.8	74.5	13.118
2022-09-12 19:00	0.20	0.27	80.1	0	0	977.8	15.5	84.9	13.051
2022-09-12 20:00	0.30	0.3	96.6	0	0	977.9	13.9	89.3	13.047
2022-09-12 21:00	0.20	0.29	39	0	0	977.6	12.5	89.4	13.043
2022-09-12 22:00	0.30	0.28	133.6	0	0	977.2	11.4	88.6	13.039
2022-09-12 23:00	0.40	0.23	41.5	0	0	976.7	10.8	88.3	13.038
2022-09-13 0:00	0.10	0.26	174.9	0	0	976.5	10.4	88.3	13.041
2022-09-13 1:00	0.30	0.23	168.7	0	0	976.2	9.9	88.5	13.042
2022-09-13 2:00	0.30	0.22	88.7	0	0	976.2	9.4	88.4	13.042
2022-09-13 3:00	0.20	0.21	122.4	0	0	976.1	9.7	88.9	13.042
2022-09-13 4:00	0.20	0.23	265	0	0	976.1	9.9	88.5	13.04
2022-09-13 5:00	0.30	0.3	204.9	0	0	976	9.6	88	13.037
2022-09-13 6:00	0.20	0.26	340	0	0	975.8	9.7	89.6	13.059
2022-09-13 7:00	0.30	0.43	263.8	0	0	975.8	11.7	91	13.156
2022-09-13 8:00	0.30	0.72	213.1	0	0	975.9	13.1	91.6	13.242
2022-09-13 9:00	0.30	0.46	174.4	0	0	976	14.8	89.8	13.431
2022-09-13 10:00	0.10	0.84	110.8	0	0	976	18.1	76.1	13.855
2022-09-13 11:00	0.10	0.76	344.8	0	0	975.7	20.2	60.7	13.969
2022-09-13 12:00	0.40	1.22	244.6	0	0	975.5	21.1	55.3	13.557

2022-09-13 13:00	0.20	1.91	268	0	0	975.4	22.2	51.1	13.322
2022-09-13 14:00	0.50	2.15	295.8	0	0	975.3	22.3	48.7	13.322
2022-09-13 15:00	0.20	1.38	309.1	0	0	975.4	22.1	47.1	13.32
2022-09-13 16:00	0.60	1.29	319.8	0	0	975.4	21.3	49.4	13.316
2022-09-13 17:00	0.20	2.12	325.8	0	0	975.9	20.5	54.9	13.285
2022-09-13 18:00	0.10	2.88	327.5	0	0	976.9	17.6	65.8	13.069
2022-09-13 19:00	0.10	2.77	333.1	0	0	978.2	14.8	72.3	13.04
2022-09-13 20:00	0.40	2.94	329.2	0	0	979.3	13.2	74.2	13.024
2022-09-13 21:00	0.30	2.32	336.3	0	0	979.9	11.4	82.3	13.014
2022-09-13 22:00	0.20	2.04	349.9	0	0	980.5	10.8	81.9	13.015
2022-09-13 23:00	0.30	1.91	350.1	0	0	981.1	10.3	79.5	13.011
2022-09-14 0:00	0.00	1.77	337.4	0	0	981.6	9.8	77.8	13.004
2022-09-14 1:00	0.20	1.96	340	0	0	982	9	75.8	12.997
2022-09-14 2:00	0.20	2.19	339.2	0	0	982.6	7.5	72.8	12.982
2022-09-14 3:00	0.30	2.29	337.5	0	0	983.4	6.3	75.3	12.971
2022-09-14 4:00	0.30	1.7	342.6	0	0	984.1	6.4	73.9	12.974
2022-09-14 5:00	0.20	1.52	344.9	0	0	984.8	6.5	72.9	12.976
2022-09-14 6:00	0.20	1.57	344.8	0	0	985.8	6.6	70.4	12.984
2022-09-14 7:00	0.20	1.49	346.3	0	0	986.5	7	68.9	13.029
2022-09-14 8:00	0.40	1.93	350.8	0	0	987.1	7.5	68.9	13.15
2022-09-14 9:00	0.30	2.31	354.5	0	0	987.7	8.7	63.2	13.474
2022-09-14 10:00	0.30	2.17	338.6	0	0	988.2	10	61.3	13.607
2022-09-14 11:00	0.10	2.63	332.3	0	0	988.6	10.7	59.4	13.743
2022-09-14 12:00	0.20	2.17	333.4	0	0	988.9	11.2	58.4	13.77
2022-09-14 13:00	0.20	2.35	325.7	0	0	989.1	11.3	58.3	14.027
2022-09-14 14:00	0.20	1.95	328.4	0	0	989.2	11.3	57.9	13.404
2022-09-14 15:00	0.20	2.13	328.3	0	0	989.5	11	57.9	13.321
2022-09-14 16:00	0.50	1.48	337.3	0	0	989.8	11	58.7	13.306
2022-09-14 17:00	0.20	1.29	331.6	0	0	990.1	11.1	57.3	13.217
2022-09-14 18:00	0.40	0.88	304	0	0	990.6	10.3	63.5	13.055
2022-09-14 19:00	0.10	0.91	308.7	0	0	991	9.2	71.8	13.033
2022-09-14 20:00	0.40	0.75	286.6	0	0	991.4	8.3	76	13.037
2022-09-14 21:00	0.10	0.49	299.7	0	0	991.5	8.1	78.8	13.036
2022-09-14 22:00	0.10	0.61	312.1	0	0	991.9	7.8	81.1	13.03
2022-09-14 23:00	0.00	0.65	289.5	0	0	992.2	7.3	83.1	13.026
2022-09-15 0:00	0.20	0.32	301.6	0	0	992.4	5.7	82.3	13.025
2022-09-15 1:00	0.10	0.32	232.4	0	0	992.8	3	83.8	13.017
2022-09-15 2:00	0.10	0.37	187.9	0	0	993	1.5	85.9	13.016
2022-09-15 3:00	0.20	0.32	133.9	0	0	993.2	0.4	86.2	13.012
2022-09-15 4:00	0.10	0.31	173.2	0	0	993.4	-0.3	85.7	13.009
2022-09-15 5:00	0.20	0.26	98.2	0	0	993.5	-0.6	85.9	13.011
2022-09-15 6:00	0.30	0.23	129.6	0	0	993.6	-0.2	86.2	13.031
2022-09-15 7:00	0.20	0.61	220	0	0	994.1	1.4	86.4	13.107
2022-09-15 8:00	0.30	0.7	174.5	0	0	994.7	5.7	83	13.364
2022-09-15 9:00	0.10	1	137.5	0	0	994.3	7.8	78.3	13.295
2022-09-15 10:00	0.30	0.81	136.5	0	0	993.4	8.2	76.4	13.127
2022-09-15 11:00	0.40	1.25	157.8	0.5	0	992.9	8.4	77.5	13.135
2022-09-15 12:00	0.30	0.7	199.6	0.6	0	993	8.4	80.8	13.074
2022-09-15 13:00	0.60	0.91	139.7	0.5	0	992.5	8.3	80.9	13.139
2022-09-15 14:00	0.50	0.62	115.7	0.3	0	991.2	8	79.3	13.102
2022-09-15 15:00	0.10	0.79	95.1	0.4	0	990.7	7.8	80.9	13.087
2022-09-15 16:00	0.30	0.81	95.2	0.6	0	990.5	7.5	83.5	13.046
2022-09-15 17:00	0.50	1.06	68.5	0.8	0	989.9	6.8	86	12.993
2022-09-15 18:00	0.20	1.2	51.4	0.2	0	989.9	6.4	87.8	12.976
2022-09-15 19:00	0.50	1.28	43.7	0.1	0	990.4	5.9	87.6	12.977
2022-09-15 20:00	0.70	0.91	68.6	0	0	990.5	5.8	87.5	12.999
2022-09-15 21:00	0.50	1.07	99.9	0.1	0	990.2	5.8	87.7	12.988
2022-09-15 22:00	0.40	0.69	76.4	0	0	989.9	6	87.3	13.004
2022-09-15 23:00	0.30	0.68	55.5	0	0	990	6	87.8	13.006
2022-09-16 0:00	0.50	0.74	83	0	0	990	6	87.9	13.003
2022-09-16 1:00	0.40	0.83	57.1	0	0	990.1	6.1	87.9	13
2022-09-16 2:00	0.40	1.08	48.2	0	0	990.3	6.1	88.2	12.996
2022-09-16 3:00	0.30	1.32	42	0	0	990.6	6.1	88.9	12.995
2022-09-16 4:00	0.20	1.05	47.8	0	0	991.3	6.1	88.4	12.996
2022-09-16 5:00	0.50	1.06	45.2	0	0	991.6	5.3	88.5	12.991
2022-09-16 6:00	0.80	1.17	54.7	0	0	991.9	4.4	88.1	13.005
2022-09-16 7:00	0.40	1.42	69.8	0	0	992.4	5.3	85.9	13.121
2022-09-16 8:00	0.30	2.12	87.5	0	0	992.6	7.5	78.2	13.522
2022-09-16 9:00	0.40	2.06	92	0	0	992.9	8.5	75.8	13.418
2022-09-16 10:00	0.20	1.87	94.2	0	0	993	9.3	73.7	13.477
2022-09-16 11:00	0.20	2.15	117.6	0	0	992.7	10.2	67.8	13.605
2022-09-16 12:00	0.20	2.07	124.8	0	0	992.2	10.8	65.8	13.711
2022-09-16 13:00	0.30	2.16	136.6	0	0	991.7	12.5	60.1	13.945
2022-09-16 14:00	0.20	1.78	112.1	0	0	991.2	13.5	55.7	13.668
2022-09-16 15:00	0.50	1.99	135	0	0	990.9	13.6	55.7	13.321
2022-09-16 16:00	0.20	1.73	132.8	0	0	990.6	13.2	58.2	13.323
2022-09-16 17:00	0.40	1.46	174.4	0	0	990.7	12.6	63.6	13.289
2022-09-16 18:00	0.40	0.49	156	0	0	990.8	10.6	73.2	13.095
2022-09-16 19:00	0.40	0.37	80.4	0	0	990.8	8.3	81.4	13.053
2022-09-16 20:00	1.50	0.42	92.4	0	0	990.9	6.9	84.4	13.036
2022-09-16 21:00	0.40	0.5	95.1	0	0	990.6	6.1	86.5	13.029
2022-09-16 22:00	0.20	0.46	96.4	0	0	990.4	5.9	86.1	13.031
2022-09-16 23:00	0.30	0.43	87.5	0	0	990	5.8	86.6	13.027
2022-09-17 0:00	0.20	0.5	75.3	0	0	989.8	6.1	86	13.021
2022-09-17 1:00	0.20	0.56	77.2	0	0	989.4	6.4	86.2	13.02
2022-09-17 2:00	0.10	0.74	83.2	0	0	988.8	7.2	85.4	13.016
2022-09-17 3:00	0.20	0.53	88.8	0	0	988.3	7.8	84	13.015
2022-09-17 4:00	0.30	0.82	88	0	0	987.6	8.4	82.6	13.014
2022-09-17 5:00	0.40	1.3	113.3	0	0	987.2	9.1	78.9	13.01
2022-09-17 6:00	0.30	1.25	114.8	0	0	987	9.5	78.2	13.011

2022-09-17 7:00	0.50	1.77	124.5	0.4	0	986.5	9.7	80	13.013
2022-09-17 8:00	0.20	1.69	110.1	2.6	0	985.8	9.4	86.9	13.008
2022-09-17 9:00	0.40	1.56	122	4	0	985.3	9.7	88.6	13.013
2022-09-17 10:00	0.20	1.52	111.3	3.4	0	984.7	10.1	88.8	13.025
2022-09-17 11:00	0.40	1.57	111.8	1.1	0	984.1	10.9	88.6	13.119
2022-09-17 12:00	0.10	1.63	91.8	3.9	0	983.1	11.6	88.5	13.066
2022-09-17 13:00	0.20	1.78	83.3	6.2	0	982.2	11.6	89.2	13.022
2022-09-17 14:00	0.20	1.58	44.2	10.8	0	981.8	11.7	89.2	13.01
2022-09-17 15:00	0.70	1.67	57.7	5.2	0	981.3	11.8	89.4	13.016
2022-09-17 16:00	0.30	1.64	89.4	5	0	980.8	12.1	89.3	13.007
2022-09-17 17:00	0.50	1.42	75.1	1.7	0	980.5	12.1	89.4	13.008
2022-09-17 18:00	0.20	1.52	46.6	0.8	0	980.7	12	89.3	13
2022-09-17 19:00	0.30	1.71	49	0	0	980.6	11.8	89.6	13.004
2022-09-17 20:00	0.30	1.85	46.7	0	0	980.4	11.3	89.5	12.995
2022-09-17 21:00	0.10	1.78	43.2	0	0	980.4	11	89	12.994
2022-09-17 22:00	0.10	1.38	43.7	1.8	0	980.5	10.8	89.1	12.989
2022-09-17 23:00	0.40	1.73	43.1	0	0	980.3	10.7	89.2	12.991
2022-09-18 0:00	0.30	1.62	51	0	0	980.2	10.6	89.7	12.991
2022-09-18 1:00	0.80	1.41	70.9	0	0	979.7	10.6	89.9	12.995
2022-09-18 2:00	0.40	1.47	58.2	0	0	979.6	10.7	89.7	12.988
2022-09-18 3:00	0.60	1.64	59.8	3.7	0	979.6	10.5	90	12.97
2022-09-18 4:00	0.60	1.85	53.5	4.9	0	979.4	10.4	89.7	12.962
2022-09-18 5:00	0.20	1.71	61.9	0.3	0	979.3	10.6	88.9	12.967
2022-09-18 6:00	0.30	1.89	69.2	0	0	979.3	10.7	88.4	12.963
2022-09-18 7:00	0.30	1.79	66.6	0	0	979.6	10.6	87.8	12.969
2022-09-18 8:00	0.60	1.59	50.8	1.9	0	979.9	10.3	88.6	12.969
2022-09-18 9:00	0.40	1.54	51.4	6.1	0	980.1	10.3	88.9	12.975
2022-09-18 10:00	0.70	1.8	55	1.3	0	980.2	10.7	88.6	13.026
2022-09-18 11:00	0.30	2.01	68.7	0.1	0	980	10.9	88	13.051
2022-09-18 12:00	0.30	1.75	71	1.7	0	980	11	88.2	13.049
2022-09-18 13:00	0.40	1.88	69.9	2.2	0	979.8	11.3	88.3	13.113
2022-09-18 14:00	0.50	1.88	72.8	1	0	979.5	11.5	88.3	13.145
2022-09-18 15:00	0.10	1.55	82.6	0	0	979.7	11.5	87.9	13.035
2022-09-18 16:00	0.30	1.61	69.8	0	0	979.5	11.6	88.7	13.022
2022-09-18 17:00	0.20	1.29	79.8	0	0	979.7	11.5	88.8	12.949
2022-09-18 18:00	0.20	1.35	79.8	0	0	979.3	11.3	89.1	12.912
2022-09-18 19:00	0.10	1.71	83.1	0	0	979	11.2	89.3	12.891
2022-09-18 20:00	0.30	1.83	82.6	0	0	978.6	11	89.4	12.879
2022-09-18 21:00	0.20	2	101.9	0	0	978.2	10.8	89.5	12.86
2022-09-18 22:00	0.30	1.76	98.8	0	0	977.6	10.8	89.8	12.855
2022-09-18 23:00	0.30	1.52	112.6	0	0	977.2	11	89.8	12.853
2022-09-19 0:00	0.40	1.84	119.4	0	0	976.4	11	90	12.849
2022-09-19 1:00	0.30	1.17	97.3	0	0	976	11.1	90.4	12.853
2022-09-19 2:00	0.20	1.27	72	0	0	975.2	11.1	90.5	12.842
2022-09-19 3:00	0.20	1.51	83.8	0.4	0	975	10.9	90.3	12.824
2022-09-19 4:00	0.30	1.12	91.8	0	0	975	10.9	89.7	12.822
2022-09-19 5:00	0.30	0.9	73.8	0.1	0	974.8	10.9	89.3	12.824
2022-09-19 6:00	0.20	1.14	86.7	0	0	975	10.9	89.5	12.821
2022-09-19 7:00	0.30	1.03	100	8.7	0	975.3	11.1	89.1	12.819
2022-09-19 8:00	0.40	1.85	112.4	7.2	0	974.8	11.1	89.5	12.864
2022-09-19 9:00	0.20	0.79	321.6	0.5	0	975.6	12.1	88.4	12.947
2022-09-19 10:00	0.30	0.48	345.4	0.4	0	975.7	12.5	88.3	12.959
2022-09-19 11:00	0.30	0.8	301.2	0.8	0	975.7	12.8	88.3	12.978
2022-09-19 12:00	0.30	1.17	288.7	0.7	0	975.8	13.5	88.9	13.108
2022-09-19 13:00	0.50	1.22	328.2	0	0	976	14.2	88.7	13.144
2022-09-19 14:00	0.30	1.58	322.2	0	0	976.4	13.9	89.7	13.007
2022-09-19 15:00	0.30	1.8	320.8	0	0	976.8	13.7	89.6	13.147
2022-09-19 16:00	0.10	1.55	314.4	0	0	977.6	13.6	88.9	13.006
2022-09-19 17:00	0.40	1.05	313.1	0	0	978.3	13.4	89.5	12.91
2022-09-19 18:00	0.20	0.48	339.8	0	0	978.8	13.2	90.3	12.852
2022-09-19 19:00	0.10	0.59	341.3	0	0	979.1	13.1	90.3	12.837
2022-09-19 20:00	0.10	0.5	324.1	0	0	979.3	13	90.6	12.825
2022-09-19 21:00	0.10	0.42	337.8	0	0	979.6	12.9	90.6	12.821
2022-09-19 22:00	0.30	0.4	354.4	0	0	979.7	12.7	90.6	12.822
2022-09-19 23:00	0.30	0.39	321.8	0	0	980	12.7	90.5	12.82
2022-09-20 0:00	0.20	0.5	286.9	0	0	980	12.7	89.9	12.814
2022-09-20 1:00	0.40	0.75	267.2	0	0	980.1	12.6	89.2	12.813
2022-09-20 2:00	0.30	0.82	268.7	0	0	980.1	12.3	88.6	12.815
2022-09-20 3:00	0.20	0.71	268.1	0	0	980.4	12.2	89	12.816
2022-09-20 4:00	0.20	0.62	217.3	0	0	980.7	12.2	89.4	12.817
2022-09-20 5:00	0.10	0.63	204.2	0	0	980.6	11.9	89.9	12.814
2022-09-20 6:00	0.20	0.62	190.5	0	0	980.6	11.9	90.3	12.82
2022-09-20 7:00	0.20	1	143.9	0	0	980.1	12.2	91	12.875
2022-09-20 8:00	0.30	1.4	159	0	0	980	13.1	90.3	12.998
2022-09-20 9:00	0.40	2	172.7	0	0	980.3	14.4	87.4	13.377
2022-09-20 10:00	0.40	2.19	179.6	0	0	980.5	16.2	80.8	13.591
2022-09-20 11:00	0.20	1.9	186.6	0	0	979.8	17.2	75.8	13.394
2022-09-20 12:00	0.30	2.29	178.9	0	0	979.2	17.9	72.6	13.627
2022-09-20 13:00	0.10	2.65	181.8	0	0	978.6	19.1	67.5	13.804
2022-09-20 14:00	0.20	2.41	173.4	0	0	978	20.2	63.6	13.754
2022-09-20 15:00	0.30	2.42	162.1	0	0	977.5	21.2	60.4	13.309
2022-09-20 16:00	0.30	2.19	159	0	0	976.9	20.8	63	13.276
2022-09-20 17:00	0.20	1.4	151.6	0	0	976.7	19.8	68.9	13.237
2022-09-20 18:00	0.50	1.63	147.8	0	0	976.2	18.3	75.9	13.099
2022-09-20 19:00	0.50	1.93	157.1	0	0	975.9	17.7	77.7	13.083
2022-09-20 20:00	0.60	2.73	167.6	0	0	975.2	17.4	78.9	13.077
2022-09-20 21:00	0.30	1.96	178.5	0	0	974.9	17	81.2	13.066
2022-09-20 22:00	0.20	1.59	177.6	0	0	974.4	16.3	83.5	13.045
2022-09-20 23:00	0.20	2.19	177.5	0	0	974	16.6	82.9	13.019
2022-09-21 0:00	0.30	2.41	186	0	0	973.4	17.1	81.5	12.981

2022-09-21 1:00	0.50	1.78	186.8	0	0	973.1	16.7	83	12.949
2022-09-21 2:00	0.30	2.15	179.4	0	0	972.5	16.1	85.4	12.934
2022-09-21 3:00	0.30	2.01	183	0	0	971.7	16	85.9	12.92
2022-09-21 4:00	0.40	1.33	186	0	0	971.1	15.8	87.2	12.904
2022-09-21 5:00	0.10	1.98	187.1	2.5	0	970.5	15.8	88.5	12.902
2022-09-21 6:00	0.50	1.56	182.3	0.6	0	969.9	15.6	91	12.899
2022-09-21 7:00	0.30	1.89	190.5	0	0	968.7	15.5	91.7	12.904
2022-09-21 8:00	0.30	1.76	214.9	0.2	0	969.2	15.9	91.3	12.944
2022-09-21 9:00	0.40	1.45	215.2	3	0	968.8	16.1	91.1	12.91
2022-09-21 10:00	0.40	1.88	229.8	0	0	968.2	16.8	89.9	13.188
2022-09-21 11:00	0.40	3.02	259.2	5.7	0	968.1	15.6	85.9	13.027
2022-09-21 12:00	0.50	3.48	252.6	0	0	967.6	16.6	79	13.839
2022-09-21 13:00	0.10	3.62	266.8	0	0	967.1	17.2	63.7	13.591
2022-09-21 14:00	0.10	3.7	239.7	0	0	966.7	18.1	57.3	13.869
2022-09-21 15:00	0.30	3.44	252.7	4.9	0	966.6	16.6	61.2	13.266
2022-09-21 16:00	0.40	3.52	284.9	2.3	0	967.7	13	80	13.138
2022-09-21 17:00	0.20	2.33	282	0.3	0	968.7	11.4	83.5	13.082
2022-09-21 18:00	0.10	2.9	305.2	2	0	969.5	10.2	86.6	13.05
2022-09-21 19:00	0.20	3.38	319.5	0.5	0	970.8	7.8	86.1	13.039
2022-09-21 20:00	0.20	2.72	315.1	0	0	971.7	7.1	86.3	13.029
2022-09-21 21:00	0.20	2.49	309.3	0	0	972.5	7	87.3	13.018
2022-09-21 22:00	0.20	2.63	304.6	0	0	973	6.9	86.3	13.006
2022-09-21 23:00	0.50	3.03	310	0	0	973.5	6.4	86.3	12.977
2022-09-22 0:00	0.20	2.27	322.1	0	0	974	5.6	86	12.946
2022-09-22 1:00	0.30	2.94	316.8	0	0	974.7	5.2	86.8	12.891
2022-09-22 2:00	0.20	2.77	317.4	0	0	975.4	4.6	86.5	12.865
2022-09-22 3:00	0.20	2.42	317.1	0	0	976	4.1	87.3	12.844
2022-09-22 4:00	0.40	2.91	316.8	0	0	976.8	3.5	86.9	12.834
2022-09-22 5:00	0.30	3.25	315	0	0	977.7	2.8	85.7	12.824
2022-09-22 6:00	0.20	2.83	316.7	0	0	978.9	2	85.6	12.821
2022-09-22 7:00	0.20	3.3	306.9	0	0	980	1.6	84.4	12.868
2022-09-22 8:00	0.40	3.12	310.6	0	0	980.8	1.8	85	12.981
2022-09-22 9:00	0.30	3.58	319.7	0	0	981.5	2.4	81.3	13.403
2022-09-22 10:00	0.20	3.79	315.2	0	0	982	3.5	76.5	13.759
2022-09-22 11:00	0.30	3.69	314.8	0.1	0	982.4	4.3	72	13.764
2022-09-22 12:00	0.20	3.86	305.7	0.1	0	982.7	4.9	70.8	13.777
2022-09-22 13:00	0.40	3.83	313.3	0.2	0	982.8	5.4	69.2	13.378
2022-09-22 14:00	0.40	3.7	311	0.1	0	983.1	5.6	71.2	13.294
2022-09-22 15:00	0.30	4.05	313.7	0	0	983.5	6.2	61.6	13.291
2022-09-22 16:00	0.10	3.43	318.2	0	0	983.7	7	53.4	13.287
2022-09-22 17:00	0.40	2.88	312	0	0	984.2	6.4	57.4	13.174
2022-09-22 18:00	0.30	1.54	304.2	0	0	984.6	5.4	63.8	13.075
2022-09-22 19:00	0.30	0.88	262.7	0	0	984.9	4.7	71.6	13.068
2022-09-22 20:00	0.20	1.13	267.9	0	0	985.2	4.2	76	13.048
2022-09-22 21:00	0.40	1.33	274	0	0	985.4	4.2	77.3	13.032
2022-09-22 22:00	0.30	1.01	269.6	0	0	985.6	4.3	78.7	13.032
2022-09-22 23:00	0.30	0.97	273.6	0	0	986	4.4	79.7	13.026
2022-09-23 0:00	0.40	0.59	263.4	0	0	986.1	4.5	79.6	13.025
2022-09-23 1:00	0.50	1.05	235.4	0	0	986.2	3.3	83.5	13.006
2022-09-23 2:00	0.30	1.45	252.5	0	0	986.1	3.1	84.3	12.987
2022-09-23 3:00	0.20	1.33	254	0	0	986.3	3.5	83.1	12.984
2022-09-23 4:00	0.30	1.32	257.2	0	0	986.4	3.7	83.3	12.979
2022-09-23 5:00	0.10	1.52	252.1	0	0	986.4	4	83.4	12.95
2022-09-23 6:00	0.20	1.22	232.1	0	0	986.6	4.2	83.6	12.928
2022-09-23 7:00	0.20	1.71	249.7	0	0	986.8	4.8	81.2	12.993
2022-09-23 8:00	0.40	2.61	265.2	0	0	987.1	7.3	72.2	13.44
2022-09-23 9:00	0.30	2.83	264.7	0	0	986.9	9.5	64.6	13.89
2022-09-23 10:00	0.10	3.55	266	0	0	986.6	11.6	57.9	13.921
2022-09-23 11:00	0.30	3.28	265.8	0	0	986.2	13	52.6	13.487
2022-09-23 12:00	0.20	3.29	260.9	0	0	985.6	13.7	49.7	13.322
2022-09-23 13:00	0.10	3.06	255.8	0	0	984.9	14.8	45.1	13.322
2022-09-23 14:00	0.30	2.99	254.5	0	0	984.3	15.6	41.5	13.321
2022-09-23 15:00	0.20	3.08	246.8	0	0	983.8	16	41.2	13.317
2022-09-23 16:00	0.30	2.76	223.7	0	0	983.3	15.8	42.3	13.314
2022-09-23 17:00	0.10	2.31	223.6	0	0	983.2	14.9	45	13.289
2022-09-23 18:00	0.20	1.08	212.6	0	0	983.3	12.3	53.6	13.1
2022-09-23 19:00	0.10	0.84	204.4	0	0	983.6	9.7	62.3	13.071
2022-09-23 20:00	0.30	1.14	239.5	0	0	983.9	9.2	65.3	13.064
2022-09-23 21:00	0.60	0.77	183.5	0	0	983.7	7.2	72.4	13.061
2022-09-23 22:00	0.20	0.58	188.3	0	0	983.5	5.4	78.9	13.054
2022-09-23 23:00	0.30	0.75	176.3	0	0	983.7	4.1	81.9	13.042
2022-09-24 0:00	0.10	0.79	196	0	0	983.8	4.1	81	13.031
2022-09-24 1:00	0.20	0.62	189.8	0	0	983.3	3	83.4	13.028
2022-09-24 2:00	0.10	0.91	184.3	0	0	983	2.1	85.5	13.016
2022-09-24 3:00	0.20	0.74	193.6	0	0	982.7	2.4	84.4	13.003
2022-09-24 4:00	0.10	0.72	174.4	0	0	982.6	1.7	85.9	13.002
2022-09-24 5:00	0.10	0.67	181.4	0	0	982.2	1.3	86	12.997
2022-09-24 6:00	0.10	0.56	177.7	0	0	981.9	0.9	86.2	13.006
2022-09-24 7:00	0.60	0.97	195.3	0	0	982	3.5	84.8	13.099
2022-09-24 8:00	0.20	1.38	225.2	0	0	982	7.8	76.9	13.523
2022-09-24 9:00	0.40	1.23	255.4	0	0	981.8	11.6	68.7	13.911
2022-09-24 10:00	0.10	1.64	262	0	0	981.1	13.9	59.7	13.851
2022-09-24 11:00	0.20	2.49	250.4	0	0	980.4	15.2	53.9	13.884
2022-09-24 12:00	0.50	2.13	235.4	0	0	979.9	15.7	51.2	13.339
2022-09-24 13:00	0.40	1.38	245.8	0	0	978.9	16.4	49.4	13.319
2022-09-24 14:00	0.30	1.94	228.5	0	0	978.2	16.4	49.1	13.318
2022-09-24 15:00	0.30	1.81	216.3	0	0	977.6	16	50.7	13.298
2022-09-24 16:00	0.30	1.22	194.7	0	0	977.2	15.1	57	13.24
2022-09-24 17:00	0.30	0.75	193.9	0	0	977	14.3	60.9	13.139
2022-09-24 18:00	0.30	0.26	127.6	0	0	976.8	12	74.6	13.068

2022-09-24 19:00	0.10	0.5	188.4	0	0	976.6	10.6	77.1	13.053
2022-09-24 20:00	0.10	0.52	199.7	0	0	976.2	10	77.2	13.043
2022-09-24 21:00	0.20	0.56	192.7	0	0	975.7	8.8	81.4	13.035
2022-09-24 22:00	0.20	0.54	198	0	0	975	7.7	84	13.031
2022-09-24 23:00	0.30	0.49	184.6	0	0	974.5	7.5	84.1	13.032
2022-09-25 0:00	0.30	0.45	181.1	0	0	973.9	7.2	86	13.029
2022-09-25 1:00	0.00	0.81	185.6	0	0	973.5	7.5	86	13.023
2022-09-25 2:00	0.00	0.73	198	0	0	972.9	7.8	84.2	13.02
2022-09-25 3:00	0.20	0.6	211.2	0	0	972.4	7.6	83.8	13.018
2022-09-25 4:00	0.40	0.48	232.2	0	0	971.9	7.4	83.6	13.016
2022-09-25 5:00	0.20	0.62	184.6	0	0	971.6	6.3	86.4	13.007
2022-09-25 6:00	0.20	0.51	171.7	0	0	971.4	5.4	86.8	13.011
2022-09-25 7:00	0.30	0.59	202.9	0	0	971	6.4	86.7	13.053
2022-09-25 8:00	0.40	0.81	218.3	0	0	970.9	8.2	84.6	13.188
2022-09-25 9:00	0.20	0.94	172.8	0	0	970.6	9.8	82	13.403
2022-09-25 10:00	0.10	1.01	167	0	0	970	11.4	78.1	13.485
2022-09-25 11:00	0.20	0.94	226.6	0	0	969.6	13.8	69.1	13.63
2022-09-25 12:00	0.30	1.48	230.2	0	0	969.1	15	62.4	13.7
2022-09-25 13:00	0.30	1.12	246	0	0	968.6	15.7	56.7	13.635
2022-09-25 14:00	0.20	0.97	332.7	0	0	968.2	16	56.9	13.469
2022-09-25 15:00	0.40	0.85	0.9	0.3	0	968	15.4	60.3	13.36
2022-09-25 16:00	0.10	0.98	186.8	0.5	0	968	13.9	75.8	13.143
2022-09-25 17:00	0.50	1.09	176.4	0	0	968.2	12.6	78.8	13.1
2022-09-25 18:00	0.20	0.41	163.5	0	0	968.3	11.7	82.9	13.055
2022-09-25 19:00	0.10	0.65	159.8	0	0	968.3	10.9	85.8	13.037
2022-09-25 20:00	0.50	0.42	183	0	0	968.3	10.5	86.1	13.031
2022-09-25 21:00	0.20	0.58	192.4	0	0	968.1	10.2	86.4	13.024
2022-09-25 22:00	0.20	0.35	148.2	0	0	967.9	9	86.8	13.024
2022-09-25 23:00	0.20	0.35	224.5	0	0	967.7	8.8	87.3	13.02
2022-09-26 0:00	0.50	0.23	98.5	0	0	967.4	7.8	86.9	13.017
2022-09-26 1:00	0.20	0.21	223.7	0	0	967.1	7	86.1	13.016
2022-09-26 2:00	0.30	0.29	275.7	0	0	966.9	6.8	87.3	13.017
2022-09-26 3:00	0.00	0.34	173.8	0	0	966.9	7.1	87	13.011
2022-09-26 4:00	0.10	0.31	114.8	0	0	967	6.5	87.2	13.006
2022-09-26 5:00	0.10	0.27	230.7	0	0	967.1	6.7	87	13.003
2022-09-26 6:00	0.10	0.47	175.2	0	0	967.5	6.9	88.1	12.999
2022-09-26 7:00	0.30	0.64	195.3	0.4	0	967.7	7.8	88.2	13.007
2022-09-26 8:00	0.30	0.64	0.7	0	0	968.2	8.9	87.6	13.039
2022-09-26 9:00	0.20	0.51	326.4	0.1	0	968.5	9.7	86.2	13.166
2022-09-26 10:00	0.40	0.96	333	0	0	968.7	11.7	85.2	13.514
2022-09-26 11:00	0.20	1.39	5.3	0	0	968.7	13.6	73	13.759
2022-09-26 12:00	0.50	1.81	3.6	0	0	968.4	15.2	57.1	13.691
2022-09-26 13:00	0.20	1.7	350.1	0	0	968.2	16	48.8	13.831
2022-09-26 14:00	0.30	2.4	353.9	0	0	968.4	16.5	44.8	13.721
2022-09-26 15:00	0.20	2.55	341	0	0	968.9	16.1	48.8	13.32
2022-09-26 16:00	0.20	2.04	343.7	0	0	969.5	14.7	55.9	13.205
2022-09-26 17:00	0.30	1.42	333.7	0	0	970	13.7	60.1	13.146
2022-09-26 18:00	0.30	1.59	334	0	0	970.5	12.6	64.2	13.046
2022-09-26 19:00	0.20	1.8	336.5	0	0	971.3	11.6	68.5	13.034
2022-09-26 20:00	0.40	1.78	334.4	0	0	971.8	10.9	72.2	13.027
2022-09-26 21:00	0.40	2.1	336.4	0	0	972.2	10.8	74.6	13.027
2022-09-26 22:00	0.10	2.09	342.4	0	0	972.5	10.5	75.3	13.027
2022-09-26 23:00	0.20	2.24	345.5	0	0	972.9	9.6	79.7	13.016
2022-09-27 0:00	0.30	2.27	336.7	0	0	973.2	8.4	86.2	13.002
2022-09-27 1:00	0.20	1.83	331.1	0	0	973.5	8	87.7	12.998
2022-09-27 2:00	0.30	2.13	333.6	0	0	973.8	7.6	88.3	12.989
2022-09-27 3:00	0.10	2.05	330.5	0.1	0	974.3	7.2	88.3	12.967
2022-09-27 4:00	0.10	2.1	331.2	0.1	0	974.8	6.7	88.4	12.965
2022-09-27 5:00	0.30	2.22	329.4	0	0	975.4	6.3	88.1	12.953
2022-09-27 6:00	0.30	2.09	328.5	0.5	0	976.2	6.1	88.4	12.961
2022-09-27 7:00	0.30	2.31	329.7	0.1	0	976.9	6.1	88.4	12.988
2022-09-27 8:00	0.30	2.98	335.2	0.5	0	977.7	6	87.6	13.012
2022-09-27 9:00	0.10	2.81	333.2	0.1	0	978.5	5.8	88	13.073
2022-09-27 10:00	0.20	2.95	329.2	0.8	0	979.4	5.4	87.7	13.073
2022-09-27 11:00	0.40	3.24	332.6	0	0	980.2	5.1	87.2	13.053
2022-09-27 12:00	0.30	3.17	331	0.1	0	981.1	5	87.2	13.04
2022-09-27 13:00	0.30	3.04	330.1	0	0	981.7	5.1	87.9	13.09
2022-09-27 14:00	0.10	3.08	333.7	0	0	982.5	5.1	87.1	13.104
2022-09-27 15:00	0.30	3.05	329.9	0	0	983.3	5	87.3	13.053
2022-09-27 16:00	0.30	2.86	331.7	0	0	984.2	4.6	87.5	12.982
2022-09-27 17:00	0.30	3.16	333	0	0	985.2	4.3	87	12.946
2022-09-27 18:00	0.30	2.64	332.1	0	0	986.1	4.1	86.3	12.938
2022-09-27 19:00	0.30	2.36	327	0	0	986.8	4	85.9	12.939
2022-09-27 20:00	0.30	1.99	324.6	0	0	987.4	4	85.7	12.945
2022-09-27 21:00	0.20	2.26	317.1	0	0	987.9	4.1	86	12.941
2022-09-27 22:00	0.20	2.41	321.2	0	0	988.4	4.1	86.2	12.94
2022-09-27 23:00	0.40	2.29	319.7	0	0	988.9	4.1	87.1	12.938
2022-09-28 0:00	0.20	1.78	325.1	0	0	989.3	4.2	88.3	12.94
2022-09-28 1:00	0.30	2.28	338.7	0	0	990	3.9	88	12.933
2022-09-28 2:00	0.40	2.2	341.2	0	0	990.7	3.4	86.8	12.927
2022-09-28 3:00	0.40	1.94	329	0	0	991.4	3.1	85.7	12.924
2022-09-28 4:00	0.40	2.12	333.1	0	0	992.1	2.2	84.2	12.909
2022-09-28 5:00	0.30	1.73	336.3	0	0	993	1.8	84.7	12.907
2022-09-28 6:00	0.10	1.88	331.5	0	0	994	1.2	84.6	12.896
2022-09-28 7:00	0.40	2.23	324.1	0	0	994.8	1	81.6	12.975
2022-09-28 8:00	0.20	2.42	329.7	0	0	995.4	1.5	80.5	13.205
2022-09-28 9:00	0.20	2.75	324.7	0	0	996	3.1	72.7	13.698
2022-09-28 10:00	0.30	2.37	323.3	0	0	996.4	3.5	66.2	13.388
2022-09-28 11:00	0.50	2.44	327.2	0	0	996.8	3.7	61.5	13.38
2022-09-28 12:00	0.30	2.46	313.2	0	0	996.9	4.2	58.8	13.554

2022-09-28 13:00	0.30	2.59	315.3	0	0	996.8	4.1	58.6	13.553
2022-09-28 14:00	0.30	2.66	305.5	0	0	996.7	4.5	58.1	13.656
2022-09-28 15:00	0.30	2.58	282.1	0	0	996.6	4.6	58.6	13.683
2022-09-28 16:00	0.10	2.21	279.5	0	0	996.5	4.6	59	13.567
2022-09-28 17:00	0.40	1.6	271.3	0	0	996.4	4.1	60.9	13.288
2022-09-28 18:00	0.20	0.85	213.7	0	0	996.4	2.3	68.7	13.044
2022-09-28 19:00	0.20	0.73	197.4	0	0	996.3	0.6	75.2	13.021
2022-09-28 20:00	0.30	0.65	178.8	0	0	996.2	-0.4	80.4	13.004
2022-09-28 21:00	0.30	0.64	183.6	0	0	996.4	-0.9	81.7	12.992
2022-09-28 22:00	0.20	1.11	181.8	0	0	996.5	-1.3	83.5	12.974
2022-09-28 23:00	0.30	0.97	185.8	0	0	996.2	-1.5	83.3	12.97
2022-09-29 0:00	0.30	1.33	181.7	0	0	996	-1.8	84.9	12.956
2022-09-29 1:00	0.30	1.43	181.4	0	0	995.9	-1.7	85.8	12.95
2022-09-29 2:00	0.30	1.15	181.7	0	0	995.9	-1.3	85.3	12.945
2022-09-29 3:00	0.10	1.14	182.4	0	0	995.9	-1.5	85.8	12.945
2022-09-29 4:00	0.10	1.4	189.4	0	0	995.9	-1.6	86.8	12.939
2022-09-29 5:00	0.30	1.11	194.9	0	0	995.9	-0.7	86.3	12.941
2022-09-29 6:00	0.20	1.44	184.9	0	0	996	-0.5	86.6	12.939
2022-09-29 7:00	0.40	1.67	198.1	0	0	996.1	0.6	84.3	13.025
2022-09-29 8:00	0.20	1.79	218.3	0	0	996.2	3.2	76	13.316
2022-09-29 9:00	0.20	2.28	225.7	0	0	996	7.3	60.6	13.788
2022-09-29 10:00	0.30	3.2	222.5	0	0	995.5	11	48.2	13.956
2022-09-29 11:00	0.20	3	208.2	0	0	995	13.2	43.7	13.654
2022-09-29 12:00	0.20	3.48	218.5	0	0	994.4	14.6	39.9	13.323
2022-09-29 13:00	0.40	3.7	215.4	0	0	993.7	15.7	36.5	13.323
2022-09-29 14:00	0.70	3.52	213.9	0	0	993.1	16.5	33.5	13.322
2022-09-29 15:00	0.30	3.12	216.5	0	0	992.7	16.7	34.1	13.32
2022-09-29 16:00	0.20	2.87	203	0	0	992.4	16.5	36.4	13.317
2022-09-29 17:00	0.40	1.55	201.2	0	0	992.2	14.6	43.1	13.207
2022-09-29 18:00	0.40	1.09	182.8	0	0	992	11.7	53.9	13.069
2022-09-29 19:00	0.20	1.21	181.8	0	0	991.8	10	61.7	13.038
2022-09-29 20:00	0.50	1.15	181.5	0	0	991.7	8.9	68.1	13.025
2022-09-29 21:00	0.20	1.45	196.4	0	0	991.8	8.7	69.7	13.016
2022-09-29 22:00	0.20	1.35	201.1	0	0	992.1	8.9	67.5	13.015
2022-09-29 23:00	0.10	1.16	190.7	0	0	992.2	8	67.6	13.012
2022-09-30 0:00	0.60	1.24	179.7	0	0	991.9	7	70.3	13.006
2022-09-30 1:00	0.40	1.1	173.8	0	0	991.8	6.4	74.7	13.003
2022-09-30 2:00	0.20	1.16	177.3	0	0	991.7	6.1	76.8	12.998
2022-09-30 3:00	0.30	1.19	183.6	0	0	991.5	6.5	76.8	12.996
2022-09-30 4:00	0.30	1.39	186.1	0	0	991.4	6.3	78.7	12.986
2022-09-30 5:00	0.40	1.55	186.9	0	0	991.3	5.9	80.6	12.979
2022-09-30 6:00	0.30	1.54	192.6	0	0	991	5.6	82.5	12.971
2022-09-30 7:00	0.10	2.12	199	0	0	990.8	7	79.9	13.085
2022-09-30 8:00	0.40	2.91	217.6	0	0	990.7	9.7	71.2	13.468
2022-09-30 9:00	0.20	2.94	225	0	0	990.7	12.2	63.1	13.56
2022-09-30 10:00	0.20	2.51	226.3	0	0	990.3	12.5	62.5	13.55
2022-09-30 11:00	0.10	2.42	216.8	0	0	989.9	14.9	54.6	13.828
2022-09-30 12:00	0.30	2.64	231.1	0	0	989.5	16	50.1	13.546
2022-09-30 13:00	0.20	3.22	244.3	0	0	989	16.8	46.4	13.622
2022-09-30 14:00	0.40	2.5	255.2	0	0	988.8	16.4	48.6	13.391
2022-09-30 15:00	0.30	2.95	256	0	0	988.6	17.6	45.7	13.676
2022-09-30 16:00	0.30	2.61	286.5	0	0	988.6	17.2	46.6	13.265
2022-09-30 17:00	0.20	1.68	276.5	0	0	988.5	16.4	51.9	13.202
2022-09-30 18:00	0.20	0.65	254.8	0	0	988.6	15.1	58.5	13.061
2022-09-30 19:00	0.30	0.29	357.8	0	0	988.7	13	73.5	13.051
2022-09-30 20:00	0.30	0.58	311	0	0	988.9	12.5	75.5	13.048
2022-09-30 21:00	0.50	1.86	15.9	0	0	989.5	12.6	70.4	13.042
2022-09-30 22:00	0.20	2.04	13.8	0	0	990.1	11	72	13.032
2022-09-30 23:00	0.20	1.87	9.6	0	0	990.9	9.4	74.8	13.029
2022-10-01 0:00	0.20	1.87	7.3	0	0	991.3	8.3	76.4	13.025
2022-10-01 1:00	0.30	2.21	9.8	0	0	991.6	7.2	77.2	13.022
2022-10-01 2:00	0.20	2.23	8.6	0	0	992.2	6.3	80.3	13.019
2022-10-01 3:00	0.30	2.17	18.1	0	0	992.8	5.4	79.4	13.013
2022-10-01 4:00	0.20	2.3	16.7	0	0	993.7	4.6	81.8	13.007
2022-10-01 5:00	0.20	2.16	13.4	0	0	994.5	4	78	13.003
2022-10-01 6:00	0.30	2.29	10.6	0	0	995.4	3	77.5	12.997
2022-10-01 7:00	0.40	2.68	19.9	0	0	996.3	2.5	74.9	13.027
2022-10-01 8:00	0.20	2.36	19	0	0	996.9	2.8	75.1	13.131
2022-10-01 9:00	0.20	2.35	30.8	0	0	997.4	4.8	67.1	13.657
2022-10-01 10:00	0.30	2.26	12.6	0	0	997.9	5	65	13.559
2022-10-01 11:00	0.30	2.15	354.6	0	0	998.1	6.3	61.4	13.64
2022-10-01 12:00	0.20	2.56	23.2	0	0	997.8	7.3	56.2	13.927
2022-10-01 13:00	0.20	2.21	6.8	0	0	997.5	8.7	51.9	13.75
2022-10-01 14:00	0.20	2.34	11.5	0	0	997.2	9.3	48	13.326
2022-10-01 15:00	0.30	2.2	13.4	0	0	997.2	9.6	46.9	13.324
2022-10-01 16:00	0.10	1.94	358.1	0	0	997.4	9.4	47.5	13.324
2022-10-01 17:00	0.30	1.29	1.5	0	0	997.7	8.1	49.6	13.269
2022-10-01 18:00	0.30	0.53	348.3	0	0	998	5.2	64.4	13.027
2022-10-01 19:00	0.10	0.43	349.5	0	0	998.2	3	72.7	13.009
2022-10-01 20:00	0.20	0.27	23.7	0	0	998.4	0.5	80.6	13.009
2022-10-01 21:00	0.30	0.3	346	0	0	998.7	-0.2	81.5	13.005
2022-10-01 22:00	0.20	0.45	359.6	0	0	998.8	-0.6	81.2	12.999
2022-10-01 23:00	0.30	0.37	60.2	0	0	999.1	-1.4	81.4	12.999
2022-10-02 0:00	0.50	0.46	92.1	0	0	999.4	-1.4	81.4	12.993
2022-10-02 1:00	0.30	0.44	58.7	0	0	999.6	-1.9	83.4	12.992
2022-10-02 2:00	0.20	0.59	51.3	0	0	999.7	-2.4	85	12.981
2022-10-02 3:00	0.30	0.27	87.5	0	0	999.6	-3.2	83	12.986
2022-10-02 4:00	0.20	0.33	243.7	0	0	999.8	-3.8	80.6	12.973
2022-10-02 5:00	0.40	0.29	64.8	0	0	1000.3	-4.3	81.4	12.975
2022-10-02 6:00	0.20	0.27	121.8	0	0	1000.6	-5	80.8	12.981

2022-10-02 7:00	0.70	0.28	59.5	0	0	1001.1	-2.2	81.8	13.15
2022-10-02 8:00	0.40	0.95	127.7	0	0	1001	0.9	79.5	13.547
2022-10-02 9:00	0.30	1.11	136.1	0	0	1001.2	4.8	69	13.919
2022-10-02 10:00	0.40	1.47	150.2	0	0	1001	7.1	54.4	13.976
2022-10-02 11:00	0.40	1.67	161.2	0	0	1000.1	8.6	47.4	13.725
2022-10-02 12:00	0.30	1.67	183.6	0	0	999.2	9.9	41.7	13.326
2022-10-02 13:00	0.20	1.85	241.5	0	0	998.2	11.1	38.6	13.327
2022-10-02 14:00	0.20	1.77	224.3	0	0	997.2	12	35.5	13.326
2022-10-02 15:00	0.40	1.64	207.9	0	0	996.7	12.4	33.3	13.324
2022-10-02 16:00	0.30	1.64	182.8	0	0	996.2	12.3	34.8	13.324
2022-10-02 17:00	0.30	0.92	158.7	0	0	995.9	10.9	42.1	13.224
2022-10-02 18:00	0.40	0.57	150.2	0	0	995.6	7.5	55.9	13.037
2022-10-02 19:00	0.30	0.41	130.8	0	0	995.4	4.9	68.1	13.027
2022-10-02 20:00	0.30	0.97	157.7	0	0	995.1	5.3	64.9	13.016
2022-10-02 21:00	0.40	1.24	179.3	0	0	994.8	5.3	62.5	13.007
2022-10-02 22:00	0.40	1.14	176.7	0	0	994.7	4.6	65.6	13.005
2022-10-02 23:00	0.30	1.4	177.5	0	0	994	4	68.3	12.995
2022-10-03 0:00	0.10	0.95	177.4	0	0	993.8	4	70	13.005
2022-10-03 1:00	0.30	1.15	182.5	0	0	993.3	4.1	70.5	12.997
2022-10-03 2:00	0.30	1.04	181.1	0	0	992.9	4.4	69.1	13
2022-10-03 3:00	0.30	0.84	162.2	0	0	992.6	3.8	72.9	13
2022-10-03 4:00	0.20	1.33	177.5	0	0	992.6	3.8	73.5	12.985
2022-10-03 5:00	0.20	0.92	177.3	0	0	992.7	4.2	71.6	12.992
2022-10-03 6:00	0.10	1.1	180.4	0	0	992.8	3.7	71.6	12.987
2022-10-03 7:00	0.20	1.45	188.9	0	0	992.7	4.7	69.3	13.07
2022-10-03 8:00	0.30	2.23	223.9	0	0	992.7	8.3	63.5	13.422
2022-10-03 9:00	0.20	2.85	236.8	0	0	992.4	11.8	61.4	13.822
2022-10-03 10:00	0.10	2.88	241.8	0	0	992.3	14.2	59.3	13.96
2022-10-03 11:00	0.30	2.72	232.8	0	0	991.8	16.1	55.7	13.971
2022-10-03 12:00	0.40	2.47	221	0	0	991.1	18.3	51.4	13.33
2022-10-03 13:00	0.20	2.86	232	0	0	990.4	19.5	48	13.325
2022-10-03 14:00	0.30	3.1	213.9	0	0	989.7	20.3	44.8	13.324
2022-10-03 15:00	0.10	3.12	214.4	0	0	988.9	20.6	44	13.322
2022-10-03 16:00	0.40	2.91	205.6	0	0	988.4	20.4	44.1	13.322
2022-10-03 17:00	0.50	1.65	195.1	0	0	988.5	18.9	49.7	13.265
2022-10-03 18:00	0.50	1.58	186.5	0	0	988.4	16.2	58.8	13.05
2022-10-03 19:00	0.30	1.23	188.6	0	0	988.4	14.5	64.9	13.04
2022-10-03 20:00	0.30	1.15	194.7	0	0	988.3	13.2	70	13.029
2022-10-03 21:00	0.30	1.21	199.9	0	0	988.1	12.4	73.3	13.023
2022-10-03 22:00	0.30	1.01	202.2	0	0	988.1	12.4	74.2	13.027
2022-10-03 23:00	0.50	1.27	214.7	0	0	987.9	12.8	72.2	13.029
2022-10-04 0:00	0.30	1.39	222.7	0	0	987.6	12.7	70	13.019
2022-10-04 1:00	0.20	1.03	209.7	0	0	987.5	11.9	69.7	13.022
2022-10-04 2:00	0.30	1.15	230.8	0	0	987.3	11.4	70.1	13.018
2022-10-04 3:00	0.10	1.1	230	0	0	987	10.9	72	13.016
2022-10-04 4:00	0.30	1.02	192	0.3	0	986.7	10.4	75.1	13.004
2022-10-04 5:00	0.20	1.09	179.2	0	0	986.6	9.8	79.3	13.003
2022-10-04 6:00	0.20	1.13	183.1	0	0	986.7	9.4	80.4	13.002
2022-10-04 7:00	0.40	0.84	180.5	0	0	986.8	9.7	80	13.031
2022-10-04 8:00	0.20	1.12	167.8	0	0	986.8	10.4	79.9	13.072
2022-10-04 9:00	0.40	1.54	194.8	0	0	986.6	11.8	77.1	13.156
2022-10-04 10:00	0.10	2.04	210.1	0	0	986.3	13.3	73.8	13.463
2022-10-04 11:00	0.20	2.04	217.9	0	0	985.9	16	64.8	13.924
2022-10-04 12:00	0.40	2.07	222.9	0	0	985.4	18	59	13.897
2022-10-04 13:00	0.30	2.22	242.1	0	0	984.7	18.7	58.1	13.324
2022-10-04 14:00	0.20	2.5	264.4	0	0	984.5	18.8	58.9	13.322
2022-10-04 15:00	0.30	2.32	267	0	0	984.5	18.4	61.7	13.219
2022-10-04 16:00	0.30	1.57	275.4	0	0	984.4	17.5	65.7	13.079
2022-10-04 17:00	0.40	1.53	281.2	0	0	984.8	16.6	70.3	13.042
2022-10-04 18:00	0.20	1.7	280.8	2	0	985.3	14.7	84.7	13.041
2022-10-04 19:00	0.20	0.89	243	0.2	0	985.3	14	90	13.04
2022-10-04 20:00	0.40	0.43	182.3	0	0	984.9	13.7	90.8	13.027
2022-10-04 21:00	0.10	0.72	221.5	0	0	984.5	13.7	91.1	13.025
2022-10-04 22:00	0.20	0.82	199	0	0	984.2	13.7	90.9	13.023
2022-10-04 23:00	0.30	0.9	181.3	0	0	983.9	13.4	91.2	13.025
2022-10-05 0:00	0.30	1.05	184.8	0	0	983.6	13.4	91.2	13.019
2022-10-05 1:00	0.10	1.26	197.6	0	0	983.3	13.3	90.3	13.018
2022-10-05 2:00	0.10	1.08	218.2	0	0	982.8	13.3	89.3	13.013
2022-10-05 3:00	0.50	1.08	188.3	0	0	982.3	12.8	89.8	13.008
2022-10-05 4:00	0.20	1.1	183.1	0	0	982	12.7	89.9	13.007
2022-10-05 5:00	0.20	1.04	176.1	0	0	981.5	12.5	89.9	13.006
2022-10-05 6:00	0.10	1.34	170.9	0	0	980.9	12.1	90	13.005
2022-10-05 7:00	0.20	1.76	176.6	0	0	980.3	12.4	89.6	13.034
2022-10-05 8:00	0.10	2.09	177.7	0	0	979.7	12.7	88.8	13.03
2022-10-05 9:00	0.20	1.72	182.3	0	0	979.3	13.2	88.4	13.055
2022-10-05 10:00	0.40	1.95	187.6	0	0	978.9	13.8	86.3	13.096
2022-10-05 11:00	0.40	2.17	192	0	0	978.5	14.7	82.2	13.146
2022-10-05 12:00	0.40	2.3	194	0	0	978.3	15.1	79.4	13.101
2022-10-05 13:00	0.40	2.8	198.6	0	0	977.7	15.7	76.1	13.198
2022-10-05 14:00	0.20	3.18	214.9	0	0	977.4	17.6	68.1	13.406
2022-10-05 15:00	0.20	3.41	228.5	0	0	977.1	18.6	63.6	13.32
2022-10-05 16:00	0.30	3.35	259.6	0	0	977.1	18.2	64.7	13.109
2022-10-05 17:00	0.40	2.86	265.8	2.6	0	977.6	16.2	77	13.033
2022-10-05 18:00	0.50	1.99	244.2	0.7	0	977.9	14.1	88.1	13.011
2022-10-05 19:00	0.20	1.38	235.3	0	0	978	13.6	88.9	13.008
2022-10-05 20:00	0.10	1.18	240.2	0	0	978.2	13.4	89.5	13.006
2022-10-05 21:00	0.20	1.07	222.7	0.6	0	978.3	13.4	89	13.006
2022-10-05 22:00	0.10	1.57	314.1	0.1	0	978.4	12.7	88.5	13
2022-10-05 23:00	0.20	2.21	356.8	0.5	0	978.6	10.3	87.9	12.975
2022-10-06 0:00	0.40	2.41	1.4	0.2	0	979	8.4	88.5	12.958

2022-10-06 1:00	0.30	2.34	1.6	0	0	979.5	6.6	87.5	12.964
2022-10-06 2:00	0.20	1.76	7.4	0	0	979.7	6.2	88.2	12.969
2022-10-06 3:00	0.20	2.19	20.5	0	0	979.6	5.9	88.4	12.95
2022-10-06 4:00	0.30	2.43	22.2	0.5	0	979.8	5.7	88.5	12.943
2022-10-06 5:00	0.30	2.76	19.3	0.1	0	979.9	5.4	87.9	12.947
2022-10-06 6:00	0.20	2.54	6.8	5.6	0	980.8	5	88	12.938
2022-10-06 7:00	0.10	2.95	11.9	3.8	0	981.2	4.3	87.3	12.938
2022-10-06 8:00	0.30	2.82	14.9	3.6	0	982.1	3.6	87.1	12.941
2022-10-06 9:00	0.30	3.19	14.5	2.5	0	982.2	3.2	86.7	12.953
2022-10-06 10:00	0.20	2.64	10.2	0.1	0	982.8	3.3	87.1	13.018
2022-10-06 11:00	0.20	2.95	3.8	0.5	0	983.2	3.8	86.8	13.075
2022-10-06 12:00	0.30	3.81	8.4	0.3	0	983.7	3.5	85.2	13.09
2022-10-06 13:00	0.30	3.05	8.4	0.1	0	984.4	2.8	86.6	13.02
2022-10-06 14:00	0.40	2.52	9.1	0.8	0	984.9	2.7	87.2	13.002
2022-10-06 15:00	0.40	2.83	4.5	0.5	0	985.2	2.8	86.7	12.978
2022-10-06 16:00	0.30	3.28	3.1	0.9	0	985.6	2.8	86.6	12.925
2022-10-06 17:00	0.50	3.52	356.7	0.3	0	986	2.4	86.4	12.892
2022-10-06 18:00	0.30	3.6	358.1	0.1	0	986.8	2.1	85	12.871
2022-10-06 19:00	0.10	3.18	354.8	0	0	987.4	1.7	84.6	12.865
2022-10-06 20:00	0.30	3.54	346.9	0	0	987.9	1.3	85.7	12.844
2022-10-06 21:00	0.20	3.76	341.8	0	0	988.3	1	85.6	12.83
2022-10-06 22:00	0.30	3.66	339.5	0	0	988.9	0.5	87	12.813
2022-10-06 23:00	0.20	3.13	336.7	0	0	989.3	0.3	87.6	12.799
2022-10-07 0:00	0.20	2.99	332.8	0	0	989.5	0.1	87.9	12.793
2022-10-07 1:00	0.30	2.86	331.6	0	0	989.8	0	88.2	12.785
2022-10-07 2:00	0.20	3.08	332.8	0	0	990	-0.1	87.8	12.771
2022-10-07 3:00	0.20	3.02	333.8	0	0	990.2	-0.2	87.1	12.763
2022-10-07 4:00	0.40	2.88	333.9	0	0	990.5	-0.3	87.8	12.762
2022-10-07 5:00	0.30	3.27	335.9	0	0	990.8	-0.3	86.6	12.76
2022-10-07 6:00	0.20	3.25	330.8	0	0	991	-0.3	86.3	12.758
2022-10-07 7:00	0.50	3.31	331.6	0	0	991.5	-0.3	85.7	12.798
2022-10-07 8:00	0.30	3.05	329.3	0	0	991.8	0	84.3	12.911
2022-10-07 9:00	0.40	3.16	328.7	0	0	991.7	0.5	80.9	13.256
2022-10-07 10:00	0.20	3.38	330	0.1	0	991.6	0.9	78.4	13.361
2022-10-07 11:00	0.40	3.41	329	0	0	991.3	1.1	75	13.554
2022-10-07 12:00	0.40	3.01	335.1	0.1	0	990.8	1.2	71.9	13.405
2022-10-07 13:00	0.30	3.04	314.7	0	0	990.2	1.8	68.9	13.441
2022-10-07 14:00	0.20	2.94	314.6	0	0	989.8	1.9	63.2	13.234
2022-10-07 15:00	0.30	2.76	300.3	0	0	989.4	1.8	64.2	13.148
2022-10-07 16:00	0.40	2.31	307.7	0	0	989.2	1.4	66.1	13.044
2022-10-07 17:00	0.30	2.58	275.3	0	0	989.1	1	65.9	12.927
2022-10-07 18:00	0.20	2.49	268.1	0	0	988.7	0.5	66.3	12.85
2022-10-07 19:00	0.30	2.65	251.9	0	0	988.3	0.3	65.9	12.81
2022-10-07 20:00	0.30	2.41	243.1	0	0	987.7	0.1	67	12.791
2022-10-07 21:00	0.40	1.37	193	0	0	987.2	-1.3	72.1	12.772
2022-10-07 22:00	0.30	1.5	188.8	0	0	986.6	-2.2	77.5	12.765
2022-10-07 23:00	0.20	1.93	201.6	0	0	985.9	-1.7	79.3	12.76
2022-10-08 0:00	0.20	2.26	205.5	0	0	984.9	-1.3	80	12.752
2022-10-08 1:00	0.40	2.38	199.1	0	0	983.8	-1.3	80.4	12.744
2022-10-08 2:00	0.30	2.55	198.3	0	0	982.6	-0.9	80.4	12.734
2022-10-08 3:00	0.40	2.49	203.2	0	0	981.7	-0.6	80.4	12.729
2022-10-08 4:00	0.20	2.44	207	0	0	980.9	-0.1	79.3	12.728
2022-10-08 5:00	0.20	2.52	209.2	0	0	980.2	0.4	78.5	12.726
2022-10-08 6:00	0.30	2.54	208.2	0	0	979.7	0.3	84.1	12.724
2022-10-08 7:00	0.30	2.52	208.8	0	0	979.1	0.7	85.7	12.737
2022-10-08 8:00	0.20	2.9	216	0	0	978.6	1.4	84.6	12.786
2022-10-08 9:00	0.60	2.96	221.6	0	0	978.2	2	83.6	12.792
2022-10-08 10:00	0.20	3.19	225.3	0	0	977.9	2.6	82.3	12.835
2022-10-08 11:00	0.20	3.38	228.6	0	0	977.5	3.1	83.1	12.855
2022-10-08 12:00	0.20	2.94	226.3	0.1	0	976.9	3.4	84	12.854
2022-10-08 13:00	0.20	3.15	229.1	0	0	976.4	4.2	81.4	13.035
2022-10-08 14:00	0.30	3.67	227.2	0	0	975.9	5.2	75.7	13.07
2022-10-08 15:00	0.30	3.49	220.9	0	0	975.3	6.4	69.8	13.54
2022-10-08 16:00	0.20	3.01	270.4	3.1	0	975.6	4.8	74.1	13.001
2022-10-08 17:00	0.30	1.68	281.4	0.2	0	976.3	2.5	85.1	12.818
2022-10-08 18:00	0.30	1.15	288.7	0	0	976.7	2.8	84	12.79
2022-10-08 19:00	0.40	1.97	320.7	0	0	977.1	2.4	84.5	12.76
2022-10-08 20:00	0.20	1.41	297.8	0	0	977.5	2.1	82.6	12.758
2022-10-08 21:00	0.30	1.17	257.6	0	0	977.9	1.7	81.6	12.746
2022-10-08 22:00	0.30	1.43	264	0	0	978.3	1.1	83	12.735
2022-10-08 23:00	0.30	1.38	264	0	0	978.6	0.8	81.9	12.731
2022-10-09 0:00	0.20	1.6	272.4	0	0	978.9	0.7	82.2	12.724
2022-10-09 1:00	0.30	2.09	270.9	0	0	979.2	0.6	82	12.72
2022-10-09 2:00	0.20	2.04	273.6	0	0	979.4	0.3	82.4	12.718
2022-10-09 3:00	0.30	2.01	275.8	0	0	979.8	0.2	82.7	12.711
2022-10-09 4:00	0.40	1.76	263.4	0	0	980.2	-0.3	83.5	12.703
2022-10-09 5:00	0.30	1.7	266.2	0	0	980.6	-0.8	84.3	12.698
2022-10-09 6:00	0.20	1.65	283.2	0	0	981.3	-1.1	85.2	12.702
2022-10-09 7:00	0.40	1.75	277	0	0	981.9	-0.3	83.7	12.873
2022-10-09 8:00	0.40	2.43	276.1	0	0	983	0.3	82.9	12.893
2022-10-09 9:00	0.30	2.74	291.5	0	0	983.7	1.1	79.5	13.178
2022-10-09 10:00	0.20	2.77	308.4	0	0	984.3	2.1	74.6	13.24
2022-10-09 11:00	0.40	2.43	277.5	0.2	0	984.8	2.5	75.6	13.316
2022-10-09 12:00	0.20	2.64	287.2	0.9	0	985	2.5	76.9	13.628
2022-10-09 13:00	0.30	3.44	292.3	0.1	0	984.8	3.6	69.9	13.748
2022-10-09 14:00	0.20	3.2	267.4	0	0	984.7	4.6	61.5	13.674
2022-10-09 15:00	0.30	2.53	270.2	0	0	984.7	5	57.9	13.204
2022-10-09 16:00	0.40	3.14	267	0	0	985	4.2	63.5	13.136
2022-10-09 17:00	0.30	1.46	255.7	0	0	985.4	3.6	66.6	12.942
2022-10-09 18:00	0.20	1.51	274.8	0	0	986	3.1	68	12.889

2022-10-09 19:00	0.50	1.78	282	0	0	986.3	2.8	65.3	12.863
2022-10-09 20:00	0.20	1.38	273.9	0	0	986.4	2.5	66	12.848
2022-10-09 21:00	0.30	1.23	275.5	0	0	986.5	2.2	67	12.84
2022-10-09 22:00	0.30	1.41	282.5	0	0	986.8	1.8	67.9	12.817
2022-10-09 23:00	0.10	0.8	250.5	0	0	986.8	1.9	67.3	12.818
2022-10-10 0:00	0.40	0.87	235.3	0	0	986.8	1.8	67.7	12.805
2022-10-10 1:00	0.30	1.07	245.4	0	0	986.7	1.6	68.9	12.78
2022-10-10 2:00	0.30	1.19	249.6	0	0	986.7	1.3	70.6	12.77
2022-10-10 3:00	0.10	1.13	248.2	0	0	986.7	1.2	72.6	12.765
2022-10-10 4:00	0.30	1.03	235.4	0	0	986.9	1.1	74.8	12.76
2022-10-10 5:00	0.20	0.96	213.2	0	0	987.2	0.8	75.4	12.753
2022-10-10 6:00	0.30	1.05	213.2	0	0	987.6	0.4	75.8	12.742
2022-10-10 7:00	0.30	1.25	198.7	0	0	988.1	0.4	74.9	12.885
2022-10-10 8:00	0.30	2.29	224.4	0	0	988.2	2.8	61.6	13.276
2022-10-10 9:00	0.40	3.3	235	0	0	988.4	4.1	56	13.628
2022-10-10 10:00	0.30	3.8	243.7	0	0	988.2	5.3	52.9	13.869
2022-10-10 11:00	0.20	3.43	241.7	0	0	987.8	6.6	49	13.931
2022-10-10 12:00	0.30	3.55	217.7	0	0	987.1	8	44.2	13.446
2022-10-10 13:00	0.30	3.41	213.2	0	0	986.4	9.1	39.5	13.315
2022-10-10 14:00	0.30	3.32	221	0	0	985.9	9.8	38.8	13.319
2022-10-10 15:00	0.20	3.19	205.4	0	0	985.3	10.1	37.8	13.317
2022-10-10 16:00	0.10	2.82	198.5	0	0	984.8	9.6	38.1	13.306
2022-10-10 17:00	0.20	2.07	184	0	0	984.4	7.6	45.8	13.138
2022-10-10 18:00	0.30	1.48	176	0	0	984.2	5.4	54.5	13.056
2022-10-10 19:00	0.30	1.62	172.6	0	0	983.8	3.3	63.4	13.02
2022-10-10 20:00	0.30	1.66	177.9	0	0	983.7	2.4	66.9	12.974
2022-10-10 21:00	0.30	1.68	184.9	0	0	983.9	2.7	68.8	12.92
2022-10-10 22:00	0.20	1.52	176.5	0	0	983.8	2	72.8	12.872
2022-10-10 23:00	0.30	1.73	179.9	0	0	983.4	1.1	77.1	12.841
2022-10-11 0:00	0.40	2.15	185.3	0	0	983.1	1.6	77.2	12.828
2022-10-11 1:00	0.30	2.14	186.2	0	0	982.9	1.9	75.5	12.814
2022-10-11 2:00	0.20	2.23	188.8	0	0	982.6	2	76.1	12.8
2022-10-11 3:00	0.30	2.01	183.9	0	0	982.3	1.7	77.3	12.797
2022-10-11 4:00	0.40	1.97	183.7	0	0	982.4	1.4	78.3	12.789
2022-10-11 5:00	0.10	1.64	172.2	0	0	982.5	0.3	82.3	12.78
2022-10-11 6:00	0.40	1.66	176.9	0	0	982.7	0.4	85.1	12.771
2022-10-11 7:00	0.40	2.28	190.1	0	0	983	2.6	82.8	12.883
2022-10-11 8:00	0.30	3.21	194.4	0	0	982.8	5.3	75.6	13.289
2022-10-11 9:00	0.50	3.48	197.8	0	0	982.6	8.9	66.2	13.692
2022-10-11 10:00	0.30	3.64	194.3	0	0	982.3	12.5	57.6	13.952
2022-10-11 11:00	0.20	3.94	186.7	0	0	981.4	15.1	50.7	13.956
2022-10-11 12:00	0.40	3.67	192.3	0	0	980.5	17.2	44.9	13.324
2022-10-11 13:00	0.30	4.52	200.9	0	0	979.8	18.6	39.9	13.32
2022-10-11 14:00	0.20	4.44	196.2	0	0	979.4	19.2	38.7	13.317
2022-10-11 15:00	0.40	4.04	197.7	0	0	978.9	19.8	37.3	13.313
2022-10-11 16:00	0.40	3.49	185	0	0	978.6	19.2	39.6	13.291
2022-10-11 17:00	0.40	2.71	181.2	0	0	978.5	17.2	45	13.116
2022-10-11 18:00	0.40	2.63	173.6	0	0	978.5	15	52.5	13.09
2022-10-11 19:00	0.30	2.84	174.5	0	0	978.5	14.3	54.6	13.08
2022-10-11 20:00	0.40	3.01	175.5	0	0	978.4	13.4	57.5	13.076
2022-10-11 21:00	0.40	2.38	172.6	0	0	978.1	12.5	60.7	13.064
2022-10-11 22:00	0.30	2.8	166.9	0	0	977.5	11.8	63.6	13.047
2022-10-11 23:00	0.40	2.97	168.8	0	0	977	11.3	65.8	13.03
2022-10-12 0:00	0.40	2.81	168	0	0	976.5	10.7	67.2	13.019
2022-10-12 1:00	0.80	2.75	163.5	0	0	975.8	10.5	66.7	13.015
2022-10-12 2:00	0.60	2.43	159.6	0	0	975.2	9.8	70.4	13.003
2022-10-12 3:00	0.50	2.39	158.8	0	0	974.4	9.7	73.2	12.989
2022-10-12 4:00	0.70	2.98	151.7	0	0	973.6	10	75.7	12.973
2022-10-12 5:00	0.50	2.82	156.5	0	0	973	10.4	78.4	12.945
2022-10-12 6:00	0.30	1.97	136.4	0	0	972.4	9.8	82.1	12.911
2022-10-12 7:00	0.60	1.79	135.6	0	0	971.8	9.6	85	12.91
2022-10-12 8:00	0.50	2.36	151	0	0	971.2	12.3	82.4	12.953
2022-10-12 9:00	0.70	3.57	163.2	0	0	970.5	14	78.5	12.961
2022-10-12 10:00	0.30	4.44	168.2	0	0	969.7	14.4	75.7	12.973
2022-10-12 11:00	0.50	3.92	163.7	0	0	969	14.6	74.4	13.024
2022-10-12 12:00	0.60	4.28	155.9	0	0	967.9	14.8	74.4	13.02
2022-10-12 13:00	1.00	4.47	159	0	0	966.9	14.7	76.3	12.998
2022-10-12 14:00	0.80	3.67	154.8	0	0	966.1	14.8	76.7	12.933
2022-10-12 15:00	0.50	4.15	155.6	0	0	965.3	14.9	76.3	12.898
2022-10-12 16:00	0.90	4.31	157.2	0	0	964.4	14.7	76.1	12.868
2022-10-12 17:00	0.80	4.02	158.4	0	0	963.8	14.9	74.1	12.864
2022-10-12 18:00	0.60	4.95	161.9	0	0	964	15.1	73.7	12.862
2022-10-12 19:00	0.60	5.31	163.8	0	0	963.9	14.5	77.1	12.855
2022-10-12 20:00	0.80	5.11	167.1	0	0	963.8	14.5	75.8	12.852
2022-10-12 21:00	0.60	4.24	183.1	0.4	0	964.1	13.6	80.5	12.82
2022-10-12 22:00	0.30	3	220.5	0	0	964.9	10	82.9	12.789
2022-10-12 23:00	0.30	3	228.2	0	0	965.4	9	83.5	12.783
2022-10-13 0:00	0.50	2.33	222.7	0	0	965.5	8.3	81.6	12.786
2022-10-13 1:00	0.30	1.79	226	0	0	965.8	7.6	79.5	12.791
2022-10-13 2:00	0.30	0.96	206.1	0	0	965.3	6.5	82.8	12.799
2022-10-13 3:00	0.40	0.76	171.1	0	0	965.4	5.7	84.9	12.8
2022-10-13 4:00	0.30	0.91	168.6	0	0	965.4	5.2	85.2	12.793
2022-10-13 5:00	0.10	0.8	186.5	0	0	965.4	4.2	85.6	12.79
2022-10-13 6:00	0.30	0.8	178.9	0	0	965.1	3.2	87.6	12.79
2022-10-13 7:00	0.20	0.99	180.5	0	0	965.4	3.4	88	12.82
2022-10-13 8:00	0.30	1.14	205.2	0	0	965.3	4.7	86.7	12.967
2022-10-13 9:00	0.30	0.77	190.1	0	0	965.2	6.3	82.8	13.131
2022-10-13 10:00	0.30	0.82	106.2	0	0	964.8	7.9	75.4	13.346
2022-10-13 11:00	0.30	1.58	155.8	0	0	965.3	8.3	73.4	13.107
2022-10-13 12:00	0.20	1.65	160.7	0	0	964.7	8.8	70.2	13.125

2022-10-13 13:00	0.50	1.62	167	0	0	964.8	8.7	70.5	12.937
2022-10-13 14:00	0.60	1.46	152.8	0	0	964.9	8.9	70.7	12.943
2022-10-13 15:00	1.00	1.97	148.3	0	0	965.1	9.6	66.1	13.224
2022-10-13 16:00	0.50	2.21	138.8	0	0	965.2	9.5	64.3	12.984
2022-10-13 17:00	0.50	2.06	123.2	0	0	965.8	8.4	73.8	12.827
2022-10-13 18:00	0.20	1.9	130.1	0	0	966.5	7.5	78.6	12.792
2022-10-13 19:00	0.20	2.17	157.2	0	0	966.9	7	81.3	12.777
2022-10-13 20:00	0.40	2.04	171.8	0	0	967.2	6.4	82.9	12.77
2022-10-13 21:00	0.40	1.55	169.1	0	0	967.6	5.4	84.7	12.767
2022-10-13 22:00	0.40	1.14	161.4	0	0	968.1	4.5	87	12.761
2022-10-13 23:00	0.30	0.81	125.7	0	0	968.4	3.9	88	12.759
2022-10-14 0:00	0.30	0.4	39.1	0	0	968.5	2.5	86.3	12.763
2022-10-14 1:00	0.40	0.64	95.9	0	0	968.7	0.7	88.1	12.754
2022-10-14 2:00	0.30	0.48	54.3	0	0	968.5	0.1	87.1	12.757
2022-10-14 3:00	0.30	0.74	102.2	0	0	968.5	-0.4	89.7	12.744
2022-10-14 4:00	0.10	0.63	98.2	0	0	968.5	0.6	89.6	12.748
2022-10-14 5:00	0.30	1.42	138.9	0	0	968.8	2.8	89.7	12.724
2022-10-14 6:00	0.40	2.19	158.5	0.2	0	969.2	3.9	88.3	12.705
2022-10-14 7:00	0.20	2.16	168.8	0.4	0	969.8	4.5	86.6	12.802
2022-10-14 8:00	0.30	2.8	170.5	0	0	970.2	5.4	83	13.153
2022-10-14 9:00	0.30	3.5	165.3	0	0	970.1	6.5	74.8	13.6
2022-10-14 10:00	0.40	3.22	161.4	0	0	970.2	6.6	71.1	13.179
2022-10-14 11:00	0.40	2.9	163.4	0	0	970.4	7	67.6	13.097
2022-10-14 12:00	0.40	2.51	170.9	0	0	970.4	7.5	65.1	13.2
2022-10-14 13:00	0.40	3.29	162.7	0	0	970.4	8.2	59.2	13.087
2022-10-14 14:00	0.40	3.34	172.1	0.2	0	970.7	8.2	57	12.999
2022-10-14 15:00	0.30	2.11	177.7	0.1	0	971.2	6.9	69.6	13.241
2022-10-14 16:00	0.40	3.18	160	0	0	971.7	8	56.9	13.098
2022-10-14 17:00	0.40	3.29	154.3	0	0	972.6	6.5	61.6	12.866
2022-10-14 18:00	0.80	2.07	144.8	0	0	973.5	4.8	72.1	12.806
2022-10-14 19:00	0.30	2.38	143.3	0	0	974.1	4	76.6	12.769
2022-10-14 20:00	0.30	2.51	144.1	0	0	974.3	3.8	77.8	12.749
2022-10-14 21:00	0.70	2.9	151.9	0	0	974.9	4.3	76.9	12.733
2022-10-14 22:00	0.50	2.93	161.3	0	0	975.1	4.3	76.1	12.727
2022-10-14 23:00	0.60	2.71	159.4	0	0	975.1	3.9	77.5	12.727
2022-10-15 0:00	0.60	2.19	138.5	0	0	975.3	4	78	12.736
2022-10-15 1:00	0.60	2.02	136.2	0	0	975.1	3.4	80.1	12.731
2022-10-15 2:00	0.30	1.18	114.5	0	0	974.8	2.7	82.5	12.733
2022-10-15 3:00	0.50	0.58	85.6	0	0	974.4	1.5	85	12.744
2022-10-15 4:00	0.40	1	72.9	0	0	974	0.9	87.7	12.726
2022-10-15 5:00	0.30	1.55	77.7	0	0	973.3	1.8	86.8	12.713
2022-10-15 6:00	0.60	1.88	78.4	0	0	972.6	2.5	85	12.708
2022-10-15 7:00	0.50	2.03	88.8	0	0	972.2	3.2	81.2	12.723
2022-10-15 8:00	0.40	2.18	98.7	0	0	971.9	4.6	74.1	12.768
2022-10-15 9:00	0.50	2.42	111.9	0	0	971.2	5.7	68.3	12.808
2022-10-15 10:00	0.50	2.12	106.4	0.3	0	970.6	5.6	72.6	12.781
2022-10-15 11:00	0.40	2.34	63	0.1	0	969.3	5.6	78.8	12.869
2022-10-15 12:00	0.50	2.73	53.2	0.1	0	968	7	69.4	12.894
2022-10-15 13:00	0.50	1.18	63.1	0	0	967.2	7.3	70.1	12.835
2022-10-15 14:00	0.30	0.87	84.2	1	0	967.1	7.1	74.4	12.731
2022-10-15 15:00	0.80	1.16	93.1	0.2	0	967.3	6	82.5	12.719
2022-10-15 16:00	0.50	0.48	108.8	0	0	967.1	6.3	83	12.728
2022-10-15 17:00	0.30	0.45	221.1	0.2	0	967.3	6.2	84.1	12.695
2022-10-15 18:00	0.10	1.3	217.8	1.1	0	967.7	5.5	85.5	12.653
2022-10-15 19:00	0.30	3.49	223.1	0.5	0	968.1	4.7	85.1	12.642
2022-10-15 20:00	0.30	4.05	222.5	0.2	0	968.9	3.2	85.1	12.626
2022-10-15 21:00	0.30	3.88	230.6	0	0	969.6	2.6	85.2	12.618
2022-10-15 22:00	0.30	3.81	232.8	0	0	969.9	2.7	84.7	12.606
2022-10-15 23:00	0.30	3.9	227.1	0	0	970.3	2.7	83.7	12.589
2022-10-16 0:00	0.20	3.5	221.6	0	0	970.6	2.8	83.3	12.578
2022-10-16 1:00	0.30	3.17	212	0	0	971	2.9	84	12.557
2022-10-16 2:00	0.50	3.23	213.2	0	0	971.5	2.8	83.6	12.545
2022-10-16 3:00	0.20	2.93	214.3	0	0	971.9	2.6	83.6	12.52
2022-10-16 4:00	0.40	2.77	212	0	0	972.4	2.4	83.6	12.499
2022-10-16 5:00	0.20	2.57	206.7	0	0	972.8	2.3	83	12.479
2022-10-16 6:00	0.50	2.54	208.9	0	0	973.1	2.3	82.5	12.452
2022-10-16 7:00	0.30	2.34	206.9	0	0	973.5	2.4	81.8	12.46
2022-10-16 8:00	0.40	2.8	213.9	0	0	974	2.9	79.6	12.569
2022-10-16 9:00	0.20	3.1	202.4	0	0	974.2	3.7	76.2	12.794
2022-10-16 10:00	0.30	3.15	213.5	0	0	974.4	3.9	75.4	12.718
2022-10-16 11:00	0.40	2.49	214.2	0	0	974.7	4.1	75.1	12.652
2022-10-16 12:00	0.50	2.41	214.7	0	0	974.6	4.4	74.2	12.726
2022-10-16 13:00	0.40	2.46	243.3	0	0	974.7	4.6	74.2	12.661
2022-10-16 14:00	0.40	1.88	241.4	0	0	974.9	4.9	73.7	12.543
2022-10-16 15:00	0.30	1.48	234.2	0	0	975	4.5	79.6	12.484
2022-10-16 16:00	0.40	1.39	286.6	0	0	975	4.5	79.3	12.443
2022-10-16 17:00	0.20	0.62	288.8	0	0	975.2	4.4	82.7	12.397
2022-10-16 18:00	0.20	0.34	232.5	0	0	975.5	4.4	83.1	12.395
2022-10-16 19:00	0.10	0.71	325.1	0	0	975.3	4	84.3	12.377
2022-10-16 20:00	0.20	0.8	301.7	0	0	974.9	3.8	85.4	12.361
2022-10-16 21:00	0.50	1.04	334.3	0	0	974.5	3.4	86.8	12.339
2022-10-16 22:00	0.50	0.77	342.9	0	0	974.3	3.3	86.7	12.34
2022-10-16 23:00	0.20	1.18	338.8	0	0	973.9	3.1	87.3	12.297
2022-10-17 0:00	0.30	0.96	332.1	0	0	973.6	3.1	87.4	12.272
2022-10-17 1:00	0.40	0.87	329.6	0.2	0	973.4	3.1	87.7	12.211
2022-10-17 2:00	0.30	0.83	339.9	0	0	972.9	3	87.9	12.106
2022-10-17 3:00	0.30	0.88	359.6	0	0	972.7	2.9	88.9	11.951
2022-10-17 4:00	0.30	1.03	352.4	0	0	972.7	2.9	89.3	11.733
2022-10-17 5:00	0.30	1.46	336	0	0	972.7	2.8	89.4	11.417
2022-10-17 6:00	0.50	1.53	336.2	0	0	972.6	2.6	89.8	10.291

2022-10-17 7:00	0.40	1.91	335	0	0	972.6	2.5	90	9.41
2022-10-17 10:00		2.38	344.8	0.3	0	972.4	3.4	87.8	8.362
2022-10-17 11:00		2.53	326.7	0	0	972.6	3.6	87.4	8.73
2022-10-17 12:00		1.92	355.7	0.2	0	972.5	3.8	84.4	9.61
2022-10-17 13:00		2.82	330.8	0.7	0	972.1	3.5	86.2	9.192
2022-10-17 14:00		3.77	334	0	0	971.8	3.2	86.3	10.348
2022-10-17 15:00		3.58	329.3	0	0	971.7	2.8	87.1	9.592
2022-10-19 12:00		2.64	312.8	0	0	969.6	-0.4	85.4	10.275
2022-10-19 13:00		2.55	312.3	0	0	969.3	-0.5	84.3	9.753
2022-10-20 9:00		2.16	259.7	0	0	966.5	-1	85.2	10.632
2022-10-20 10:00		2.25	239.8	0	0	966.8	-0.5	82.1	10.816
2022-10-20 11:00		2.34	203.7	0	0	966.7	0	80.9	12.52
2022-10-20 12:00		2.54	213.1	0	0	966.6	0.2	82.2	13.164
2022-10-20 13:00		2.67	209.8	0	0	966.7	0.5	81.8	13.14
2022-10-20 14:00		2.82	220.2	0	0	967.2	0.9	81.6	12.992
2022-10-20 15:00		2.33	209	0	0	967.5	0.6	85.6	12.718
2022-10-20 16:00		2.32	206.3	0	0	967.8	0.3	86.5	12.613
2022-10-20 17:00		2.07	196.8	0	0	967.9	0	87.9	12.554
2022-10-20 18:00		2.67	190.7	0	0	968.2	-0.1	88.4	12.52
2022-10-20 19:00		2.64	202.1	0	0	968.5	0.2	87.4	12.497
2022-10-20 20:00		2.62	196.1	0	0	968.6	0.4	87.2	12.477
2022-10-20 21:00		2.98	190.9	0	0	968.4	0.5	87	12.447
2022-10-20 22:00		2.59	202.1	0	0	968.7	0.7	85.9	12.394
2022-10-20 23:00		2.54	197.6	0	0	969.2	0.7	85.7	12.264
2022-10-21 0:00		2.69	183.3	0	0	968.9	0.3	86.8	12.075
2022-10-21 1:00		2.84	178.3	0	0	968.9	0	87.3	11.826
2022-10-21 2:00		2.82	176.9	0	0	968.5	0	87.8	11.459
2022-10-21 3:00		2.58	174.7	0	0	968.4	0.2	87.8	10.144
2022-10-21 4:00		2.12	173.6	0	0	968.7	0.5	87.8	9.07
2022-10-21 8:00		4.19	173.8	0	0	967.9	2.6	83.2	10.243
2022-10-21 9:00		4.67	175.5	0	0	967.7	3.7	80	11.115
2022-10-21 10:00		5.07	174.9	0	0	967	4.9	75.8	11.527
2022-10-21 11:00		5.17	175	0	0	966.3	5.1	75.2	11.298
2022-10-21 12:00		5.31	173.1	0	0	964.9	5.9	73.2	11.411
2022-10-21 13:00		5.5	176.6	0	0	964.1	8.2	64.8	11.927
2022-10-21 14:00		5.25	176.8	0	0	963.5	8.5	64.1	11.615
2022-10-21 15:00		3.68	182.1	0	0	964.2	8.9	64.7	11.432
2022-10-21 16:00		2.95	182.4	0	0	964.9	9.4	65.5	11.244
2022-10-21 17:00		2.2	182.9	0	0	966	9.2	68.3	10.901
2022-10-21 18:00		1.5	183.8	0	0	967	8.3	72.7	10.371
2022-10-21 19:00		2.07	181.8	0	0	967.6	7.9	74.2	9.418
2022-10-22 9:00		1.6	181	0	0	977.3	4.9	84.6	9.422
2022-10-22 10:00		1.68	192.7	0	0	977.6	6.5	81.4	10.773
2022-10-22 11:00		1.56	186.3	0	0	978.3	8.4	76.5	11.037
2022-10-22 12:00		1.83	187.5	0	0	978.9	10.6	69.9	11.906
2022-10-22 13:00		1.66	206.4	0	0	978.9	12.9	59.9	13.282
2022-10-22 14:00		1.4	177.5	0	0	979.3	13.4	57.5	12.872
2022-10-22 15:00		1	115.4	0	0	979.5	13.1	60.8	12.827
2022-10-22 16:00		0.93	76.6	0	0	979.4	12.6	65.6	12.808
2022-10-22 17:00		0.92	37.2	0	0	979.7	10.8	71.3	12.628
2022-10-22 18:00		1.01	55.5	0	0	980.2	9.3	74.6	12.58
2022-10-22 19:00		1.02	59.7	0	0	980.5	8.4	76.1	12.556
2022-10-22 20:00		1.2	48.2	0	0	980.9	7.8	76.5	12.53
2022-10-22 21:00		0.93	79.7	0	0	981.2	7.4	78.1	12.504
2022-10-22 22:00		0.75	97.1	0	0	981.3	6.9	80.1	12.44
2022-10-22 23:00		0.72	92.8	0	0	981.8	6.8	81.4	12.323
2022-10-23 0:00		0.84	122.9	0	0	982.2	6.6	83.2	12.162
2022-10-23 1:00		1.36	129	0	0	982.5	7.7	81.2	11.963
2022-10-23 2:00		1.25	114.9	0	0	982.6	7.2	83.5	11.709
2022-10-23 3:00		1.43	148.2	0	0	982.8	7.2	84.7	11.104
2022-10-23 4:00		1.38	159.9	0	0	983.2	7.7	84.2	9.928
2022-10-23 5:00		1.2	144.9	0	0	983.4	7.6	84.5	8.666
2022-10-23 7:00		1.74	179.6	0	0	984.7	8.4	83.8	9.865
2022-10-23 8:00		2.19	174.7	0	0	984.8	11	78	10.866
2022-10-23 9:00		2.89	167.2	0	0	985	14.2	69.8	12.218
2022-10-23 10:00		3.27	163.4	0	0	985.2	16.6	62	13.545
2022-10-23 11:00		3.7	167.3	0	0	985.4	18.9	55.9	13.82
2022-10-23 12:00		3.96	172.1	0	0	985.1	20.8	51	13.915
2022-10-23 13:00		4.14	163.2	0	0	984.8	22.2	46.9	13.847
2022-10-23 14:00		4.42	173.6	0	0	984.5	22.9	44.3	13.295
2022-10-23 15:00		3.76	175.2	0	0	984.4	22.6	45.1	13.282
2022-10-23 16:00		1.96	168.7	0	0	984.6	20.9	50.8	13.13
2022-10-23 17:00		1.32	160.9	0	0	985	18.6	58.1	12.958
2022-10-23 18:00		1.09	156.7	0	0	985.6	17	61.1	12.935
2022-10-23 19:00		1.28	143.4	0	0	986	15.5	66	12.927
2022-10-23 20:00		1.38	151.5	0	0	986.3	14.9	68.7	12.912
2022-10-23 21:00		2.27	152.8	0	0	986.4	15.1	70.2	12.905
2022-10-23 22:00		2.42	164.2	0	0	986.7	14.9	73.2	12.902
2022-10-23 23:00		1.97	136.8	0	0	986.6	13.9	76.6	12.891
2022-10-24 0:00		1.84	133.7	0	0	986.2	12.7	80.6	12.859
2022-10-24 1:00		1.82	134.9	0	0	985.8	11.9	81.6	12.848
2022-10-24 2:00		1.54	140.3	0	0	986.1	11.4	81.8	12.839
2022-10-24 3:00		2.04	163.2	0	0	986.2	12	78.1	12.823
2022-10-24 4:00		1.98	133.4	0	0	985.5	11	79.9	12.804
2022-10-24 5:00		1.93	134.3	0	0	985.6	10	82.1	12.788
2022-10-24 6:00		2.01	138.1	0	0	985.1	9.5	83	12.764
2022-10-24 7:00		2.29	135.2	0	0	984.6	9.9	80.1	12.795
2022-10-24 8:00		2.61	144.7	0	0	984.5	11.8	70.8	13.114
2022-10-24 9:00		2.67	139.5	0	0	983.8	13.8	62.8	13.24
2022-10-24 10:00		2.8	142.9	0.1	0	983.2	14.9	57.7	13.017

2022-10-24 11:00	3.32	145.2	0	0	982.8	17.2	49.7	13.423
2022-10-24 12:00	3.58	154.6	0	0	982.1	18.2	43.6	13.141
2022-10-24 13:00	3.87	157.5	0	0	981.4	18.8	43.2	13.168
2022-10-24 14:00	3.33	148.4	0	0	980.5	18.9	44.7	13.255
2022-10-24 15:00	4.06	156.3	0	0	979.8	19.4	44.7	13.226
2022-10-24 16:00	3.24	155.8	0	0	979.7	19.1	46.9	13.01
2022-10-24 17:00	3.8	157.1	0	0	979.6	18.8	46.9	12.93
2022-10-24 18:00	4.43	157.8	0	0	979.3	18.6	46	12.902
2022-10-24 19:00	3.67	163.9	0	0	979.3	18	47.1	12.888
2022-10-24 20:00	4.85	169.8	0	0	979	17.8	46.2	12.871
2022-10-24 21:00	4.64	172.8	0	0	979.2	17.4	47.5	12.865
2022-10-24 22:00	4.38	173.1	0	0	978.8	17	49.1	12.851
2022-10-24 23:00	4.22	162.3	0	0	977.5	16.7	48.5	12.833
2022-10-25 0:00	3.83	171.6	0	0	977	16.4	49.5	12.824
2022-10-25 1:00	3.08	164.9	0	0	976.9	15.9	51.6	12.804
2022-10-25 2:00	3.21	154.1	0	0	976.3	15.6	52.5	12.793
2022-10-25 3:00	3	159.2	0	0	975.7	15.2	54.8	12.776
2022-10-25 4:00	3.04	158.7	0	0	975.4	15.1	56	12.761
2022-10-25 5:00	3.54	162.2	0	0	974.8	15	56.1	12.753
2022-10-25 6:00	3.62	158.1	0	0	974.3	14.9	56.3	12.737
2022-10-25 7:00	4.03	160.8	0	0	974	14.8	55.8	12.73
2022-10-25 8:00	4.15	165.6	0	0	973.8	15.2	53.9	12.824
2022-10-25 9:00	4.3	168.7	0	0	973.4	16	51.4	12.953
2022-10-25 10:00	4.64	171.6	0	0	972.9	17.8	47.2	13.321
2022-10-25 11:00	4.89	176.7	0	0	972.8	19.5	43.2	13.477
2022-10-25 12:00	3.83	170.5	0	0	972.7	19.1	46.5	13.18
2022-10-25 13:00	5.17	165.6	0	0	971.7	20.9	43	13.884
2022-10-25 14:00	5.58	174.2	0	0	971	21.6	39.5	13.541
2022-10-25 15:00	4.95	172.8	0	0	970.9	21.2	38.9	13.336
2022-10-25 16:00	4.12	174.9	0	0	971	20.5	38.6	13.011
2022-10-25 17:00	2.5	171.7	0	0	971.3	19	43.1	12.947
2022-10-25 18:00	1.97	171.1	0	0	971.7	18.1	46.4	12.933
2022-10-25 19:00	1.76	172.9	0	0	971.8	17.7	48.2	12.922
2022-10-25 20:00	1.34	170.3	0	0	971.8	16.5	54.3	12.904
2022-10-25 21:00	1.45	256.6	0	0	972.2	16	61.5	12.901
2022-10-25 22:00	1.3	286	0	0	972	14.9	73.4	12.896
2022-10-25 23:00	0.88	226.9	0	0	971.6	13.9	81.3	12.879
2022-10-26 0:00	1.82	176	3.5	0	971.4	12.4	87	12.837
2022-10-26 1:00	1.2	186	2	0	971	11.5	87.8	12.832
2022-10-26 2:00	2.53	304.8	0.4	0	970.8	9.4	87.1	12.803
2022-10-26 3:00	3.04	321.2	0	0	970.7	7.2	87.6	12.792
2022-10-26 4:00	2.29	319.9	0	0	970.5	6.3	88.1	12.776
2022-10-26 5:00	2.26	321.6	1.9	0	970.5	5.9	88	12.763
2022-10-26 6:00	2.24	324.1	2.2	0	970.6	5.5	87.9	12.745
2022-10-26 7:00	2.44	318.4	0.3	0	970.9	5.2	87.9	12.726
2022-10-26 8:00	2.88	323.1	0	0	971.1	5	88	12.725
2022-10-26 9:00	2.88	322.7	0	0	971.5	4.8	87.8	12.721
2022-10-26 10:00	3.87	319.4	0.3	0	972	4.2	87	12.736
2022-10-26 11:00	4.07	321.5	0.9	0	972.6	2.5	86.2	12.733
2022-10-26 12:00	2.84	321.1	2.1	0	973	0.7	87.1	12.705
2022-10-26 13:00	2.26	311.3	0.5	0	973.4	0	88.3	12.68
2022-10-26 14:00	2.58	312.9	0	0	973.7	0	88.5	12.652
2022-10-26 15:00	2.38	316.4	0	0	974.3	-0.1	88.4	12.627
2022-10-26 16:00	2.46	308.7	0	0	975.6	-0.1	88	12.598
2022-10-26 17:00	1.9	307.5	0	0	976.5	-0.1	88.1	12.575
2022-10-26 18:00	2.1	285.9	0	0	977.3	-0.1	87.6	12.55
2022-10-26 19:00	2.27	279.8	0	0	978.2	0	87.3	12.523
2022-10-26 20:00	2.59	283.2	0	0	978.9	-0.1	86.6	12.496
2022-10-26 21:00	2.11	281.5	0	0	979.8	0	85.2	12.462
2022-10-26 22:00	1.88	279.9	0	0	980.6	0	83.9	12.445
2022-10-26 23:00	1.7	275.3	0	0	981.4	0	82.4	12.433
2022-10-27 0:00	2.44	275.2	0	0	982.5	0	81.4	12.412
2022-10-27 1:00	2.02	276.7	0	0	983.6	-0.1	82.1	12.406
2022-10-27 2:00	2.09	281.5	0	0	984.5	-0.3	79.4	12.394
2022-10-27 3:00	1.29	259.8	0	0	985.4	-0.4	80.4	12.378
2022-10-27 4:00	1.03	260	0	0	986.3	-0.3	80.4	12.362
2022-10-27 5:00	1.07	253.3	0	0	987	-0.3	81	12.298
2022-10-27 6:00	1.16	226	0	0	988	-0.5	81.6	12.162
2022-10-27 7:00	0.88	244.2	0	0	988.9	-0.3	81.5	11.996
2022-10-27 8:00	1.46	238.8	0	0	990.1	0	81.4	11.824
2022-10-27 9:00	1.84	232.1	0	0	990.9	0.3	80.2	11.716
2022-10-27 10:00	2.01	226	0	0	991.6	0.6	78.5	11.69
2022-10-27 11:00	2.17	239.4	0	0	992.2	1.3	74	12.204
2022-10-27 12:00	2.36	243.9	0	0	992.5	1.8	72.9	12.908
2022-10-27 13:00	2.43	245.5	0	0	992.7	2.4	70.5	13.146
2022-10-27 14:00	1.75	234.4	0	0	993	2.8	68.6	12.783
2022-10-27 15:00	1.4	196	0	0	993.5	2.7	71.1	12.659
2022-10-27 16:00	1.23	174.8	0	0	993.8	2.8	76.3	12.803
2022-10-27 17:00	0.65	139.8	0	0	993.9	0.7	83.5	12.578
2022-10-27 18:00	0.74	110	0	0	994.2	-0.5	87	12.518
2022-10-27 19:00	0.51	99	0	0	994.3	-1.1	86.7	12.493
2022-10-27 20:00	0.99	168	0	0	994.4	-0.9	86.6	12.423
2022-10-27 21:00	1.55	177.9	0	0	994.7	-0.8	86.8	12.294
2022-10-27 22:00	1.47	174.8	0	0	994.9	-1.2	86.5	12.097
2022-10-27 23:00	1.83	176.9	0	0	995	-1.4	86.3	11.831
2022-10-28 0:00	1.75	176.1	0	0	995	-1.7	86.4	11.498
2022-10-28 1:00	2	175.9	0	0	995.1	-1.7	86.2	10.329
2022-10-28 2:00	1.67	175.4	0	0	995.1	-1.8	86	9.396
2022-10-28 10:00	3.43	177.5	0	0	994.5	4.6	79.8	11.458
2022-10-28 11:00	4.3	183.4	0	0	993.8	7.8	67.2	13.583

2022-10-28 12:00	4.38	182.4	0	0	993.1	9.5	59.5	13.632
2022-10-28 13:00	4.34	185.3	0	0	992.5	9.8	57	13.403
2022-10-28 14:00	4.78	186	0	0	991.5	10.7	53.6	13.839
2022-10-28 15:00	4.96	184.8	0	0	991	10.6	50.6	13.66
2022-10-28 16:00	4.46	184.9	0	0	990.9	9.7	50.9	13.285
2022-10-28 17:00	3.04	179.2	0	0	990.8	8	57.2	12.934
2022-10-28 18:00	2.43	177.1	0	0	990.8	6.5	62.1	12.904
2022-10-28 19:00	3.09	179.6	0	0	990.5	5.9	64.8	12.869
2022-10-28 20:00	3.25	183.8	0	0	990.4	6.1	64.6	12.857
2022-10-28 21:00	3.84	187.2	0	0	990.3	6	65.4	12.836
2022-10-28 22:00	3.6	187.8	0	0	990.4	5.5	67.3	12.827
2022-10-28 23:00	3.28	187.6	0	0	990.2	4.9	69.9	12.803
2022-10-29 0:00	3.13	186.2	0	0	990.1	4.4	72.5	12.785
2022-10-29 1:00	3.41	186.8	0	0	989.8	4.2	74.2	12.761
2022-10-29 2:00	3.41	186.6	0	0	989.6	4.2	75.4	12.733
2022-10-29 3:00	3.03	185.7	0	0	989.3	3.9	77.1	12.714
2022-10-29 4:00	2.83	187.5	0	0	989.4	3.7	78.2	12.7
2022-10-29 5:00	2.89	183.6	0	0	989.1	3.4	79.8	12.679
2022-10-29 6:00	3.05	182.7	0	0	988.6	3.3	80.5	12.658
2022-10-29 7:00	3.16	186	0	0	988.5	4	78.6	12.671
2022-10-29 8:00	3.37	188.6	0	0	988.5	5	74.8	12.818
2022-10-29 9:00	3.76	189.7	0	0	988.4	7.4	65.9	13.251
2022-10-29 10:00	4.07	198.9	0	0	988.3	10.1	57.4	13.738
2022-10-29 11:00	4.5	205.6	0	0	988.2	12.5	51.4	13.848
2022-10-29 12:00	4.25	207.5	0	0	987.9	12.9	50.2	13.619
2022-10-29 13:00	4.07	210.5	0	0	987.3	13.7	49.7	13.495
2022-10-29 14:00	4.15	226.2	0	0	987.2	14.3	49.8	13.636
2022-10-29 15:00	3.55	223.1	0	0	987.2	14.4	49.9	13.397
2022-10-29 16:00	3.08	213.6	0	0	987.1	14.1	49.9	13.203
2022-10-29 17:00	2.08	189.5	0	0	987.1	12.3	54.6	12.961
2022-10-29 18:00	2.3	191.6	0	0	987.2	10.9	58.4	12.926
2022-10-29 19:00	2.22	197	0	0	987.1	10.4	59.4	12.904
2022-10-29 20:00	1.66	186.4	0	0	986.8	9.1	63.2	12.897
2022-10-29 21:00	1.74	184	0	0	986.8	8	65.8	12.879
2022-10-29 22:00	1.67	183	0	0	986.8	7.2	67.6	12.865
2022-10-29 23:00	1.33	176.3	0	0	986.8	6	70.1	12.861
2022-10-30 0:00	1.2	164	0	0	986.4	5	73.3	12.858
2022-10-30 1:00	1.57	168.5	0	0	986.1	3.8	77.5	12.838
2022-10-30 2:00	1.81	171.3	0	0	985.6	3.4	78.9	12.821
2022-10-30 3:00	2.29	174.3	0	0	985	2.9	79.9	12.804
2022-10-30 4:00	2.3	176.1	0	0	984.5	2.5	81.1	12.802
2022-10-30 5:00	2.06	173.3	0	0	984	2.2	82.5	12.801
2022-10-30 6:00	2.06	175.5	0	0	983.5	1.9	83.2	12.792
2022-10-30 7:00	1.68	171.1	0	0	983.2	1.6	84	12.845
2022-10-30 8:00	2.27	180.7	0	0	982.8	3.9	78.8	13.203
2022-10-30 9:00	2.98	194.4	0	0	982.3	7.8	66.8	13.631
2022-10-30 10:00	2.82	190.7	0	0	981.6	10.8	57.2	13.893
2022-10-30 11:00	3.38	191.1	0	0	980.9	13.2	50.2	13.914
2022-10-30 12:00	3.83	198.2	0	0	980.2	15.3	43.3	13.526
2022-10-30 13:00	4.02	208.2	0	0	979.6	16.4	40.5	13.299
2022-10-30 14:00	4.16	224.5	0	0	979.2	16.7	40.3	13.296
2022-10-30 15:00	3.48	218.5	0	0	978.8	16.6	40.4	13.293
2022-10-30 16:00	2.66	203	0	0	978.6	15.9	42.3	13.227
2022-10-30 17:00	1.62	186.3	0	0	978.8	14.1	47.1	12.991
2022-10-30 18:00	1.23	178.3	0	0	979.1	11.7	53.3	12.957
2022-10-30 19:00	0.98	188.9	0	0	979.3	10.6	56	12.934
2022-10-30 20:00	0.87	183.6	0	0	979.4	10.3	57.4	12.929
2022-10-30 21:00	0.64	199.2	0	0	979.5	10	57.8	12.92
2022-10-30 22:00	0.68	202.2	0	0	979.4	8.3	62.7	12.9
2022-10-30 23:00	0.72	143.6	0	0	979.4	5.6	72.9	12.887
2022-10-31 0:00	0.4	221.5	0	0	979.3	5.7	72.2	12.882
2022-10-31 1:00	0.33	147.3	0	0	979.2	3.2	79.6	12.873
2022-10-31 2:00	0.96	179.3	0	0	979.1	2.4	82.1	12.842
2022-10-31 3:00	0.36	210.1	0	0	978.8	2.5	80.2	12.852
2022-10-31 4:00	0.37	75.6	0	0	978.5	1	85	12.844
2022-10-31 5:00	0.51	166.4	0	0	978.4	1.3	85.7	12.83
2022-10-31 6:00	0.55	157.1	0	0	978.1	1.5	84.8	12.826
2022-10-31 7:00	0.99	172.4	0	0	978.1	2.1	85.1	12.817
2022-10-31 8:00	1.3	165.7	0	0	977.9	3.4	84.2	12.848
2022-10-31 9:00	1.6	169.9	0	0	977.6	4.8	81.2	12.897
2022-10-31 10:00	1.83	169.6	0	0	977.2	6.2	77.3	13.12
2022-10-31 11:00	2.08	178	0	0	976.7	10	66.2	13.781
2022-10-31 12:00	2.35	184.1	0	0	975.9	13.3	55.6	13.902
2022-10-31 13:00	2.61	177.1	0	0	974.7	15.1	48	13.46
2022-10-31 14:00	2.6	191.7	0	0	974.1	15.3	45	13.308
2022-10-31 15:00	2.54	185.8	0	0	974.1	14.9	46.4	13.305
2022-10-31 16:00	1.9	174.9	0	0	973.8	14.1	48.5	13.238
2022-10-31 17:00	0.7	145.7	0	0	973.7	11.3	56.5	13.003
2022-10-31 18:00	1.09	160.6	0	0	974.1	8.9	65.6	12.952
2022-10-31 19:00	1.93	176.1	0	0	974.2	8.1	69.2	12.912
2022-10-31 20:00	2.63	177.6	0	0	973.9	7.2	72.2	12.886
2022-10-31 21:00	2.02	181	0	0	974.1	6.4	75.2	12.876
2022-10-31 22:00	1.81	179.2	0	0	974.2	5.5	77.8	12.859
2022-10-31 23:00	1.78	180.1	0	0	974.6	5.1	78.3	12.853
2022-11-01 0:00	1.61	181.3	0	0	974.9	5.4	76.8	12.847
2022-11-01 1:00	1.79	180	0	0	975.2	5.2	77.7	12.832
2022-11-01 2:00	1.67	183.5	0	0	975.6	5.2	78.2	12.829
2022-11-01 3:00	1.43	188.1	0	0	975.8	5.2	77.8	12.828
2022-11-01 4:00	1.56	189.9	0	0	976	5.3	76.3	12.824
2022-11-01 5:00	1.29	185.5	0	0	976.5	5.2	76.4	12.824

2022-11-01 6:00			1.34	189.3	0	0	976.9	5.3	75.7	12.823
2022-11-01 7:00			1.35	185.7	0	0	977.5	5.3	74.9	12.83
2022-11-01 8:00			1.51	210.1	0	0	978.4	6.4	71.8	12.984
2022-11-01 9:00			2.63	247.7	0	0	979.2	8.8	62.9	13.261
2022-11-01 10:00			2.87	292.7	0	0	979.9	10.5	56.4	13.461
2022-11-01 11:00			2.55	286.4	0	0	980.6	11.5	53.6	13.592
2022-11-01 12:00			1.96	279.2	0	0	980.7	12.5	50.1	13.869
2022-11-01 13:00			2.55	260.9	0	0	981.2	13.5	46	13.772
2022-11-01 14:00			2.83	256.8	0	0	981.7	14.5	41.1	13.527
2022-11-01 15:00			2.72	258	0	0	982.5	15	39.2	13.321
2022-11-01 16:00			2.2	293.5	0	0	983.7	14.1	37.4	13.25
2022-11-01 17:00			1.2	317.5	0	0	984.8	11.4	43.5	13.089
2022-11-01 18:00			0.84	341.6	0	0	985.9	8.4	54.7	13.059
2022-11-01 19:00			0.43	246.4	0	0	987	4.4	66.3	13.041
2022-11-01 20:00			0.36	291.9	0	0	988	1.7	73.3	12.998
2022-11-01 21:00			0.34	224	0	0	988.9	0.3	77.6	12.949
2022-11-01 22:00			0.45	4.9	0	0	989.8	-0.8	81.7	12.908
2022-11-01 23:00			0.49	17.3	0	0	990.6	0	74	12.885
2022-11-02 0:00			0.31	34.2	0	0	991.3	-1.9	79	12.867
2022-11-02 1:00			0.29	295.6	0	0	992.2	-2.2	79.8	12.86
2022-11-02 2:00			0.32	106.1	0	0	992.7	-3.1	81.1	12.85
2022-11-02 3:00			0.43	159.6	0	0	992.9	-3.5	81.6	12.832
2022-11-02 4:00			0.46	32.1	0	0	993.2	-3.4	82.8	12.825
2022-11-02 5:00			0.67	63.9	0	0	993.9	-2.6	80.6	12.816
2022-11-02 6:00			0.55	81.2	0	0	994.1	-2.6	80.5	12.815
2022-11-02 7:00			0.65	83.9	0	0	994.4	-2.7	81	12.864
2022-11-02 8:00			1.52	77	0	0	994.6	-0.7	78.9	13.219
2022-11-02 9:00			1.99	95.9	0	0	994.5	3.2	68.8	13.688
2022-11-02 10:00			3.08	116	0	0	993.7	7.2	52.8	13.913
2022-11-02 11:00			3.82	135.3	0	0	992.7	10.1	42.2	13.928
2022-11-02 12:00			3.68	130.7	0	0	991.4	11.4	39.6	13.327
2022-11-02 13:00			3.8	145.8	0	0	990.2	13	36.5	13.324
2022-11-02 14:00			3.86	145.2	0	0	989.2	14	35.2	13.323
2022-11-02 15:00			3.08	142.7	0	0	988.5	14.3	37.2	13.323
2022-11-02 16:00			1.92	126.2	0	0	987.8	13.1	40.9	13.267
2022-11-02 17:00			1.87	136.4	0	0	987.1	11.2	45.6	13.139
2022-11-02 18:00			1.86	131.5	0	0	986.6	10.1	50.6	13.116
2022-11-02 19:00			2.7	165.2	0	0	986.2	11	54.5	13.098
2022-11-02 20:00			3.18	176.9	0	0	985.8	10.7	57.8	13.08
2022-11-02 21:00			3.13	179.1	0	0	985.7	10.3	60.9	13.066
2022-11-02 22:00			2.83	181.7	0	0	985.6	10	64	13.057
2022-11-02 23:00			2.48	177.2	0	0	985.2	9.3	67.7	13.047
2022-11-03 0:00	14.535	16.47	2.18	174.6	0	0	984.9	7.8	72.8	13.02
2022-11-03 1:00	15.165	16.875	2.38	174.7	0	0	984.8	7	75.6	12.984
2022-11-03 2:00	16.11	18.045	2.55	174.4	0	0	984.5	6.5	76.1	12.938
2022-11-03 3:00	18.54	20.88	3.02	177.6	0	0	984.1	6.5	75.1	12.904
2022-11-03 4:00	19.71	22.005	2.88	175.3	0	0	983.9	6.2	76	12.893
2022-11-03 5:00	21.06	23.625	2.69	172.1	0	0	983.5	5.8	77.2	12.88
2022-11-03 6:00	22.5	25.335	3.29	170.9	0	0	982.8	6.3	76.7	12.871
2022-11-03 7:00	24.795	36.9	3.2	175.3	0	0	982.4	6.8	77.3	12.9
2022-11-03 8:00	22.68	31.59	3.53	175.1	0	0	981.9	8.4	74	12.261
2022-11-03 9:00	22.095	26.415	4.02	176.9	0	0	981.2	10.4	69	12.484
2022-11-03 10:00	19.755	23.76	3.31	175.8	0	0	980.7	12.4	63.6	12.816
2022-11-03 11:00	17.325	22.41	4.2	189.1	0	0	980.6	15.1	54.4	13.602
2022-11-03 12:00	15.165	19.935	4.53	192.6	0	0	979.8	17.1	49.2	13.984
2022-11-03 13:00	14.58	20.025	4.65	192.4	0	0	979.3	18	47.2	13.659
2022-11-03 14:00	14.445	22.545	4.29	195.7	0	0	979	17.9	48.1	13.314
2022-11-03 15:00	15.21	28.08	3.4	182.4	0	0	978.9	18.1	48.4	13.278
2022-11-03 16:00	13.14	16.56	3.51	179.4	0	0	978.7	17.1	51.4	12.58
2022-11-03 17:00	14.67	17.82	3.68	173.6	0	0	978.5	15.4	58.1	12.446
2022-11-03 18:00	16.65	19.755	3.92	174.5	0	0	978.2	14.6	63	12.399
2022-11-03 19:00	18.135	21.15	4.47	173.1	0	0	977.6	14.1	65.8	12.363
2022-11-03 20:00	18.54	21.285	3.75	175.1	0	0	977.5	13.8	66.7	12.333
2022-11-03 21:00	17.82	20.295	3.57	176.6	0	0	977.5	13.6	66.6	12.303
2022-11-03 22:00	17.955	20.205	3.73	179.9	0	0	977.5	13.6	66.3	12.278
2022-11-03 23:00	17.415	19.485	3.14	175.4	0	0	977.2	12.8	67.7	12.251
2022-11-04 0:00	16.875	18.9	3.44	179.7	0	0	976.7	12.5	68.3	12.223
2022-11-04 1:00	16.515	18.63	3.32	174.7	0	0	976.1	12	70.1	12.197
2022-11-04 2:00	15.525	17.55	3	176.8	0	0	975.3	11.7	71.6	12.174
2022-11-04 3:00	13.635	15.885	3.48	174.8	0	0	974.3	12.2	69.7	12.155
2022-11-04 4:00	13.095	15.345	3.64	174.7	0	0	973.7	12.4	68.3	12.122
2022-11-04 5:00	13.86	17.01	3.77	178.4	0	0	973.4	13.2	66.1	12.109
2022-11-04 6:00	14.49	17.595	3.58	177.9	0	0	972.9	13.6	65.4	12.093
2022-11-04 7:00	15.165	19.44	3.2	174.6	0	0	972.6	13.4	66.9	12.076
2022-11-04 8:00	16.785	19.395	3.49	180	8.8	0	973.6	11.8	80.4	12.012
2022-11-04 9:00	17.19	18.81	4.37	170.9	0.3	0	972	11.6	85.5	12.453
2022-11-04 10:00	16.425	17.955	4.51	177.6	0	0	972	13.1	83.5	12.971
2022-11-04 11:00	15.345	17.595	4.32	180.4	0	0	971.8	13.9	80.2	12.548
2022-11-04 12:00	14.535	17.235	3.49	184.9	0	0	971.7	14.5	76.5	12.431
2022-11-04 13:00	14.4	17.19	2.63	184.8	0	0	971.5	14.7	77.4	12.298
2022-11-04 14:00	14.58	17.775	2.8	185.6	0	0	971.2	15.5	74.9	12.278
2022-11-04 15:00	15.345	18.63	2.3	227.2	1.3	0	971.8	15.2	77.7	12.157
2022-11-04 16:00	2.25	3.195	3.75	319.6	0.5	0	973.9	7.6	85.2	12.042
2022-11-04 17:00	0.495	1.08	2.74	329.5	0.3	0	975.2	4.2	86.6	12.001
2022-11-04 18:00	0.54	1.08	1.65	335	0.7	0	975.7	3.6	87.2	11.978
2022-11-04 19:00	0.675	1.35	1.43	321.4	1.6	0	976.7	3.6	87.1	11.952
2022-11-04 20:00	0.63	1.305	2.29	324.8	1	0	977.5	3	86.8	11.924
2022-11-04 21:00	0.675	1.35	2.17	340.7	0.2	0	977.8	2.3	86.3	11.904
2022-11-04 22:00	0.855	1.53	1.54	333.5	0	0	978.4	1.8	85.7	11.884
2022-11-04 23:00	1.035	1.845	1.23	333.4	0	0	978.7	1.9	86	11.854

2022-11-05 0:00	1.125	1.935	1.16	353.1	0.3	0	979.1	1.6	86.7	11.832
2022-11-05 1:00	1.17	2.115	1.16	8.7	0	0	978.7	1.5	87.8	11.821
2022-11-05 2:00	1.215	1.98	1.88	6	0	0	978.6	0.9	88.7	11.781
2022-11-05 3:00	1.44	2.25	1.03	5.1	0	0	978.8	0.7	87.3	11.771
2022-11-05 4:00	1.26	2.25	1.46	17.9	0.1	0	978.2	0.5	88.1	11.734
2022-11-05 5:00	1.17	1.98	1.39	26	1	0	978	0	87.8	11.701
2022-11-05 6:00	0.81	1.35	1.54	12.8	1.8	0	977.9	0	88.7	11.671
2022-11-05 7:00	0.585	1.035	2.07	32.8	2.2	0	977.3	-0.1	88.7	11.639
2022-11-05 8:00	0.54	0.945	1.71	35.3	2.6	0	977.3	-0.1	89	11.606
2022-11-05 9:00	0.36	0.72	1.94	44.4	2.7	0	976.4	0.1	89.2	11.578
2022-11-05 10:00	0.27	0.585	2.39	32.5	1.2	0	975	0.5	89.1	11.562
2022-11-05 11:00	0.315	0.585	2.5	34.3	2.3	0	974.1	0.8	88.7	11.516
2022-11-05 12:00	0.36	0.63	2.54	39.6	2.8	0	972.8	0.8	89	11.486
2022-11-05 13:00	0.315	0.54	2.82	50.2	2.8	0	971	0.9	89.2	11.436
2022-11-05 14:00	0.315	0.495	2.87	63	0	0	969.6	1.2	89.1	11.4
2022-11-05 15:00	0.315	0.585	2.39	58.2	0.1	0	968.6	1.4	89.1	11.341
2022-11-05 16:00	0.27	0.54	1.86	56.8	2.8	0	967.3	1.5	89.6	10.765
2022-11-05 17:00	0.27	0.45	1.66	75.1	1.7	0	965.8	2	89.9	10.535
2022-11-05 18:00	0.855	1.125	1.58	92.5	0	0	964.6	3.4	90.1	10.486
2022-11-05 19:00	4.545	5.31	1.78	108.9	0.8	0	963.1	5.7	90.6	10.408
2022-11-05 20:00	8.775	10.44	3.61	138.8	3.4	0	961.1	9.4	89.7	10.333
2022-11-05 21:00	9.81	11.52	3.63	157	2.7	0	960.5	12.1	88.1	10.281
2022-11-05 22:00	8.19	10.035	2.3	166.7	0	0	959.9	13	88.3	10.227
2022-11-05 23:00	5.625	6.93	5.26	185.2	2	0	959.5	12.3	81.4	10.067
2022-11-06 0:00	3.195	4.59	4.27	192.2	0	0	960.8	10.2	78.9	9.829
2022-11-06 1:00	2.43	3.87	4.24	192.8	0	0	961.7	9	77.9	9.007
2022-11-06 2:00	1.485	2.52	5.03	181.9	0	0	961.8	7.9	77.4	8.799
2022-11-06 3:00	1.17	2.205	5.74	182.8	0	0	962.2	7.9	76.4	8.791
2022-11-06 4:00	0.945	1.845	5.59	192.2	0	0	963.8	7.7	77.8	8.759
2022-11-06 5:00	0.675	1.485	6.14	209.7	0	0	966.1	6.9	72.8	8.718
2022-11-06 6:00	0.585	1.44	5.25	211.4	0	0	968.1	6	71.3	8.67
2022-11-06 7:00	0.495	1.26	4.29	204.9	0	0	969.4	5.5	70	8.623
2022-11-06 8:00	0.54	1.125	3.63	198.4	0	0	970.2	5.6	71.6	9.034
2022-11-06 9:00	0.45	0.99	4.58	201.2	0	0	970.8	7	67	11.508
2022-11-06 10:00	0.495	1.125	4.76	201.4	0	0	971.7	7.7	64.8	11.003
2022-11-06 11:00	0.675	1.395	4.38	202.9	0	0	972.1	8.5	61.5	11.082
2022-11-06 12:00	0.99	1.71	4.12	192.3	0	0	972.1	8.1	62.5	10.651
2022-11-06 13:00	1.98	3.06	3.83	188.1	0	0	972.1	8.1	59.7	10.648
2022-11-06 14:00	2.61	4.005	2.98	174.8	0	0	972	8.4	60.5	10.555
2022-11-06 15:00	3.195	4.68	2.6	170.4	0	0	971.5	8.8	61.4	10.482
2022-11-06 16:00	3.375	4.95	1.56	166.4	0.2	0	971.2	8.2	67.8	10.211
2022-11-06 17:00	3.375	5.04	3.06	176.2	0	0	970.9	8.5	68.9	9.832
2022-11-06 18:00	3.375	4.86	3.56	181	0	0	970.9	9	67.9	9
2022-11-06 19:00	3.6	5.445	3.38	189.5	0	0	971.1	9.3	65.6	8.655
2022-11-06 20:00	3.78	5.94	3.62	192.4	0	0	971	9.3	65	8.547
2022-11-06 21:00	4.095	6.84	3.9	209.6	0	0	971.3	9	64.3	8.454
2022-11-06 22:00	3.51	5.355	4.65	260	4.4	0	972.6	4.3	77.8	8.268
2022-11-06 23:00	2.79	3.69	4.05	230.9	0.6	0	972.6	3.7	81.1	7.776
2022-11-07 11:00	3.645	5.985	4.13	257.4	0	0	986	2.4	79	8.328
2022-11-07 12:00	0.99	1.485	3.73	296.1	0	0	987.6	1.7	82.2	10.386
2022-11-07 13:00	0.54	0.945	4.99	289.9	0	0	988.8	2.1	75	12.263
2022-11-07 14:00	0.45	0.9	4.66	296.6	0	0	990.5	2.5	64.7	12.372
2022-11-07 15:00	0.495	0.945	4.54	296	0	0	992.1	1.3	61.6	11.405
2022-11-07 16:00	0.45	0.945	3.67	290.9	0	0	993.8	0.7	60.7	10.74
2022-11-07 17:00	0.405	0.765	3.99	298.1	0	0	995.4	0	63.4	10.417
2022-11-07 18:00	0.45	0.855	4.28	295.7	0	0	997	-1.3	67.1	10.25
2022-11-07 19:00	0.495	0.855	3.9	301.6	0	0	998.5	-1.8	67.8	9.938
2022-11-07 20:00	0.585	0.945	4.02	295.8	0	0	999.7	-1.7	66.8	9.089
2022-11-07 21:00	0.63	0.9	4	299.5	0	0	1000.8	-1.8	66.9	8.204
2022-11-07 22:00	0.675	0.81	3.1	315	0	0	1001.4	-2	67.5	7.564
2022-11-08 8:00	2.835	9.9	1.53	272.7	0	0	1009.3	-4.6	77.3	9.924
2022-11-08 9:00	3.375	14.76	2.19	300.9	0	0	1009.9	-3.4	72.6	11.723
2022-11-08 10:00	1.98	3.375	1.49	290.7	0	0	1010	-2.3	67.4	12.724
2022-11-08 11:00	1.395	1.62	1.66	303.4	0	0	1009.9	-0.4	58.6	13.155
2022-11-08 12:00	1.08	1.395	1.51	13.8	0	0	1009.4	0.5	51.2	13.126
2022-11-08 13:00	0.945	1.17	0.76	292.9	0	0	1008.8	1.2	47.6	12.429
2022-11-08 14:00	1.08	1.305	1.11	297.1	0	0	1008.2	1.9	45.4	12.857
2022-11-08 15:00	1.215	1.395	0.99	78.4	0	0	1007.6	1.6	43.8	12.612
2022-11-08 16:00	1.125	1.305	0.91	111.8	0	0	1007	0.9	45.7	12.225
2022-11-08 17:00	1.08	1.26	0.65	80.6	0	0	1006.4	-1.1	55.5	11.919
2022-11-08 18:00	1.125	1.395	1.19	117.8	0	0	1005.7	-1.9	60	11.837
2022-11-08 19:00	1.305	1.575	0.97	125.7	0	0	1005.1	-1.5	59.6	11.793
2022-11-08 20:00	2.475	2.79	1.33	111.2	0	0	1004.1	-1.4	60.6	11.734
2022-11-08 21:00	2.88	3.6	2.1	125.4	0	0	1002.8	-0.8	59.1	11.689
2022-11-08 22:00	2.79	3.375	2.25	134.6	0	0	1001.8	-0.6	59.7	11.647
2022-11-08 23:00	2.295	2.925	2.8	138.5	0	0	1000.7	-0.1	55.2	11.607
2022-11-09 0:00	2.745	3.555	3.29	143.5	0	0	999.6	0	54.7	11.569
2022-11-09 1:00	3.06	4.05	3.49	147.2	0	0	998.6	0	55.6	11.531
2022-11-09 2:00	3.15	4.41	3.19	157.9	0	0	997.9	-0.1	56.8	11.49
2022-11-09 3:00	3.195	4.32	3.55	151.7	0	0	996.4	-0.1	58.1	11.445
2022-11-09 4:00	3.105	4.5	4.04	159.5	0	0	994.7	0.2	58	11.392
2022-11-09 5:00	2.925	3.87	3.82	164.3	0	0	993.8	0.4	58.4	11.334
2022-11-09 6:00	2.655	3.33	3.71	165.2	0	0	992.5	0.6	60.7	10.706
2022-11-09 7:00	2.565	3.645	3.65	165.9	0.3	0	991.2	1.1	64	10.508
2022-11-09 8:00	2.52	3.555	2.76	170.1	0.1	0	990.5	1.1	72.2	10.419
2022-11-09 9:00	2.97	3.87	3.22	163.7	2.9	0	989.3	1	82.2	10.329
2022-11-09 10:00	3.42	4.005	2.94	173.4	0.4	0	988.2	1.5	85.9	10.234
2022-11-09 11:00	4.05	4.635	2.81	173.7	0.1	0	987.3	2.4	86.9	10.114
2022-11-09 12:00	3.87	4.275	2.94	175.5	0.5	0	986.6	2.8	87.8	9.782
2022-11-09 13:00	3.69	4.23	1.96	176.3	0	0	986.1	3.1	88.3	9.131

2022-11-09 14:00	3.78	4.365	2.21	174.5	0	0	985.3	3.7	88.8	8.75
2022-11-09 15:00	3.69	4.185	1.83	176.9	0	0	985.1	4.3	88.2	8.663
2022-11-09 16:00	3.195	3.645	1.69	173.5	0	0	984.6	4.3	88.3	8.578
2022-11-09 17:00	3.42	4.005	1.64	175	0	0	984.3	4.4	88.4	8.482
2022-11-09 18:00	3.15	3.69	1.62	165.4	1	0	983.7	4.3	89	8.332
2022-11-09 19:00	2.97	3.375	1.53	177.7	0.1	0	983.3	4.5	88.4	8.054
2022-11-10 11:00	0.36	0.72	2.88	3	0	0	982	3.1	87	7.992
2022-11-14 12:00	1.62	2.385	3.11	281.1	0	0	993.6	-5.2	80.3	8.349
2022-11-14 13:00	1.44	1.755	2.48	282.8	0	0	993.6	-4.7	79.8	7.967
2022-11-14 14:00	1.665	1.89	2.61	278.5	0	0	994	-4.6	80.1	9.904
2022-11-15 9:00	1.035	1.35	0.76	17.4	0	0	1001.4	-8	78.6	10.629
2022-11-15 10:00	0.99	1.215	1.08	42.9	0	0	1001.3	-7.6	76.5	11.148
2022-11-15 11:00	0.9	1.08	0.87	14	0	0	1000.9	-6.6	74.5	11.021
2022-11-15 12:00	1.125	1.305	1.39	42.3	0	0	999.9	-6.5	76.6	10.784
2022-11-15 13:00	1.305	1.485	1.69	37.7	0	0	999	-6.5	77.2	10.331
2022-11-15 14:00	1.17	1.44	1.76	27.6	0	0	998.3	-6.5	78.1	9.278
2022-11-16 10:00	0.63	0.675	2.7	354	0	0	985.9	-8.6	72.9	7.711
2022-11-16 11:00	0.54	0.9	2.48	348.3	0	0	985.9	-8.7	73.4	8.86
2022-11-16 12:00	0.36	0.585	2.76	342.8	0	0	984.4	-8.6	72.3	8.778
2022-11-16 13:00	0.315	0.675	2.59	355.3	0	0	984.2	-8.6	71.8	9.446
2022-11-17 9:00	0.855	1.035	1.8	307.5	0	0	979.8	-10.8	76.2	8.299
2022-11-17 10:00	0.81	0.99	1.7	290.1	0	0	979.8	-10.6	76.6	8.372
2022-11-18 15:00	1.08	1.44	1.47	215.8	0	0	975.7	-7.9	77	12.124
2022-11-18 16:00	0.945	1.215	1.02	194.7	0	0	975.8	-8.3	76.5	12.043
2022-11-18 17:00	0.9	0.99	0.8	162.7	0	0	975.7	-9.2	80.6	12.017
2022-11-18 18:00	0.81	0.855	1.1	171	0	0	975.7	-9.6	80.8	11.993
2022-11-18 19:00	0.81	0.945	1.45	174.1	0	0	975.6	-10	81	11.972
2022-11-18 20:00	0.855	1.035	1.67	172.5	0	0	975.3	-10.1	80.5	11.948
2022-11-18 21:00	1.35	1.53	1.96	173.1	0	0	974.9	-9.9	79.4	11.923
2022-11-18 22:00	2.61	2.745	1.69	172.9	0	0	974.6	-9.8	78.1	11.899
2022-11-18 23:00	2.07	2.205	2.18	166.6	0	0	974.1	-9.5	77	11.878
2022-11-19 0:00	1.53	1.755	2.32	172.8	0	0	973.9	-9.1	77	11.854
2022-11-19 1:00	1.35	1.485	2.16	166.3	0	0	973.4	-9	78	11.835
2022-11-19 2:00	1.665	1.89	2.53	164.3	0	0	972.8	-9.2	79.3	11.813
2022-11-19 3:00	2.07	2.34	2.31	166	0	0	972.6	-9.3	81.1	11.792
2022-11-19 4:00	2.07	2.655	2.25	167.1	0	0	972.3	-8.9	82.2	11.769
2022-11-19 5:00	2.25	2.61	2.13	159.8	0	0	971.9	-8.5	82.8	11.748
2022-11-19 6:00	2.475	2.79	1.97	147.8	0	0	971.5	-8.6	82.9	11.731
2022-11-19 7:00	2.61	2.79	1.78	143.1	0	0	971.3	-8.8	82.6	11.709
2022-11-19 8:00	2.475	2.7	2.31	159	0	0	971.1	-8.2	82	11.711
2022-11-19 9:00	2.16	2.34	2.75	171.3	0	0	970.9	-7.2	79.7	11.775
2022-11-19 10:00	2.25	2.475	3.12	171.9	0	0	970.5	-6.4	77.3	12.362
2022-11-19 11:00	2.61	2.88	3.43	173.3	0	0	969.9	-5.7	75.9	12.385
2022-11-19 12:00	2.97	3.375	3.49	172.8	0	0	969.1	-5.3	78.5	12.381
2022-11-19 13:00	2.835	3.195	2.86	165.3	0	0	968.4	-5.3	81.2	11.866
2022-11-19 14:00	2.7	3.06	2.22	139	0	0	967.7	-5.2	82.9	11.727
2022-11-19 15:00	2.205	2.7	2.99	154.6	0	0	967	-5	82.8	11.677
2022-11-19 16:00	1.98	2.475	2.11	185.3	0	0	967.2	-5.4	81.7	11.653
2022-11-19 17:00	2.07	2.43	1.43	183.7	0	0	967.5	-5.8	82.2	11.641
2022-11-19 18:00	2.205	2.7	1.27	177.4	0	0	967.8	-6.5	80.4	11.623
2022-11-19 19:00	2.7	3.465	2.42	211.9	0	0	968	-6.9	78.6	11.596
2022-11-19 20:00	1.89	2.565	3.54	252.3	0	0	968.6	-7.4	80.1	11.574
2022-11-19 21:00	1.845	2.79	3.89	286.1	0	0	969.1	-8.2	79	11.558
2022-11-19 22:00	1.935	3.06	5.08	295	0	0	970.1	-10.2	76.3	11.534
2022-11-19 23:00	2.925	4.995	4.34	297.8	0	0	971.1	-12	75.4	11.511
2022-11-20 0:00	4.14	7.02	4.27	298.4	0	0	972	-12.9	75.3	11.487
2022-11-20 1:00	6.075	8.46	4.48	298.5	0	0	973.1	-14.3	74.6	11.462
2022-11-20 2:00	6.975	9.045	4.35	291.3	0	0	974.1	-15.4	74.1	11.436
2022-11-20 3:00	6.48	7.335	3.9	283.7	0	0	974.9	-15.9	73.9	11.409
2022-11-20 4:00	5.805	6.39	3.25	276.8	0	0	975.6	-16.4	74.5	11.388
2022-11-20 5:00	5.265	5.94	2.37	277.2	0	0	976.5	-16.6	74.7	11.365
2022-11-20 6:00	5.175	6.48	3.3	285.4	0	0	977.2	-16.4	73.9	11.333
2022-11-20 7:00	4.725	5.355	2.95	273	0	0	978	-16.4	73.7	10.551
2022-11-20 8:00	4.5	5.22	3.82	276.4	0	0	978.9	-16.3	73.7	9.235
2022-11-20 9:00	4.455	5.04	3.85	269.9	0	0	979.8	-15.9	75	8.464
2022-11-20 10:00	4.095	4.59	4.49	263	0	0	980.7	-15.6	74.1	10.528
2022-11-20 11:00	4.095	4.455	3.9	259.8	0	0	981.1	-15.2	72.5	12.358
2022-11-20 12:00	4.185	4.5	4.18	258.3	0	0	981.3	-14.2	71.4	12.76
2022-11-20 13:00	4.095	4.545	3.88	260.2	0	0	981.7	-13.5	70.2	12.47
2022-11-20 14:00	3.69	4.23	3.52	260.5	0	0	982.1	-12.4	68	13.002
2022-11-20 15:00	3.42	3.825	3.19	243.5	0.1	0	982.5	-12.2	68.4	12.033
2022-11-20 16:00	3.15	3.6	2	233.9	3.3	0	983	-12.4	70.6	11.727
2022-11-20 17:00	2.835	3.15	1.85	220.8	0	0	983.3	-12.7	69.7	11.626
2022-11-20 18:00	2.34	2.7	1.24	178.2	0	0	983.2	-14.3	74.4	11.54
2022-11-20 19:00	2.385	2.7	1.54	170.5	0	0	982.7	-15.4	76.6	11.423
2022-11-20 20:00	2.16	2.385	1.7	168.6	0	0	982	-15.5	75.3	9.578
2022-11-20 21:00	2.16	2.385	2.14	169.6	0	0	981.4	-14.9	73.3	8.247
2022-11-21 10:00	11.34	12.375	2.62	210.1	0	0	968.8	-2.6	87.5	12.397
2022-11-21 11:00	7.785	8.64	3.43	254.7	0	0	969.3	-2.7	86.1	12.334
2022-11-21 12:00	3.105	3.6	4.71	293.9	0	0	970.2	-3.5	81.4	12.442
2022-11-21 13:00	2.835	3.96	4.88	305.3	0	0	971.6	-4.5	81.1	12.785
2022-11-21 14:00	2.565	4.095	5.5	307	0	0	973.9	-5.7	79.6	12.76
2022-11-21 15:00	2.34	3.015	4.49	302.1	0	0	976.2	-6.5	78.8	12.219
2022-11-21 16:00	2.295	2.88	4.34	295.6	0	0	978.2	-7	79.1	12.145
2022-11-21 17:00	2.79	3.825	3.88	293.6	0	0	980.3	-7.4	79.1	12.111
2022-11-21 18:00	2.52	2.88	3.7	275.4	0	0	982	-7.6	79	12.077
2022-11-21 19:00	2.07	2.34	3.73	274	0	0	983.5	-7.8	78.3	12.044
2022-11-21 20:00	1.71	1.935	2.4	263	0	0	984.7	-8.8	78	12.004
2022-11-21 21:00	1.845	2.16	3.07	271.2	0	0	985.6	-8.4	78.3	11.969
2022-11-21 22:00	1.575	1.8	2.08	255	0	0	986.1	-8.5	74.2	11.933

2022-11-21 23:00	1.395	1.575	1.66	250.2	0	0	986.5	-9.3	73.7	11.903
2022-11-22 0:00	1.395	1.755	1.37	210.4	0	0	986.6	-10.8	77.2	11.881
2022-11-22 1:00	1.215	1.395	1.4	187.6	0	0	986.8	-11.8	79.1	11.856
2022-11-22 2:00	1.125	1.305	1.69	189	0	0	986.8	-12.1	79.6	11.832
2022-11-22 3:00	1.035	1.17	1.74	186.4	0	0	986.8	-12.2	79.1	11.805
2022-11-22 4:00	0.99	1.17	1.78	194.7	0	0	986.6	-12.1	79	11.777
2022-11-22 5:00	1.035	1.17	1.82	191.3	0	0	986.2	-12	78.7	11.752
2022-11-22 6:00	0.99	1.125	1.82	183.1	0	0	985.7	-11.8	79	11.728
2022-11-22 7:00	0.99	1.17	1.96	180.7	0	0	985.5	-10.6	78.8	11.706
2022-11-22 8:00	1.125	1.35	2.12	177.3	0	0	985.4	-9.8	79.3	11.702
2022-11-22 9:00	0.99	1.17	2.4	177.3	0	0	984.9	-8.8	80.7	11.739
2022-11-22 10:00	1.125	1.305	2.99	179.4	0	0	984.1	-7.7	83.2	11.756
2022-11-22 11:00	1.125	1.35	3.03	177.9	0.2	0	983.1	-7	84.8	11.757
2022-11-22 12:00	1.44	1.665	2.91	187.9	0	0	982	-5.4	84.9	11.778
2022-11-22 13:00	1.575	1.8	3.21	193.3	0	0	981.2	-4.3	84	11.802
2022-11-22 14:00	1.44	1.665	2.88	190.1	0	0	980.6	-4.1	83.1	11.742
2022-11-22 15:00	1.35	1.485	2.44	190.8	0	0	980.4	-3.9	83.4	11.678
2022-11-22 16:00	1.53	1.71	1.85	199.6	0	0	980.7	-3.9	82.7	11.634
2022-11-22 17:00	1.62	1.845	1.31	190.8	0	0	981	-4.2	83	11.611
2022-11-22 18:00	1.71	1.845	0.94	213.6	0	0	981.4	-4.2	82.7	11.6
2022-11-22 19:00	1.755	1.89	1.62	270.4	0	0	982	-4.1	83.5	11.57
2022-11-22 20:00	1.755	1.845	1.43	299.7	0	0	982.4	-4.1	81.5	11.554
2022-11-22 21:00	2.25	2.43	1.36	319.8	0	0	982.8	-4.9	79.2	11.528
2022-11-22 22:00	2.25	2.385	0.89	309.1	0	0	983.3	-4.9	77.8	11.499
2022-11-22 23:00	2.16	2.295	1.47	338.5	0	0	983.4	-5.6	76.8	11.44
2022-11-23 0:00	2.205	2.295	1.45	329.7	0	0	983.9	-6.3	77.8	11.382
2022-11-23 1:00	2.115	2.25	1.33	341.5	0	0	984.6	-6.5	79.5	11.335
2022-11-23 2:00	1.98	2.115	1	0.9	0	0	984.9	-6.7	79.1	10.738
2022-11-23 3:00	1.8	1.89	0.54	48.7	0	0	985.3	-6.7	77.2	10.549
2022-11-23 4:00	1.62	1.71	0.54	141.1	0	0	985.6	-7.1	80	10.483
2022-11-23 5:00	1.575	1.71	0.52	82.1	0	0	986.1	-6.9	79	10.413
2022-11-23 6:00	1.665	1.71	0.69	158.3	0	0	986.5	-7.1	80.4	10.311
2022-11-23 7:00	1.8	1.89	0.48	104.6	0	0	987.3	-6.8	79.1	10.214
2022-11-23 8:00	1.935	2.115	0.91	106.4	0	0	987.4	-6.9	80.8	9.823
2022-11-23 9:00	2.16	2.295	1.46	124.1	0	0	987.8	-6.3	80.1	8.805
2022-11-23 10:00	2.34	2.745	1.88	143.5	0	0	988	-5.6	79.1	9.424
2022-11-23 11:00	2.475	2.655	2.03	152.1	0	0	987.7	-4.6	79.8	12.169
2022-11-23 12:00	2.79	3.015	1.62	136	0	0	987.3	-4	81.5	12.12
2022-11-23 13:00	2.79	3.06	1.67	141.2	0	0	987.2	-3.5	82.8	12.105
2022-11-23 14:00	2.79	2.97	1.49	131.2	0	0	987.1	-3.1	84.8	12.049
2022-11-23 15:00	2.565	2.745	1.38	127.1	0	0	987.1	-2.9	86.6	12.017
2022-11-23 16:00	2.655	2.745	1.48	124.1	0	0	987.1	-2.7	87.4	11.991
2022-11-23 17:00	3.42	3.6	1.54	130.9	0	0	987.3	-2.3	87.2	11.978
2022-11-23 18:00	4.59	4.77	1.56	146.6	0	0	987.3	-1.9	87	11.949
2022-11-23 19:00	7.155	7.335	2.1	148.9	0	0	987	-1.5	87.7	11.914
2022-11-23 20:00	6.84	7.065	1.26	134.3	0	0	987.4	-1.1	86.2	11.905
2022-11-23 21:00	6.435	6.57	2.7	165	0	0	987.1	-0.6	85.9	11.858
2022-11-23 22:00	4.68	4.815	2.65	173.2	0	0	987	-0.4	85.5	11.828
2022-11-23 23:00	3.78	3.915	2.53	170.1	0	0	986.8	-0.2	86	11.798
2022-11-24 0:00	4.185	4.365	2.43	162.9	0	0	986.5	-0.2	86.4	11.765
2022-11-24 1:00	6.03	6.3	2.52	166.3	0	0	986.1	-0.2	86.6	11.731
2022-11-24 2:00	7.2	7.425	2.45	165.1	0	0	985.6	-0.5	86.8	11.704
2022-11-24 3:00	7.875	8.1	2.3	168.4	0	0	985	-0.9	87.1	11.672
2022-11-24 4:00	8.28	8.55	2.15	169.7	0	0	984.4	-1.3	87	11.642
2022-11-24 5:00	10.845	11.385	1.96	170.8	0	0	984	-1.8	86.7	11.611
2022-11-24 6:00	18.855	19.845	1.61	169.4	0	0	983.6	-2.1	86.7	11.583
2022-11-24 7:00	25.335	26.775	2.11	167.3	0	0	983	-2.2	86.9	11.557
2022-11-24 8:00	30.51	31.95	3.08	172.4	0	0	982.3	-1.7	86.6	11.599
2022-11-24 9:00	44.505	46.44	3.49	178.2	0	0	981.7	-0.8	86.8	11.596
2022-11-24 10:00	59.625	61.785	3	179.8	0	0	981.3	0.1	86.1	11.805
2022-11-24 11:00	68.625	70.875	2.8	177	0	0	980.6	0.4	85.4	12.443
2022-11-24 12:00	77.445	79.965	3.15	178	0	0	979.6	1	84.3	13.231
2022-11-24 13:00	82.89	85.41	2.33	181.9	0	0	978.8	1.6	83.1	13.216
2022-11-24 14:00	83.88	86.355	1.88	182.7	0	0	978.1	2	83.4	12.915
2022-11-24 15:00	83.7	85.995	0.73	205.5	0	0	977.7	2.1	83.8	12.186
2022-11-24 16:00	74.205	75.96	0.34	117.8	0	0	977.4	1.6	84.7	12.026
2022-11-24 17:00	64.575	66.105	0.68	123.9	0	0	976.7	0.7	87.2	11.955
2022-11-24 18:00	67.77	69.3	0.61	110.5	0	0	975.8	0.8	87.3	11.912
2022-11-24 19:00	60.615	61.245	0.53	312.2	0.1	0	975.1	0.8	86	11.851
2022-11-24 20:00	56.43	56.745	0.57	185.7	0.1	0	974.5	0.8	85.7	11.807
2022-11-24 21:00	51.525	51.705	0.79	192.6	0.2	0	973.6	0.5	87.2	11.756
2022-11-24 22:00	44.82	45.045	1.88	278	1.4	0	973.3	1	87.3	11.708
2022-11-24 23:00	19.395	19.485	2.48	293.3	0.2	0	973.2	0.3	87.4	11.668
2022-11-25 0:00	11.925	12.015	2.36	301.7	0	0	973.3	0	88	11.622
2022-11-25 1:00	6.75	6.795	2.39	305.8	0	0	973.5	-0.2	87.7	11.584
2022-11-25 2:00	3.195	3.195	2.39	308.3	0	0	973.9	-0.2	86.9	11.544
2022-11-25 3:00	2.835	2.88	2.52	312	0	0	974	-0.2	86.8	11.512
2022-11-25 4:00	2.385	2.475	2.58	308.7	0	0	974.2	-0.3	87	11.476
2022-11-25 5:00	2.475	2.565	2.02	311.5	0	0	974.6	-0.3	87.3	11.446
2022-11-25 6:00	3.195	3.285	2.71	313	0	0	975.2	-0.4	85.4	11.416
2022-11-25 7:00	2.52	2.61	2.75	313.2	0	0	975.8	-0.7	85.2	11.386
2022-11-25 8:00	2.25	2.34	2.65	306.4	0	0	976.3	-0.8	83.6	11.355
2022-11-25 9:00	1.755	1.845	3.01	309.7	0	0	976.9	-1.2	83.1	11.344
2022-11-25 10:00	0.99	1.035	2.98	307.5	0	0	977.5	-1.3	81.2	11.362
2022-11-25 11:00	0.9	0.945	2.81	297.3	0	0	977.7	-1.4	80.1	11.377
2022-11-25 12:00	0.81	0.9	3.21	291.2	0	0	977.6	-1.4	79.8	11.37
2022-11-25 13:00	0.45	0.45	2.79	275.9	0	0	977.6	-1.3	75.4	11.449
2022-11-25 14:00	0.54	0.63	2.59	257.1	0	0	977.7	-1.5	78.6	10.802
2022-11-25 15:00	0.54	0.585	2.68	251	0	0	978.1	-1.4	79.7	10.523
2022-11-25 16:00	0.675	0.765	2.64	242.9	0	0	978.6	-1.6	82.1	10.433

2022-11-25 17:00	0.72	0.765	2.31	235.6	0	0	978.9	-1.8	83	10.354
2022-11-25 18:00	0.63	0.765	2.1	216.2	0	0	978.4	-2	82.5	10.269
2022-11-25 19:00	0.585	0.63	1.52	201.9	0	0	978.2	-3	83.3	10.176
2022-11-25 20:00	0.585	0.675	1.81	176.1	0	0	977.5	-3.7	84.3	10.056
2022-11-25 21:00	0.72	0.765	2.42	176.3	0	0	976.5	-4	84.4	9.891
2022-11-25 22:00	0.765	0.855	2.9	175	0	0	975.6	-4	84.5	9.444
2022-11-25 23:00	0.855	0.945	3.2	180	0	0	974.3	-3.4	84	8.523
2022-11-26 0:00	0.99	1.08	3.38	181.6	0	0	973.7	-2.6	83.9	8.118
2022-11-26 1:00	1.035	1.35	3.29	179.3	0	0	972.6	-2.3	83.8	7.551
2022-11-26 9:00	4.905	5.355	2.59	191.6	0	0	967.8	0.1	83.7	8.344
2022-11-26 10:00	5.04	5.49	2.76	189.7	0	0	967.6	1	80.9	10.829
2022-11-26 11:00	4.545	4.95	2.88	197.8	0	0	967.1	2.5	76.5	11.632
2022-11-26 12:00	4.095	4.68	2.9	187.5	0	0	966.5	3.5	74.8	12.674
2022-11-26 13:00	3.69	4.41	2.95	191.4	0	0	965.9	4.8	71	13.075
2022-11-26 14:00	3.42	4.185	1.82	214.5	0	0	966	6	67.6	12.873
2022-11-26 15:00	3.24	3.87	0.8	240.5	0	0	966.1	6.8	66.4	12.529
2022-11-26 16:00	2.97	3.465	0.55	154.2	0	0	966.3	4.6	76.3	11.94
2022-11-26 17:00	2.925	3.555	1.19	170.4	0	0	966.4	1.9	82.7	11.685
2022-11-26 18:00	3.06	3.96	1.11	195.4	0	0	966.5	2.4	78	11.639
2022-11-26 19:00	2.925	3.78	1.03	179.1	0	0	966.4	1.3	80.9	11.6
2022-11-26 20:00	3.06	4.095	1.1	196	0	0	966.8	0.8	80.8	11.555
2022-11-26 21:00	3.33	4.725	1.17	223.8	0	0	967.2	0.8	79.5	11.506
2022-11-26 22:00	3.6	5.22	1.58	244	0	0	967.4	0.8	79.6	11.458
2022-11-26 23:00	3.6	4.995	1.19	209.5	0	0	967.4	0.3	81.9	11.415
2022-11-27 0:00	3.6	4.905	1.26	214.4	0	0	967.8	0.4	82.6	11.362
2022-11-27 1:00	3.465	4.59	1.1	212	0	0	968.3	0.6	83.2	11.143
2022-11-27 2:00	3.51	4.455	1.81	272.9	0	0	968.8	0.8	84.2	10.548
2022-11-27 3:00	3.915	4.725	1.54	277.2	0	0	969.3	1.1	84.3	10.477
2022-11-27 4:00	3.87	4.365	2.06	309.9	0	0	969.9	1	86.3	10.391
2022-11-27 5:00	1.395	1.53	2.03	323.6	0	0	970.9	0.6	86.2	10.297
2022-11-27 6:00	0.81	0.945	1.91	340.4	0	0	971.5	0	85.7	10.181
2022-11-27 7:00	1.08	1.215	1.43	346.8	0	0	972.1	-0.4	85	10.035
2022-11-27 8:00	1.215	1.305	0.91	349.8	0	0	972.3	-0.3	84.5	9.859
2022-11-27 9:00	1.26	1.395	1.32	1.5	0	0	972.4	-0.4	83.9	9.427
2022-11-27 10:00	1.125	1.305	1.81	0.2	0	0	972.5	-0.3	77.5	9.596
2022-11-27 11:00	1.035	1.215	2.11	2.2	0	0	972.7	-0.7	76.4	8.839
2022-11-27 12:00	0.945	1.08	2.06	358.3	0	0	972.3	-0.8	72.8	8.566
2022-11-27 13:00	0.945	1.08	2.12	0.3	0	0	971.6	-0.9	69.8	8.429
2022-11-27 14:00	1.08	1.215	1.7	8.1	0	0	971.2	-1.2	73.6	7.746
2022-11-28 10:00	2.25	2.52	1.85	297.3	0	0	981.8	-6.1	81.1	8.38
2022-11-28 11:00	2.115	2.385	1.4	291.7	0	0	982	-5.6	77.1	10.01
2022-11-28 12:00	2.115	2.34	0.98	305.8	0	0	981.5	-4.8	73.9	11.19
2022-11-28 13:00	1.71	1.935	1.26	235.5	0	0	981.7	-4.3	69	11.585
2022-11-28 14:00	1.665	1.89	1.06	198.8	0	0	982	-3.8	65.8	11.971
2022-11-28 15:00	1.845	2.115	1.27	125	0	0	982.3	-4.3	69.7	10.762
2022-11-28 16:00	1.62	1.8	0.87	127.9	0	0	982.6	-4.4	68.7	10.262
2022-11-28 17:00	1.62	1.845	0.36	146.2	0	0	983	-4.4	70.1	10.069
2022-11-28 18:00	1.53	1.71	0.51	111.7	0	0	982.9	-6.1	77.4	9.646
2022-11-28 19:00	1.53	1.665	0.58	82	0	0	982.8	-7.2	80.2	8.197
2022-11-29 13:00	1.26	1.575	2.95	132.8	0	0	980.8	-1.1	72.7	10.9
2022-11-29 14:00	1.53	2.16	3.17	137	0	0	980.2	-0.4	71.3	10.512
2022-11-29 15:00	1.53	1.935	2.89	130.1	0	0	979.5	-0.6	73.5	9.18
2022-11-30 10:00	0.18	0.315	3.9	225.9	0	0	955.5	0.9	81.7	12.18
2022-11-30 11:00	0.63	0.765	3.96	216.2	0.2	0	955.4	0.3	81.2	12.213
2022-11-30 12:00	1.485	1.8	4.28	207.6	0	0	956.2	-0.5	79.6	12.032
2022-11-30 13:00	1.08	1.44	4.99	222.8	0	0	956.2	-0.2	69.7	12.425
2022-11-30 14:00	1.17	1.62	5.3	220.2	0	0	956.4	-0.4	66.4	12.218
2022-11-30 15:00	1.35	1.98	4.75	223.5	0	0	957	-1	65.5	11.987
2022-11-30 16:00	1.305	1.71	4.81	231.4	0	0	957.7	-1.5	63.5	11.938
2022-11-30 17:00	1.17	1.62	5.2	228.8	0	0	958.2	-1.8	62	11.899
2022-11-30 18:00	0.99	1.71	5.05	238.2	0	0	958.8	-2.4	65.4	11.865
2022-11-30 19:00	0.765	1.26	5.19	243	0	0	959.7	-3.3	61.1	11.831
2022-11-30 20:00	1.08	2.205	4.54	235.7	0	0	960.7	-4.3	69.7	11.798
2022-11-30 21:00	1.08	2.7	4.19	220.8	0	0	961.1	-5	79.3	11.768
2022-11-30 22:00	0.99	3.06	4.66	234.7	0	0	961.6	-4.9	81.1	11.738
2022-11-30 23:00	0.945	2.7	4.81	249.1	0	0	962.8	-4.8	81.6	11.708
2022-12-01 0:00	0.81	2.61	5.11	252.4	0	0	964	-4.8	82.2	11.678
2022-12-01 1:00	1.08	3.285	6.82	261.2	0	0	965.7	-4.9	79.3	11.651
2022-12-01 2:00	1.305	3.6	6.55	267.5	0	0	968.2	-5.4	78.7	11.622
2022-12-01 3:00	1.935	4.95	6.65	270.5	0	0	970.5	-5.8	79.2	11.588
2022-12-01 4:00	2.25	4.95	6.75	272.7	0	0	972.7	-6.2	76.8	11.549
2022-12-01 5:00	3.24	5.85	6.7	277.7	0	0	975.1	-6.7	74.9	11.494
2022-12-01 6:00	4.095	6.615	6.12	275.4	0	0	977.5	-7.2	75.5	11.442
2022-12-01 7:00	4.05	6.66	6.71	275.6	0	0	979.5	-7.6	74.6	11.395
2022-12-01 8:00	3.645	5.355	5.83	282.4	0	0	981.5	-8.1	72.7	11.359
2022-12-01 9:00	3.42	5.355	5.77	281.3	0	0	983.1	-8.5	72.8	11.425
2022-12-01 10:00	2.745	3.915	5.76	284.9	0	0	984.4	-8.6	70.7	11.822
2022-12-01 11:00	2.52	3.33	5.45	284.1	0	0	985.7	-8.4	69.3	12.294
2022-12-01 12:00	2.79	3.6	4.5	272.8	0	0	986.4	-7.7	68.2	13.06
2022-12-01 13:00	3.06	3.69	4.29	274.9	0	0	986.8	-6.9	64.6	13.644
2022-12-01 14:00	3.24	3.735	3.81	263.2	0	0	987.4	-6.3	61.6	13.453
2022-12-01 15:00	3.6	4.05	3.38	248.7	0	0	988.1	-5.7	57.9	13.287
2022-12-01 16:00	2.925	3.24	1.55	245.5	0	0	988.7	-6.3	56.8	12.021
2022-12-01 17:00	2.61	2.88	0.96	199.1	0	0	988.8	-7.6	59.9	11.888
2022-12-01 18:00	2.52	2.88	0.91	200.7	0	0	988.9	-7.7	60.6	11.773
2022-12-01 19:00	2.385	2.61	1.02	183.3	0	0	989	-8.2	63.2	11.325
2022-12-01 20:00	2.295	2.475	0.4	150.6	0	0	988.4	-8.9	66.9	10.811
2022-12-01 21:00	2.115	2.295	0.54	132.5	0	0	988	-10.6	72.8	10.734
2022-12-01 22:00	2.205	2.475	1.06	162.4	0	0	987.4	-9.4	70.2	10.636
2022-12-01 23:00	2.385	2.655	1.58	173	0	0	987.2	-8.5	69.5	10.546

2022-12-02 0:00		3.06	3.42	1.71	156.1	0	0	986.8	-7.6	68.3	10.436
2022-12-02 1:00		3.735	4.455	1.36	104.7	0	0	986.1	-8.1	72.6	10.337
2022-12-02 2:00		3.285	5.31	1.93	134.1	0	0	985.3	-7.5	74.4	10.268
2022-12-02 3:00		2.7	4.365	2.61	144.6	0	0	983.8	-6.2	75.3	10.207
2022-12-02 4:00		2.295	3.195	3.2	160.8	0	0	982.5	-4.8	74.7	10.135
2022-12-02 5:00		1.89	2.25	2.65	172.9	0	0	982.1	-4.1	73.3	9.953
2022-12-02 6:00		2.115	2.565	2.64	166.6	0	0	981.3	-3.6	71.4	8.921
2022-12-02 7:00		3.015	3.465	2.68	168.3	0	0	980.8	-3.1	71.9	8.781
2022-12-02 8:00		4.095	4.815	2.68	163.7	0	0	980.5	-2.7	72.9	8.746
2022-12-02 9:00		5.445	6.12	3	161	0	0	979.5	-1.9	72.3	8.792
2022-12-02 10:00		6.435	7.065	3.4	167.7	0	0	978.6	-0.5	68.5	9.025
2022-12-02 11:00		7.2	8.145	4.7	176.3	0	0	977.6	0.7	63.9	10.263
2022-12-02 12:00		7.065	8.01	4.61	177.5	0	0	976.7	1.2	62.4	11.424
2022-12-02 13:00		6.57	7.65	4.45	174.6	0	0	975.6	1.3	62.4	10.276
2022-12-02 14:00		6.165	7.2	3.74	170.9	0	0	974.8	1.4	62.1	9.314
2022-12-02 15:00		5.4	6.39	3.21	163	0	0	974.1	1.5	61.9	8.752
2022-12-02 16:00		4.95	6.03	3.33	159.3	0	0	973.3	1.4	62.3	8.644
2022-12-02 17:00		4.905	6.3	3.19	152.4	0	0	972	1.3	61.6	8.61
2022-12-02 18:00		5.085	6.705	3.02	153.7	0	0	971	1.1	60.4	8.562
2022-12-02 19:00		4.995	6.525	3.93	166.5	0	0	970	1.7	62.3	8.495
2022-12-02 20:00		4.86	6.21	4.46	174.4	0	0	969.3	2	63.5	8.421
2022-12-02 21:00		5.535	7.29	4.31	173	0	0	968.2	2.1	66.6	8.311
2022-12-02 22:00		5.49	7.02	3.65	178.7	0	0	968.1	2	69	8.006
2022-12-03 11:00		1.575	3.645	5.31	302.9	0	0	972.8	-10.6	75.2	8.632
2022-12-05 10:00		3.555	4.23	2.28	261.4	0	0	972.2	-7.7	73	12.075
2022-12-05 11:00		3.465	4.095	2.74	237.5	0	0	972.6	-7	66.7	13.669
2022-12-05 12:00		3.42	3.96	2.14	287.9	0	0	972.9	-7.1	67.7	13.513
2022-12-05 13:00		3.24	3.825	1.56	290.5	0	0	973.4	-6.9	67.5	12.624
2022-12-05 14:00		2.97	3.51	1.22	186.1	0	0	974	-6.4	63.6	13.241
2022-12-05 15:00		2.97	3.51	1.59	147.2	0	0	974.5	-7	70.1	12.202
2022-12-05 16:00		2.88	3.465	0.86	115.9	0	0	974.9	-8.6	79.2	11.244
2022-12-05 17:00		2.7	3.24	1.01	125.2	0	0	975.3	-9.8	81.4	10.328
2022-12-05 18:00		2.925	3.465	1.73	128.2	0	0	975.4	-9.4	81.9	9.75
2022-12-05 19:00		2.835	3.375	2.52	130.6	0	0	975	-8.3	82.6	8.085
2022-12-06 8:00		2.7	3.15	0.43	59.2	0.1	0	990.4	-23	78.8	10.845
2022-12-06 9:00		3.015	3.375	1.19	43.3	0	0	990.9	-20.7	72.9	13.59
2022-12-06 10:00		2.745	3.015	1.37	65.9	0	0	991.7	-18.4	65.8	13.971
2022-12-06 11:00		3.465	3.825	1.46	36.8	0	0	991.5	-16.7	65.6	13.672
2022-12-06 12:00		4.545	4.995	1.44	47.4	0	0	991.4	-15	62.4	13.285
2022-12-06 13:00		5.13	5.625	1.56	24.2	0	0	991.8	-14.1	62	13.28
2022-12-06 14:00		5.31	5.895	1.91	33.4	0	0	991.8	-13.6	64.3	13.052
2022-12-06 15:00		5.265	5.895	1.6	47.2	0	0	991.4	-13.5	68	11.844
2022-12-06 16:00		4.95	5.445	1.24	52.3	0	0	991	-13.6	70.8	11.579
2022-12-06 17:00		4.77	5.4	1.08	36.3	0	0	990.8	-13.8	71.4	11.438
2022-12-06 18:00		4.635	5.13	1.34	31	0	0	990.3	-13.6	73.2	10.34
2022-12-06 19:00		4.365	4.725	1.42	61	0	0	990	-13.5	74.8	9.131
2022-12-08 9:00		1.53	2.61	1.45	153.1	0	0	996.9	-20.8	77.5	12.218
2022-12-08 10:00		2.115	2.61	2.74	165.1	0	0	996.9	-18.9	74.7	13.78
2022-12-08 11:00		2.52	2.97	2.19	156.2	0	0	996.4	-17.2	70.3	13.989
2022-12-08 12:00		3.375	3.69	2.01	170.9	0	0	995.7	-15.3	67	13.925
2022-12-08 13:00		3.24	3.555	2.35	179	0	0	995	-13.6	66.8	13.29
2022-12-08 14:00		2.475	2.7	2.26	200.1	0	0	994.6	-12.6	66	13.291
2022-12-08 15:00		2.34	2.61	1.97	194.4	0	0	994.7	-12.2	67	13.291
2022-12-08 16:00		2.25	2.43	1.05	196.5	0	0	994.8	-12.9	71	11.831
2022-12-08 17:00		2.115	2.295	0.89	174.6	0	0	995.3	-14.9	75.3	11.217
2022-12-08 18:00		2.025	2.205	0.71	206.5	0	0	995.6	-15.3	73.9	9.746
2022-12-09 10:00	4.20	5.31	5.985	1.9	57.5	0	0	1002.7	-12.5	75.7	13.016
2022-12-09 11:00	0.60	4.725	5.265	1.69	60.7	0	0	1002.4	-12.2	74.1	14.024
2022-12-09 12:00	0.10	3.825	4.185	1.96	54.8	0	0	1002.2	-11.7	73.3	13.776
2022-12-09 13:00	0.10	3.06	3.33	2.05	53	0	0	1002.1	-11.5	71.2	13.313
2022-12-09 14:00	0.10	3.06	3.375	2.14	70.3	0	0	1002.3	-11.6	70.9	13.296
2022-12-09 15:00	0.10	2.745	3.06	1.83	44.7	0	0	1002.6	-12.1	72.5	12.963
2022-12-09 16:00	0.20	2.7	2.97	1.35	42.7	0	0	1003	-13.3	75.2	12.404
2022-12-09 17:00	0.20	2.745	3.06	0.99	56.9	0	0	1003	-15.1	77.5	12.191
2022-12-09 18:00	0.20	2.88	3.15	0.98	65.4	0	0	1003.3	-16.1	77.3	12.166
2022-12-09 19:00	0.10	2.655	2.925	0.51	26.7	0	0	1003.7	-17.8	74.5	12.133
2022-12-09 20:00	0.30	3.915	4.275	1	66.5	0	0	1003.6	-18.6	76.4	12.096
2022-12-09 21:00	0.30	4.815	5.355	1.04	63.8	0	0	1003.5	-19.1	75.9	12.064
2022-12-09 22:00	0.10	4.725	5.22	1.06	69.7	0	0	1000.5	-19.7	75.4	12.029
2022-12-09 23:00	0.10	4.275	4.635	0.64	85.7	0	0	1003.4	-20.3	74	11.996
2022-12-10 0:00	0.10	3.915	4.275	0.7	54.4	0	0	1003.5	-20.7	73.8	11.963
2022-12-10 1:00	0.20	3.87	4.185	0.87	48.4	0	0	1003.2	-21.1	74.5	11.935
2022-12-10 2:00	0.10	3.6	3.915	0.76	32.3	0	0	1003.2	-21.8	73.9	11.907
2022-12-10 3:00	0.10	3.735	4.05	0.99	65.7	0	0	1002.8	-21.9	74.1	11.877
2022-12-10 4:00	0.20	3.825	4.185	1.25	66	0	0	1002.3	-21.9	74.8	11.848
2022-12-10 5:00	0.10	3.87	4.185	1.05	67	0	0	1002	-22	74.1	11.823
2022-12-10 6:00	0.30	3.735	4.005	0.8	67.7	0	0	1001.7	-22.3	72.9	11.799
2022-12-10 7:00	0.10	3.6	3.87	0.62	57.4	0	0	1001.3	-22.6	72.2	11.775
2022-12-10 8:00	0.00	3.6	3.825	0.82	60.9	0	0	1000.8	-22.3	72.6	11.881
2022-12-10 9:00	0.00	3.51	3.735	1.51	98.9	0	0	1000.6	-19.4	72.8	13.742
2022-12-10 10:00	0.20	3.33	3.6	2.27	107.3	0	0	1000.4	-16.2	69.8	13.985
2022-12-10 11:00	0.00	3.15	3.465	2.57	102.6	0	0	999.5	-14.3	64.5	13.464
2022-12-10 12:00	0.10	2.97	3.285	2.38	88.1	0	0	998.8	-13	61.4	13.29
2022-12-10 13:00	0.10	2.97	3.285	2.52	90.6	0	0	998.4	-11.9	59.5	13.289
2022-12-10 14:00	0.20	3.015	3.465	2.62	89.5	0	0	997.8	-11.5	60.3	13.289
2022-12-10 15:00	0.10	2.88	3.42	2.09	85.6	0	0	997.4	-11.7	63.6	12.905
2022-12-10 16:00	0.10	2.79	3.195	1.9	68.6	0	0	996.5	-13	69.2	12.267
2022-12-10 17:00	0.20	2.835	3.15	2.15	74.8	0	0	995.9	-14.2	73	12.156
2022-12-10 18:00	0.00	2.925	3.24	1.66	86.2	0	0	995.4	-14.5	72.8	12.069
2022-12-10 19:00	0.30	2.88	3.24	1.17	77.2	0	0	995.1	-14.6	71.8	11.96

2022-12-10 20:00	0.10	2.745	3.06	1.12	78.9	0	0	994.7	-14.8	71.9	11.85
2022-12-10 21:00	0.10	2.79	3.105	1.43	84.4	0	0	994.1	-14.7	73.4	11.809
2022-12-10 22:00	0.10	2.745	3.06	1.3	82.2	0	0	993.5	-14.8	73.8	11.783
2022-12-10 23:00	0.10	2.79	3.06	1.23	81.9	0	0	992.8	-15.2	74.7	11.764
2022-12-11 0:00	0.20	2.745	2.97	0.76	70.1	0	0	992.6	-15	74	11.74
2022-12-11 1:00	0.20	2.565	2.835	1.12	75.6	0	0	992.3	-14.6	74.5	11.719
2022-12-11 2:00	0.30	2.43	2.7	1.15	72.2	0	0	992.1	-14.3	74.9	11.701
2022-12-11 3:00	0.20	2.385	2.61	1.4	82.1	0	0	991.9	-14.4	75.6	11.678
2022-12-11 4:00	0.20	2.34	2.52	1.01	65.1	0	0	991.4	-14.9	76.7	11.662
2022-12-11 5:00	0.10	2.205	2.385	1.27	43.6	0	0	991	-15.7	77.7	11.638
2022-12-11 6:00	0.20	2.115	2.295	1.37	63.7	0	0	991	-15.5	77.6	11.619
2022-12-11 7:00	0.10	2.115	2.34	1.34	62.6	0	0	991	-15.2	77.2	11.597
2022-12-11 8:00	0.30	2.205	2.34	1.6	65.7	0	0	991.2	-14.9	76.8	11.595
2022-12-11 9:00	0.20	2.385	2.745	1.13	55.2	0	0	991.3	-15	75.6	11.668
2022-12-11 10:00	0.10	2.475	2.79	1.27	53.4	0	0	991.4	-14.5	73.2	13.106
2022-12-11 11:00	0.10	2.475	2.745	1.05	25.4	0	0	991	-12.5	67.2	13.787
2022-12-11 12:00	0.20	2.565	3.015	1.38	4.9	0	0	990.7	-12	67.8	13.663
2022-12-11 13:00	0.20	2.475	3.015	1.36	13.3	0	0	990.5	-11.5	67.2	13.653
2022-12-11 14:00	0.20	2.79	3.915	1.71	36.9	0	0	990.6	-10.1	65.1	13.266
2022-12-11 15:00	0.10	3.24	4.545	1.79	16.6	0	0	990.9	-9.9	67.2	12.86
2022-12-11 16:00	0.20	3.6	4.635	1.32	13.1	0	0	991.5	-11.9	72.1	12.28
2022-12-11 17:00	0.50	3.015	4.05	0.99	358.1	0	0	992.1	-13.7	74.2	12.17
2022-12-11 18:00	0.10	2.565	3.375	0.82	355.3	0	0	992.5	-14.6	74.1	12.1
2022-12-11 19:00	0.10	2.34	2.97	0.46	23.7	0	0	992.9	-16	72.9	12.058
2022-12-11 20:00	0.10	2.115	2.79	0.71	4.1	0	0	993.4	-17.6	72	11.991
2022-12-11 21:00	0.20	2.43	2.97	0.86	39.8	0	0	993.6	-17	75.9	11.935
2022-12-11 22:00	0.20	1.98	2.25	0.43	353.4	0	0	993.7	-18.6	70.1	11.901
2022-12-11 23:00	0.10	1.665	1.89	0.41	0.2	0	0	993.8	-20.4	69.4	11.838
2022-12-12 0:00	0.10	1.395	1.575	0.47	302.7	0	0	994.1	-20.5	63.5	11.78
2022-12-12 1:00	0.30	1.35	1.485	0.46	301.8	0	0	994.8	-21.5	65.4	11.713
2022-12-12 2:00	0.20	1.395	1.575	0.33	322.1	0	0	995.6	-21.6	62.5	11.638
2022-12-12 3:00	0.20	1.665	1.89	0.49	319.1	0	0	996.1	-21.8	66	11.571
2022-12-12 4:00	0.10	1.98	2.295	0.51	23.5	0	0	996.6	-22.5	69.6	11.526
2022-12-12 5:00	0.30	1.98	2.745	0.37	313.8	0	0	997	-22	64.4	11.493
2022-12-12 6:00	0.10	1.62	2.07	0.36	148.3	0	0	997.5	-23.3	62.5	11.464
2022-12-12 7:00	0.20	1.575	2.385	0.39	131.8	0	0	997.6	-24.7	65.7	11.458
2022-12-12 8:00	0.10	1.8	2.475	0.32	277.5	0	0	998	-23.4	62	11.554
2022-12-12 9:00	0.60	2.925	3.825	0.39	175.2	0	0	998.6	-18.9	64.9	13.348
2022-12-12 10:00	0.30	2.115	2.655	1.08	76.1	0	0	998.6	-16.4	70.7	13.949
2022-12-12 11:00	0.30	1.845	2.16	0.84	78.3	0	0	998.4	-12.8	63.2	13.724
2022-12-12 12:00	0.20	1.665	1.98	0.8	84.2	0	0	998.3	-9.7	51.7	13.269
2022-12-12 13:00	0.10	1.53	2.115	1.24	58.4	0	0	998.3	-8.1	42.3	13.266
2022-12-12 14:00	0.20	1.53	2.025	0.8	31.3	0	0	998.5	-7.1	40.6	13.274
2022-12-12 15:00	0.20	1.44	1.845	1.05	33.1	0	0	998.8	-7.4	41.3	13.272
2022-12-12 16:00	0.20	1.305	1.62	0.39	7.5	0	0	998.9	-9.3	55.1	12.396
2022-12-12 17:00	0.10	1.17	1.395	0.39	358.4	0	0	999	-13	68.2	12.139
2022-12-12 18:00	0.20	1.035	1.17	0.42	106.4	0	0	998.9	-15.1	67.1	12.065
2022-12-12 19:00	0.10	0.945	1.08	0.3	110.3	0	0	998.8	-17.3	69.9	12.003
2022-12-12 20:00	0.10	0.945	1.17	0.22	12.2	0	0	999.2	-17.5	65.9	11.946
2022-12-12 21:00	0.10	0.855	0.99	0.41	298.4	0	0	999.5	-18	62.8	11.894
2022-12-12 22:00	0.10	0.81	0.9	0.3	35.3	0	0	999.5	-19.9	66.7	11.843
2022-12-12 23:00	0.30	0.9	1.035	0.36	64.3	0	0	999.2	-20.7	67.8	11.798
2022-12-13 0:00	0.70	1.035	1.215	0.43	210.9	0	0	999	-20.6	64.4	11.744
2022-12-13 1:00	0.20	0.9	1.035	0.3	322.1	0	0	998.8	-20.6	63.7	11.695
2022-12-13 2:00	0.20	0.9	0.99	0.35	236	0	0	999	-20.8	62	11.639
2022-12-13 3:00	0.30	0.765	0.855	0.36	91.1	0	0	998.9	-22.3	67	11.574
2022-12-13 4:00	0.40	0.675	0.765	0.26	268.3	0	0	998.9	-20.9	60.3	11.507
2022-12-13 5:00	0.30	0.675	0.72	0.22	7.8	0	0	998.8	-21.4	60.4	11.461
2022-12-13 6:00	0.30	0.675	0.765	0.33	248	0	0	998.7	-21.9	60.9	11.452
2022-12-13 7:00	0.40	0.63	0.72	0.39	71.5	0	0	998.8	-22.5	63.2	11.439
2022-12-13 8:00	0.20	0.675	0.81	0.41	234.1	0	0	999.2	-22	62.9	11.492
2022-12-13 9:00	0.10	0.855	0.99	0.6	261.5	0	0	999.5	-18.7	66.1	12.579
2022-12-13 10:00	0.20	1.35	1.485	0.32	19	0	0	999.6	-13	65.7	13.752
2022-12-13 11:00	0.10	1.53	1.755	0.46	359.9	0	0	999.1	-8.9	63.7	13.939
2022-12-13 12:00	0.10	1.035	1.215	1.02	355.7	0	0	998.4	-7.2	66	13.471
2022-12-13 13:00	0.20	0.855	1.17	0.94	358.4	0	0	997.9	-5.3	65.6	13.268
2022-12-13 14:00	0.10	0.675	0.81	1.16	5.1	0	0	997.6	-4.8	67.5	13.265
2022-12-13 15:00	0.30	0.495	0.585	1.35	6.7	0	0	997.2	-4.9	70.3	13.233
2022-12-13 16:00	0.20	0.54	0.63	0.7	328.2	0	0	997.4	-5.9	72.3	12.31
2022-12-13 17:00	0.30	0.54	0.675	0.82	12.9	0	0	997.4	-8.4	80	12.116
2022-12-13 18:00	0.30	0.45	0.585	0.52	294	0	0	997.5	-10	75	12.05
2022-12-13 19:00	0.20	0.405	0.45	0.33	342.7	0	0	997.7	-13.1	72.5	11.995
2022-12-13 20:00	0.30	0.36	0.405	0.44	274.8	0	0	997.6	-15.4	70.5	11.934
2022-12-13 21:00	0.20	0.36	0.36	0.48	337.4	0	0	997.6	-15.5	73.2	11.886
2022-12-13 22:00	0.10	0.36	0.405	0.77	16.9	0	0	997	-15	79.9	11.837
2022-12-13 23:00	0.20	1.08	1.125	1.22	34	0	0	996.5	-13.2	84.4	11.791
2022-12-14 0:00	0.50	1.62	1.665	1.36	39.3	0	0	996.1	-12.5	83.8	11.744
2022-12-14 1:00	0.20	1.62	1.665	1.19	76.5	0	0	995.9	-13.3	82.4	11.704
2022-12-14 2:00	0.30	1.08	1.08	1.14	88.3	0	0	996.1	-14.4	80.3	11.661
2022-12-14 3:00	0.20	0.945	0.945	0.5	107.8	0	0	996.6	-15.6	76.3	11.617
2022-12-14 4:00	0.40	1.935	2.475	0.58	89.3	0	0	996.5	-15.5	79.7	11.562
2022-12-14 5:00	0.10	2.475	2.7	0.75	72.8	0	0	996.2	-15.6	77.2	11.503
2022-12-14 6:00	0.20	1.575	1.665	0.43	160.2	0	0	997.2	-16.6	74.2	11.456
2022-12-14 7:00	0.20	1.44	1.53	0.36	67.7	0	0	997.5	-18.2	69.5	11.422
2022-12-14 8:00	0.10	1.26	1.35	0.34	337.8	0	0	997.5	-18.6	68.3	11.448
2022-12-14 9:00	0.30	0.99	1.08	0.29	79	0	0	997.4	-15	71.6	12.533
2022-12-14 10:00	0.20	0.72	0.81	0.34	312.3	0	0	997.2	-11.3	70	13.615
2022-12-14 11:00	0.10	0.54	0.63	0.47	239.4	0	0	996.6	-9.3	67.7	13.907
2022-12-14 12:00	0.20	0.54	0.585	0.83	250.6	0	0	995.9	-7.8	65.1	13.666
2022-12-14 13:00	0.20	0.54	0.63	0.5	231.4	0	0	995.4	-6.6	61.3	13.266

2022-12-14 14:00	0.20	0.585	0.675	1.16	45.6	0	0	994.8	-6.6	63.8	13.259
2022-12-14 15:00	0.10	0.63	0.81	1.6	53.2	0	0	994.3	-6.8	65.7	12.665
2022-12-14 16:00	0.10	0.63	0.765	1.26	57.8	0	0	993.8	-8	71.3	12.195
2022-12-14 17:00	0.50	0.585	0.675	1.13	58.7	0	0	993.9	-9.5	75.7	12.106
2022-12-14 18:00	0.30	0.54	0.585	1	63.3	0	0	993.7	-10.4	78.5	12.046
2022-12-14 19:00	0.20	0.495	0.585	0.43	74.9	0	0	993.7	-11	76.5	12.005
2022-12-14 20:00	0.30	0.675	0.765	1	59.5	0	0	993	-11.8	80.7	11.947
2022-12-14 21:00	0.20	0.855	0.945	0.83	81.3	0	0	992.9	-12.2	79.9	11.902
2022-12-14 22:00	0.10	0.9	0.945	0.65	29.3	0	0	993.2	-13	75.9	11.868
2022-12-14 23:00	0.20	1.26	1.395	1.03	66.7	0	0	992.9	-13.6	80.6	11.821
2022-12-15 0:00	0.10	1.845	1.98	1.6	78.9	0	0	992.1	-13	81.6	11.775
2022-12-15 1:00	0.30	1.98	2.07	1.95	77.3	0	0	991.1	-12.1	81.7	11.736
2022-12-15 2:00	0.30	1.935	2.025	2.27	79.1	0	0	990	-11.3	81.9	11.7
2022-12-15 3:00	0.10	1.71	1.8	2.1	83.2	0	0	989.2	-10.9	81.5	11.662
2022-12-15 4:00	0.10	1.53	1.71	1.84	87.4	0	0	988.8	-11.2	82	11.621
2022-12-15 5:00	0.20	1.35	1.44	2.54	82.7	0	0	987.4	-9.4	82.2	11.577
2022-12-15 6:00	0.10	1.35	1.485	2.83	89.4	0	0	986.6	-8.7	82	11.534
2022-12-15 7:00	0.10	1.395	1.485	2.95	90.1	0	0	985.9	-8.2	82.1	11.487
2022-12-15 8:00	0.20	1.305	1.44	3.5	94.8	0	0	985.5	-7.4	81.9	11.456
2022-12-15 9:00	0.20	1.17	1.305	4.07	94.9	0	0	985.4	-6.5	81.8	11.474
2022-12-15 10:00	0.30	0.99	1.215	4.77	100	0	0	984.4	-5.8	81.2	11.576
2022-12-15 11:00	0.10	0.945	1.17	4.75	98	0	0	983.1	-4.6	81	11.664
2022-12-15 12:00	0.30	0.765	0.99	4.07	105.8	0	0	981.8	-3.1	79.3	11.693
2022-12-15 13:00	0.10	0.675	0.945	4.54	106.6	0	0	981.5	-2.1	76.9	11.547
2022-12-15 14:00	0.10	0.765	1.035	4.83	101.2	0	0	980.6	-1.5	76.3	11.489
2022-12-15 15:00	0.10	0.945	1.305	4.48	100.7	0	0	979.9	-1	75.3	11.413
2022-12-15 16:00	0.20	1.17	1.485	4.38	95	0	0	979.4	-0.8	75.6	11.366
2022-12-15 17:00	0.10	1.35	1.755	4.61	102.3	0	0	978.9	-0.6	75.3	11.336
2022-12-15 18:00	0.10	1.53	2.205	4.27	107.4	0	0	978.9	-0.5	77.1	11.307
2022-12-15 19:00	0.10	1.53	2.025	3.86	103.6	0	0	978.3	-0.9	85.7	10.717
2022-12-15 20:00	0.10	1.62	2.025	3.98	99.5	0	0	977.8	-0.8	85.6	10.559
2022-12-15 21:00	0.30	1.26	1.755	3.77	100.3	0	0	977.2	-0.8	87.9	10.522
2022-12-15 22:00	0.10	0.945	1.125	3.86	101.7	0	0	976.9	-0.8	88.8	10.483
2022-12-15 23:00	0.10	0.585	0.72	3.85	104.9	0	0	976.3	-0.8	88.3	10.441
2022-12-16 0:00	0.30	0.81	0.99	3.57	109.1	0	0	975.8	-0.8	88.8	10.391
2022-12-16 1:00	0.30	1.035	1.125	3.37	115	0	0	975.5	-0.6	87.5	10.341
2022-12-16 2:00	0.10	0.765	0.81	3.13	113.2	0	0	975.5	-0.5	87.1	10.281
2022-12-16 3:00	0.40	0.585	0.675	2.89	111.1	0	0	975.2	-0.6	88.4	10.214
2022-12-16 4:00	0.20	0.45	0.495	2.81	111	0	0	974.9	-0.5	88.3	10.129
2022-12-16 5:00	0.30	0.405	0.45	3.15	111.4	0	0	974.5	-0.4	87.6	10.025
2022-12-16 6:00	0.30	0.405	0.45	2.96	114.9	0	0	974.1	-0.4	86.9	9.875
2022-12-16 7:00	0.30	0.36	0.405	2.77	112	0	0	973.9	-0.5	87.7	9.506
2022-12-16 8:00	0.40	0.36	0.36	2.71	112	0	0	973.8	-0.5	87.3	8.308
2022-12-16 9:00	0.30	0.36	0.405	2.87	112.1	0	0	973.4	-0.3	87.4	12.235
2022-12-16 10:00	0.20	0.36	0.405	3.06	109.1	0	0	973	-0.3	87.3	12.37
2022-12-16 11:00	0.10	0.36	0.36	3.33	113.6	0	0	972.3	0	85.2	12.737
2022-12-16 12:00	0.30	0.36	0.405	2.92	118.9	0	0	971.8	0	84.7	12.517
2022-12-16 13:00	0.10	0.36	0.405	2.73	117.8	0	0	971.6	0.1	85	12.263
2022-12-16 14:00	0.40	0.36	0.405	2.42	113	0	0	971.5	0	86.2	12.168
2022-12-16 15:00	0.20	0.405	0.495	2.29	109.3	0	0	971.7	-0.1	87.5	12.108
2022-12-16 16:00	0.20	0.45	0.54	1.96	116	0	0	971.8	-0.1	87.1	12.078
2022-12-16 17:00	0.20	0.45	0.54	1.95	110.4	0	0	971.6	-0.3	87.3	12.052
2022-12-16 18:00	0.30	0.405	0.405	2.04	109.1	0	0	971.5	-0.3	87.3	12.028
2022-12-16 19:00	0.20	0.405	0.405	1.81	109.3	0	0	971.1	-0.3	87.4	12.023
2022-12-16 20:00	0.20	0.315	0.36	1.8	105.8	0	0	970.6	-0.4	87.8	12
2022-12-16 21:00	0.30	0.315	0.315	1.82	106.3	0	0	970.2	-0.4	87.7	11.974
2022-12-16 22:00	0.30	0.27	0.315	1.38	108.2	0	0	969.8	-0.4	87.2	11.957
2022-12-16 23:00	0.30	0.27	0.27	1.42	110.5	0	0	969.6	-0.4	86.9	11.932
2022-12-17 0:00	0.20	0.27	0.315	1.46	111.2	0	0	969.3	-0.5	86.4	11.921
2022-12-17 1:00	0.10	0.27	0.27	1.51	111	0	0	968.9	-0.6	86.1	11.889
2022-12-17 2:00	0.20	0.27	0.315	1.42	111.3	0	0	968.8	-0.6	85.1	11.879
2022-12-17 3:00	0.30	0.315	0.315	1.29	112.1	0	0	968.8	-0.5	84	11.851
2022-12-17 4:00	0.10	0.36	0.405	1.29	110.7	0	0	968.5	-0.7	83.7	11.829
2022-12-17 5:00	0.20	0.45	0.495	1.05	129.7	0	0	968.4	-0.8	83.4	11.811
2022-12-17 6:00	0.20	0.405	0.495	0.89	133.3	0	0	968.4	-0.8	83	11.791
2022-12-17 7:00	0.10	0.45	0.45	0.6	131.4	0	0	968.4	-0.6	80.6	11.761
2022-12-17 8:00	0.30	0.45	0.495	0.57	119.3	0	0	968.4	-0.3	78.6	11.74
2022-12-17 9:00	0.40	0.495	0.54	0.92	128.7	0	0	968.5	-0.5	80.3	11.713
2022-12-17 10:00	0.40	1.44	1.53	1.05	150.5	0	0	968.7	-0.6	81.8	11.699
2022-12-17 11:00	0.20	3.465	3.6	1.46	165.8	0	0	968.5	-0.6	83.2	11.721
2022-12-17 12:00	0.30	3.465	3.555	1.51	170.5	0	0	968	-0.4	82.4	11.704
2022-12-17 13:00	0.30	2.52	2.61	1.57	169.8	0	0	967.7	-0.4	80.6	11.766
2022-12-17 14:00	0.40	1.755	1.8	1.03	142.2	0	0	968	-0.3	80.2	11.84
2022-12-17 15:00	0.70	1.935	2.025	0.65	136.4	0	0	968.4	-0.4	81.8	11.624
2022-12-17 16:00	0.40	1.845	1.98	0.34	64.1	0	0	968.9	-0.4	83	11.574
2022-12-17 17:00	0.70	1.71	1.845	0.49	113.9	0	0	969.1	-1.1	84.4	11.525
2022-12-17 18:00	0.30	1.53	1.62	0.38	171.2	0	0	969.3	-1.7	84.1	11.49
2022-12-17 19:00	0.40	1.71	1.8	0.28	120.1	0	0	969.4	-1.8	83.4	11.453
2022-12-17 20:00	0.30	1.485	1.575	0.27	82.6	0	0	969.5	-2.3	83.3	11.4
2022-12-17 21:00	0.50	1.89	1.98	0.26	104.5	0	0	969.3	-2.2	81.9	11.301
2022-12-17 22:00	0.30	1.89	1.98	0.66	170.7	0	0	969.2	-3	84.9	10.583
2022-12-17 23:00	0.30	1.8	1.845	0.49	169.6	0	0	969.2	-2.6	82.6	10.518
2022-12-18 0:00	0.40	1.935	1.98	1.02	217.1	0	0	969	-3.2	84.3	10.292
2022-12-18 1:00	0.30	1.8	1.89	0.78	217.6	0	0	969.1	-3	83	9.301
2022-12-18 2:00	0.30	1.8	1.89	0.61	202.7	0	0	969.5	-2.9	82.3	8.965
2022-12-18 3:00	0.20	1.98	2.07	1.1	193.9	0	0	969.8	-3.1	84.3	8.904
2022-12-18 4:00	0.10	2.16	2.25	1.31	195.5	0	0	969.8	-3.3	84.7	8.843
2022-12-18 5:00	0.30	2.16	2.205	1.18	200.5	0	0	969.9	-3.4	84.3	8.765
2022-12-18 6:00	0.20	2.07	2.16	1.13	198.5	0	0	970	-3.7	84	8.692
2022-12-18 7:00	0.30	2.025	2.07	1.02	196.7	0	0	970.2	-3.8	83.7	8.652

2022-12-18 8:00	0.20	1.98	2.025	1.03	195.5	0	0	970.5	-4	83.4	8.604
2022-12-18 9:00	0.30	1.935	1.98	0.99	203.6	0	0	971	-4	82.3	8.56
2022-12-18 10:00	0.20	1.89	1.98	1.1	219.7	0	0	971.4	-3.3	81.5	8.506
2022-12-18 11:00	0.10	1.755	1.8	1.68	234	0	0	971.5	-2.7	81.6	8.425
2022-12-18 12:00	0.20	1.53	1.53	1.66	215.1	0	0	971.3	-2.1	82.6	8.331
2022-12-18 13:00	0.20	1.305	1.305	1.73	239.1	0	0	971.7	-1.8	82.4	8.172
2022-12-18 14:00	0.10	0.9	0.945	2.49	258.8	0	0	972.2	-1.8	81.8	7.839
2022-12-21 10:00	0.10	4.41	4.815	3.47	258.4	0	0	992.1	-17.8	68	13.981
2022-12-21 11:00	0.10	4.59	4.815	3.7	246.6	0	0	992.1	-17.2	65.3	13.955
2022-12-21 12:00	0.10	4.725	4.995	3.85	241.5	0	0	992.1	-16.6	62.8	13.487
2022-12-21 13:00	0.10	4.41	4.635	3.48	236.8	0	0	992.5	-16.1	63.4	13.259
2022-12-21 14:00	0.00	3.51	3.645	2.8	242.2	0	0	992.8	-16.1	64.8	13.019
2022-12-21 15:00	0.10	2.88	3.015	1.92	224.1	0	0	993.2	-15.9	66.1	11.872
2022-12-21 16:00	0.20	2.115	2.16	1.63	236.1	0	0	993.5	-15.9	67.8	11.525
2022-12-21 17:00	0.20	1.845	1.935	0.48	185.8	0	0	993.6	-16.1	67.8	10.079
2022-12-22 10:00	0.00	2.97	3.42	3.44	100.8	0	0	986.9	-10.1	78.7	11.656
2022-12-22 11:00	0.20	3.06	3.6	3.45	103.3	0	0	986	-9.6	77.7	11.818
2022-12-22 12:00	0.10	3.375	4.14	3.41	102.6	0	0	984.6	-9	78.2	11.345
2022-12-22 13:00	0.10	3.735	4.86	3.22	101.2	0	0	983.4	-8.6	79.9	10.444
2022-12-22 14:00	0.10	3.51	4.005	2.8	102.2	0	0	982.8	-8.3	79.6	8.38
2023-05-23 8:00	0.40	23.49	30.87	4.23	201.4	0	0	981.2	16.2	50.9	12.964
2023-05-23 9:00	0.20	1.62	2.025	3.71	210.8	0	0	980.8	17.6	48.1	13.034
2023-05-23 10:00	0.30	1.575	2.25	4.6	237	0	0	981	19.1	44.5	13.245
2023-05-23 11:00	0.70	1.53	2.115	4.42	276.6	0.3	0	981.2	18.9	46.9	13.217
2023-05-23 12:00	0.60	1.44	1.71	2.76	297.9	6.5	0	982.5	14.6	67.8	12.649
2023-05-23 13:00	0.40	1.485	1.665	0.85	258.8	0	0	983	12.7	85.4	12.464
2023-05-23 14:00	0.20	1.845	1.98	2.82	322.8	1.6	0	983.9	12	84	12.388
2023-05-23 15:00	0.30	2.205	2.25	2.61	325.8	0	0	984.6	10.7	84.2	12.593
2023-05-23 16:00	0.20	2.43	2.52	2.12	321.2	0	0	985.3	10.1	83.3	12.362
2023-05-23 17:00	0.20	1.8	1.89	2.81	328.1	0.1	0	986.1	8.7	85.6	12.271
2023-05-23 18:00	0.30	0.81	0.855	3.77	341.2	0	0	987.2	7.2	86.5	12.221
2023-05-23 19:00	0.30	0.135	0.18	3.26	350.5	0	0	988.3	5.8	85.4	12.204
2023-05-23 20:00	0.10	0.18	0.225	2.81	353.6	0	0	989.5	5	84.7	12.152
2023-05-23 21:00	0.40	0.225	0.315	2.26	337.4	0	0	990.4	4.1	83.2	12.123
2023-05-23 22:00	0.10	0.18	0.225	2.56	333.9	0	0	991	3.6	85	12.089
2023-05-23 23:00	0.20	0.09	0.18	2.44	342.4	0	0	991.5	3.1	85.1	12.058
2023-05-24 0:00	0.30	0.09	0.135	2.27	347.9	0	0	992.1	2.3	84.1	12.025
2023-05-24 1:00	0.10	0.09	0.135	2.92	353.2	0	0	992.9	1.3	84.4	12.003
2023-05-24 2:00	0.20	0.27	0.315	3.36	355.6	0	0	993.8	-0.2	82.3	11.981
2023-05-24 3:00	0.20	0.315	0.36	3.18	349	0	0	994.4	-0.8	73	11.954
2023-05-24 4:00	0.00	0.36	0.45	3.39	354	0	0	995	-1.5	72.5	11.929
2023-05-24 5:00	0.10	0.405	0.45	2.9	352.3	0	0	995.9	-1.9	70.7	11.924
2023-05-24 6:00	0.00	0.405	0.45	3.24	357.3	0	0	997	-1.9	69.8	12.023
2023-05-24 7:00	0.30	0.36	0.45	3.63	6.2	0	0	997.7	-2	66.4	12.532
2023-05-24 8:00	0.10	0.315	0.36	3.58	349.1	0	0	998.3	-1.7	64.2	12.859
2023-05-24 9:00	0.20	0.27	0.315	3.11	358.7	0	0	998.6	-0.4	60.1	13.6
2023-05-24 10:00	0.20	0.27	0.315	3.08	346.5	0	0	998.7	1.6	54.7	13.891
2023-05-24 11:00	0.20	0.225	0.27	2.93	358.9	0	0	998.6	3.7	48.7	13.569
2023-05-24 12:00	0.20	0.225	0.27	2.88	357.2	0	0	998.1	5.8	43.7	13.27
2023-05-24 13:00	0.30	0.18	0.225	3.21	345.5	0	0	997.8	7.5	39.2	13.27
2023-05-24 14:00	0.20	0.18	0.27	3.35	355.6	0	0	997.5	8.6	36.1	13.278
2023-05-24 15:00	0.20	0.225	0.225	3.21	350.4	0	0	997	9.7	32.5	13.282
2023-05-24 16:00	0.20	0.18	0.225	2.94	351.1	0	0	996.7	10.5	30.2	13.283
2023-05-24 17:00	0.30	0.18	0.225	2.74	359.1	0	0	996.7	10.6	29.1	13.282
2023-05-24 18:00	0.20	0.18	0.225	2.5	6	0	0	996.7	10.4	30.1	13.061
2023-05-24 19:00	0.20	0.18	0.225	1.52	7.7	0	0	996.8	9.3	34.4	12.516
2023-05-24 20:00	0.10	0.225	0.27	0.63	350.8	0	0	996.7	6.5	52.7	12.403
2023-05-24 21:00	0.20	0.225	0.315	0.55	347.4	0	0	996.9	4	64.9	12.348
2023-05-24 22:00	0.10	0.225	0.27	0.54	337.1	0	0	996.9	1.9	73	12.302
2023-05-24 23:00	0.30	0.27	0.315	0.96	4.5	0	0	997.2	1.2	66	12.239
2023-05-25 0:00	0.20	0.27	0.315	0.62	19.1	0	0	997.3	0.8	63.6	12.215
2023-05-25 1:00	0.10	0.27	0.315	0.29	212.3	0	0	997.2	-1.1	76	12.184
2023-05-25 2:00	0.10	0.27	0.36	0.31	184.8	0	0	997	-2.2	78.5	12.15
2023-05-25 3:00	0.30	0.225	0.27	0.44	234.8	0	0	997.2	-2.6	79.3	12.109
2023-05-25 4:00	0.20	0.18	0.27	0.38	254	0	0	997.5	-2.7	77.2	12.08
2023-05-25 5:00	0.20	0.225	0.27	0.24	178.9	0	0	997.7	-1.6	76.4	12.106
2023-05-25 6:00	0.20	0.315	0.36	0.47	273.1	0	0	998.2	2.3	60.1	12.153
2023-05-25 7:00	0.70	0.27	0.315	0.96	325.7	0	0	998.6	4.8	44.5	12.522
2023-05-25 8:00	0.50			1.82	2	0	0	998.5	6.9	40.2	13.43
2023-05-25 9:00	0.50			1.94	6.5	0	0	998.2	9	36.4	13.922
2023-05-25 10:00	0.90			1.78	341.1	0	0	997.7	10.8	34.4	13.882
2023-05-25 11:00	2.40			1.72	336.3	0	0	997	12.4	31.4	13.266
2023-05-25 12:00	3.70			1.7	10	0	0	996.1	14	29.7	13.266
2023-05-25 13:00	2.00			1.86	311.2	0	0	995.3	15.4	27.6	13.265
2023-05-25 14:00	0.00			1.88	258.6	0	0	994.5	16.6	26.9	13.267
2023-05-25 15:00	0.00			1.95	271.6	0	0	993.8	17.5	24.9	13.269
2023-05-25 16:00	0.00			1.36	8.6	0	0	993.2	18.2	23.4	13.269
2023-05-25 17:00	0.00			1.78	308.4	0	0	992.7	18.4	23.3	13.271
2023-05-25 18:00	0.00			1.16	320.8	0	0	992.1	18.2	23.2	13.102
2023-05-25 19:00	1.10			0.59	303.8	0	0	991.9	16.8	31.6	12.615
2023-05-25 20:00	0.30			0.37	104	0	0	991.9	11.8	51.6	12.465
2023-05-25 21:00	0.40			0.44	105.5	0	0	991.9	8.4	53.2	12.408
2023-05-25 22:00	0.10			0.42	162.4	0	0	991.8	5.8	65.1	12.365
2023-05-25 23:00	0.20			0.25	242.9	0	0	992	4.9	70.4	12.328
2023-05-26 0:00	0.30			0.48	191.6	0	0	992.1	4.9	64.3	12.286
2023-05-26 1:00	0.50			0.35	153.8	0	0	992	4.3	68.4	12.258
2023-05-26 2:00	0.40			0.96	189.8	0	0	992	4.1	64.2	12.203
2023-05-26 3:00	0.20			0.52	226.6	0	0	992.3	2.8	67.1	12.18
2023-05-26 4:00	0.30			0.72	191.3	0	0	992.5	2.4	68.7	12.142
2023-05-26 5:00	0.20			0.84	174.4	0	0	992.8	3.3	66.6	12.174

2023-05-26 6:00	0.20	1.47	193.8	0	0	993.1	6.5	58.6	12.304
2023-05-26 7:00	0.30	1.97	218.3	0	0	993.2	10.7	45.6	12.729
2023-05-26 8:00	0.60	3.34	237.3	0	0	993.1	14.8	28.8	13.549
2023-05-26 9:00	0.00	3.34	238.6	0	0	992.5	17.6	18.6	13.917
2023-05-26 10:00	0.00	3.71	223.9	0	0	992.1	19.5	19	13.844
2023-05-26 11:00	0.00	3.55	228.9	0	0	991.5	21.1	17.6	13.259
2023-05-26 12:00	0.00	3.21	229.9	0	0	991	22.4	17.3	13.262
2023-05-26 13:00	0.00	3.33	231	0	0	990.4	23.9	16.6	13.262
2023-05-26 14:00	0.00	3.27	222.2	0	0	989.9	24.9	15.7	13.262
2023-05-26 15:00	0.30	3.5	259.3	0	0	989.6	25.6	17.6	13.263
2023-05-26 16:00	0.00	3.16	249.5	0	0	989.1	26.1	18.5	13.262
2023-05-26 17:00	0.10	3.2	255.8	0	0	988.7	26	20.2	13.262
2023-05-26 18:00	0.00	2.41	243.2	0	0	988.4	25.4	21	13.064
2023-05-26 19:00	0.10	1.12	214.6	0	0	988.2	23.6	24.1	12.6
2023-05-26 20:00	0.20	1.09	196.5	0	0	988.3	21	28.3	12.494
2023-05-26 21:00	0.70	1.2	212.1	0	0	988.5	18.8	31.1	12.451
2023-05-26 22:00	0.90	1.72	230.1	0	0	988.7	18.3	33.2	12.414
2023-05-26 23:00	0.60	1.78	230.4	0	0	988.7	17.2	37.3	12.38
2023-05-27 0:00	0.70	1.52	227.5	0	0	988.8	16.1	40.8	12.351
2023-05-27 1:00	0.20	1.47	223.4	0	0	989	14.8	44.6	12.32
2023-05-27 2:00	0.30	1.35	199.5	0	0	989.1	13.7	46.8	12.281
2023-05-27 3:00	0.20	1.16	213.5	0	0	989.4	13	47.9	12.249
2023-05-27 4:00	0.20	1.34	212.7	0	0	989.8	12.5	47.4	12.216
2023-05-27 5:00	0.50	1.88	218.8	0	0	990.2	13	44.3	12.242
2023-05-27 6:00	0.50	2.55	230.2	0	0	990.3	14.8	38.6	12.312
2023-05-27 7:00	0.30	3.12	235	0	0	990.4	17.5	31.8	12.627
2023-05-27 8:00	0.00	3.75	245.4	0	0	990.2	20.1	26.6	13.365
2023-05-27 9:00	0.10	3.37	233	0	0	989.7	22.8	23	13.878
2023-05-27 10:00	0.00	3.57	232.9	0	0	989.2	24.7	20.3	13.918
2023-05-27 11:00	0.00	3.64	223	0	0	988.7	26.1	18.7	13.262
2023-05-27 12:00	0.10	3.71	227.3	0	0	988	27.5	19.6	13.253
2023-05-27 13:00	0.10	3.49	226.6	0	0	987.3	28.5	20.7	13.254
2023-05-27 14:00	0.10	3.91	235.9	0	0	986.8	29.3	20.6	13.253
2023-05-27 15:00	0.00	3.82	234.1	0	0	986.4	29.6	19.7	13.254
2023-05-27 16:00	0.00	3.72	238.1	0	0	986.1	29.8	19.3	13.254
2023-05-27 17:00	0.00	3.8	243.8	0	0	985.8	29.4	19.4	13.255
2023-05-27 18:00	0.00	3.23	235.1	0	0	985.8	28.5	19.6	13.115
2023-05-27 19:00	0.00	2.02	227.7	0	0	986.2	26.6	21.2	12.614
2023-05-27 20:00	0.10	1.55	216	0	0	986.5	23.4	23.9	12.505
2023-05-27 21:00	1.00	2.53	232.8	0	0	986.8	21.6	25.9	12.461
2023-05-27 22:00	0.10	3.57	250.2	0	0	987	20.9	24.7	12.426
2023-05-27 23:00	0.60	2.06	252.8	0	0	987.2	18.7	26.9	12.394
2023-05-28 0:00	0.50	1.55	268.2	0	0	987.5	16.5	30.3	12.367
2023-05-28 1:00	0.60	1.38	250.9	0	0	987.9	14.8	34	12.335
2023-05-28 2:00	0.20	0.8	218.1	0	0	987.8	12.7	38.3	12.301
2023-05-28 3:00	0.10	0.72	190.8	0	0	987.8	10.2	45.6	12.263
2023-05-28 4:00	0.40	0.67	211.1	0	0	987.8	9.6	46.9	12.236
2023-05-28 5:00	0.10	1.04	234.7	0	0	988	10.4	45.8	12.25
2023-05-28 6:00	0.30	2.04	272.7	0	0	988.2	14.2	38.9	12.325
2023-05-28 7:00	0.30	2.5	315.9	0	0	988.6	16.7	34.5	12.676
2023-05-28 8:00	0.30	2.4	341.1	0	0	989	17.9	34	13.416
2023-05-28 9:00	0.80	2.22	6.8	0	0	989.1	19.6	38.2	13.884
2023-05-28 10:00	0.00	3.41	13.5	0	0	989.4	19.1	59.8	13.914
2023-05-28 11:00	0.00	2.82	10.2	0	0	989.3	19.8	61	13.256
2023-05-28 12:00	0.20	2.36	7.6	0	0	988.8	21.3	54.8	13.255
2023-05-28 13:00	0.50	2.22	9.4	0	0	988.4	22.8	47.5	13.254
2023-05-28 14:00	0.60	2.26	32	0	0	988.1	23.6	41.7	13.254
2023-05-28 15:00	0.20	2.03	17.2	0	0	987.7	24.1	39.3	13.253
2023-05-28 16:00	0.00	2.1	36	0	0	987.2	24.7	30.9	13.254
2023-05-28 17:00	0.10	1.97	34.6	0	0	986.8	24.8	23.1	13.254
2023-05-28 18:00	0.20	2.05	28.4	0	0	986.7	24.1	22.5	13.126
2023-05-28 19:00	0.00	1.4	27.9	0	0	986.6	22.6	24.1	12.611
2023-05-28 20:00	1.30	1.44	39.1	0	0	986.9	20	29.1	12.505
2023-05-28 21:00	1.40	1.19	47.4	0	0	987.2	17.7	36.5	12.458
2023-05-28 22:00	0.60	0.92	62.3	0	0	987.3	15.7	43.2	12.421
2023-05-28 23:00	0.20	0.82	67.1	0	0	987.4	13.9	48.7	12.383
2023-05-29 0:00	0.20	0.9	67.4	0	0	987.5	12.5	52.4	12.345
2023-05-29 1:00	0.20	0.85	72.3	0	0	987.3	11.4	54.1	12.312
2023-05-29 2:00	0.00	0.52	64.8	0	0	987.3	10.1	56.9	12.279
2023-05-29 3:00	0.00	0.48	48.9	0	0	987.4	9	62.5	12.243
2023-05-29 4:00	0.20	0.39	69.6	0	0	987.7	7.9	65.8	12.221
2023-05-29 5:00	0.30	0.55	87.8	0	0	987.8	8.8	63.6	12.24
2023-05-29 6:00	0.30	1.41	102.4	0	0	987.8	12.6	53.7	12.296
2023-05-29 7:00	0.30	2.64	134	0	0	987.9	16.5	39.8	12.633
2023-05-29 8:00	0.30	2.58	148.6	0	0	987.7	19	34.4	13.385
2023-05-29 9:00	0.00	2.47	148.3	0	0	987.4	21.3	30	13.873
2023-05-29 10:00	0.00	2.17	149.8	0	0	986.9	23.3	28	13.914
2023-05-29 11:00	0.00	2.08	144.9	0	0	986.2	25	28.8	13.27
2023-05-29 12:00	0.00	2.06	152.7	0	0	985.7	26.2	29.5	13.248
2023-05-29 13:00	0.00	1.81	134.2	0	0	984.9	27.1	27.7	13.248
2023-05-29 14:00	0.00	1.65	131.2	0	0	984.1	27.9	26.1	13.249
2023-05-29 15:00	0.00	1.57	111.1	0	0	983.5	28.5	25	13.25
2023-05-29 16:00	0.00	1.77	143.1	0	0	982.8	29.1	24.6	13.249
2023-05-29 17:00	0.00	1.79	129.2	0	0	982.4	29	25	13.25
2023-05-29 18:00	0.20	1.54	132.1	0	0	982.1	28.5	26.8	13.118
2023-05-29 19:00	0.20	1.27	123.6	0	0	982.1	26.6	30.7	12.626
2023-05-29 20:00	1.80	0.81	102.2	0	0	982.3	23.5	37.8	12.518
2023-05-29 21:00	0.90	1.58	121.5	0	0	982.6	21.6	41.9	12.466
2023-05-29 22:00	0.30	1.97	138.9	0	0	982.6	21	41.8	12.427
2023-05-29 23:00	0.20	1.92	146.5	0	0	982.7	19.8	42.9	12.397

2023-05-30 0:00	0.10	1.26	174.9	0	0	982.7	18.4	48.8	12.368
2023-05-30 1:00	0.10	0.96	208.3	0	0	982.7	16.6	54.3	12.342
2023-05-30 2:00	0.00	0.83	206.6	0	0	982.9	15.1	60	12.308
2023-05-30 3:00	0.10	0.76	186.9	0	0	983.2	13.7	63.7	12.27
2023-05-30 4:00	0.10	0.93	203.1	0	0	983.7	13.8	58.4	12.252
2023-05-30 5:00	0.10	0.69	211.5	0	0	983.9	13.9	58	12.272
2023-05-30 6:00	0.10	1.12	210.9	0	0	984.3	16.5	52.2	12.329
2023-05-30 7:00	0.30	1.77	211.2	0	0	984.4	20.8	40.1	12.651
2023-05-30 8:00	0.10	2.23	226.5	0	0	984.3	23.8	31.4	13.324
2023-05-30 9:00	0.00	2.19	221.7	0	0	984.1	26	24.6	13.779
2023-05-30 10:00	0.00	2.64	219.2	0	0	983.8	27.7	20.7	13.783
2023-05-30 11:00	0.00	2.68	218.1	0	0	983.4	29	19	13.22
2023-05-30 12:00	0.00	3.09	209.3	0	0	982.7	30.1	18.4	13.205
2023-05-30 13:00	0.00	3.41	199.9	0	0	982.2	30.6	16.7	13.215
2023-05-30 14:00	0.00	3.52	194.1	0	0	981.7	31.2	15.3	13.216
2023-05-30 15:00	0.00	3.53	190.8	0	0	981.2	31.3	15.5	13.217
2023-05-30 16:00	0.00	2.95	195.7	0	0	980.8	31.3	15.2	13.218
2023-05-30 17:00	0.00	3.03	194.3	0	0	980.4	31	17.2	13.218
2023-05-30 18:00	0.00	2.64	183.2	0	0	980.2	30.3	20.4	13.04
2023-05-30 19:00	0.00	1.53	178.9	0	0	980.2	28.5	24.9	12.625
2023-05-30 20:00	1.10	0.88	193.6	0	0	980.6	25.4	31.7	12.509
2023-05-30 21:00	1.80	0.85	213.4	0	0	981.2	22.1	38.6	12.461
2023-05-30 22:00	0.90	0.67	183.3	0	0	981.8	19.8	45.1	12.421
2023-05-30 23:00	0.10	0.52	138.2	0	0	982.3	17.2	56.1	12.385
2023-05-31 0:00	0.00	1.13	174.9	0	0	982.6	17.1	54	12.361
2023-05-31 1:00	0.10	0.82	169.6	0	0	982.8	15.8	59.8	12.334
2023-05-31 2:00	0.10	0.42	158.9	0	0	982.9	15.4	62.2	12.305
2023-05-31 3:00	0.20	0.93	174.2	0	0	982.9	15.2	63	12.277
2023-05-31 4:00	0.10	1.22	171.5	0	0	983.2	14.6	64.6	12.259
2023-05-31 5:00	0.20	0.81	175.9	0	0	983.6	14.9	65.5	12.277
2023-05-31 6:00	0.20	1.13	166.6	0	0	984	17.3	59.3	12.331
2023-05-31 7:00	0.30	1.88	190.1	0	0	984.3	20.7	48.6	12.639
2023-05-31 8:00	0.30	1.67	209	0	0	984.2	23.7	39.5	13.275
2023-05-31 9:00	0.30	1.88	207.7	0	0	984.1	26.1	33	13.777
2023-05-31 10:00	0.00	2.29	223.7	0	0	983.9	28.1	27	13.848
2023-05-31 11:00	0.00	3.05	212.6	0	0	983.6	29.4	21.9	13.266
2023-05-31 12:00	0.00	2.51	226	0	0	983.4	30.4	20.7	13.217
2023-05-31 13:00	0.00	2.43	236.3	0	0	983.1	31.1	20.3	13.218
2023-05-31 14:00	0.00	3.07	225.2	0	0	982.9	31.6	21.1	13.219
2023-05-31 15:00	0.00	2.99	215.1	0	0	982.6	31.9	20.4	13.219
2023-05-31 16:00	0.00	2.45	217.5	0	0	982.3	32	19.9	13.22
2023-05-31 17:00	0.00	2.34	219.3	0	0	982.1	31.8	19.7	13.219
2023-05-31 18:00	0.00	1.83	213.8	0	0	982.1	31.2	20.5	13.095
2023-05-31 19:00	0.10	0.81	199.9	0	0	982.3	29.2	25.2	12.613
2023-05-31 20:00	1.70	0.31	124.9	0	0	982.8	23.8	39.8	12.508
2023-05-31 21:00	0.90	0.67	213.4	0	0	983.3	21.3	45.5	12.459
2023-05-31 22:00	0.60	0.65	203.9	0	0	983.8	21.6	45	12.418
2023-05-31 23:00	0.30	0.85	216.4	0	0	984.3	20.1	49.8	12.387
2023-06-01 0:00	0.20	0.64	178.9	0	0	984.6	18.8	53.2	12.363
2023-06-01 1:00	0.00	0.84	195.3	0	0	984.8	17.8	57	12.335
2023-06-01 2:00	0.20	0.76	201.1	0	0	985.1	17.7	55.8	12.306
2023-06-01 3:00	0.20	0.79	217.8	0	0	985.4	17.3	61.4	12.276
2023-06-01 4:00	0.30	0.83	224.9	0	0	986.1	16	69.6	12.261
2023-06-01 5:00	0.20	0.5	206	0	0	986.4	15	76.9	12.276
2023-06-01 6:00	0.10	0.58	267.7	0	0	986.8	18.1	64.5	12.381
2023-06-01 7:00	0.30	1.54	255.6	0	0	987.2	22.3	48.2	12.777
2023-06-01 8:00	0.30	1.4	259.2	0	0	987.3	25.5	41.6	13.307
2023-06-01 9:00	0.00	1.43	250.1	0	0	987.4	28.3	33.3	13.792
2023-06-01 10:00	0.00	1.39	289.5	0	0	987.2	29.6	29.7	13.851
2023-06-01 11:00	0.00	1.71	272.6	0	0	986.9	30.5	29.2	13.268
2023-06-01 12:00	0.00	1.96	243.8	0	0	986.6	31	28.6	13.218
2023-06-01 13:00	2.40	2.22	189.8	1.1	0	986.3	27	45.3	13.219
2023-06-01 14:00	1.30	1.28	82.3	0.7	0	985.9	27.3	49.5	13.224
2023-06-01 15:00	0.10	1.49	167.5	0	0	985.7	26.7	55.7	13.065
2023-06-01 16:00	0.50	1.03	218.3	0	0	986.2	23.3	63.3	12.593
2023-06-01 17:00	0.00	2.15	230.9	3.5	0	987.1	21.9	71.3	12.663
2023-06-01 18:00	0.10	1.27	169.8	0.8	0	987.5	20.5	83.6	12.735
2023-06-01 19:00	0.00	2.29	233.7	12.5	0	988.5	19.8	82.5	12.444
2023-06-01 20:00	0.30	2.75	238.3	16	0	989.2	18.2	85.8	12.408
2023-06-01 21:00	0.20	1.23	250.1	1.1	0	989	17.9	85.6	12.373
2023-06-01 22:00	0.20	0.94	22.6	0	0	988.7	17.3	89.1	12.352
2023-06-01 23:00	0.10	0.83	338.4	0	0	988.5	16.8	89.7	12.324
2023-06-02 0:00	0.10	1.12	344.4	0	0	988.5	16.8	88.8	12.296
2023-06-02 1:00	0.20	0.84	17.4	0	0	988.5	16.2	87.5	12.268
2023-06-02 2:00	0.20	0.74	5.5	0	0	988.5	15.5	88.3	12.24
2023-06-02 3:00	0.10	0.85	1.3	0	0	988.5	14.8	88.3	12.223
2023-06-02 4:00	0.20	0.9	343.6	0	0	989.2	14.6	87.5	12.206
2023-06-02 5:00	0.30	0.93	345.4	0	0	989.7	14.3	82.3	12.233
2023-06-02 6:00	0.20	1	0.1	0	0	990.1	14.7	74.4	12.432
2023-06-02 7:00	0.10	1.26	358.8	0	0	990.6	16.4	64.7	12.725
2023-06-02 8:00	0.20	1.15	3.4	0	0	990.6	18.8	57.4	13.322
2023-06-02 9:00	0.60	1.53	3.7	0	0	990.4	20.9	50.7	13.781
2023-06-02 10:00	0.50	2.05	27.5	0	0	990.2	22.7	43.2	13.855
2023-06-02 11:00	0.20	2.12	13.6	0	0	989.9	23.9	39.8	13.255
2023-06-02 12:00	0.30	1.71	10	0	0	989.6	25.1	36.5	13.218
2023-06-02 13:00	0.70	1.98	16.4	0	0	989.2	26.1	32.5	13.219
2023-06-02 14:00	0.00	1.94	14.3	0	0	988.7	26.9	30.7	13.22
2023-06-02 15:00	0.00	2.58	22.8	0	0	988.2	27.4	27.2	13.219
2023-06-02 16:00	0.00	2.46	31.2	0	0	988	27.6	20.4	13.223
2023-06-02 17:00	0.00	2.19	4.7	0	0	987.8	27.5	17.7	13.225

2023-06-02 18:00	0.00	2.01	13.8	0	0	988	26.8	20.2	13.131
2023-06-02 19:00	0.20	1.6	17.6	0	0	988.3	24.5	24.3	12.615
2023-06-02 20:00	2.60	0.83	10.1	0	0	988.7	21.1	36	12.493
2023-06-02 21:00	0.60	1.28	23.3	0	0	989.3	19.2	35.7	12.44
2023-06-02 22:00	0.90	1.39	21.3	0	0	989.5	17.7	40.1	12.403
2023-06-02 23:00	0.30	1.23	32.3	0	0	989.5	15.9	44.5	12.372
2023-06-03 0:00	0.20	0.74	42.5	0	0	989.5	14	49.5	12.342
2023-06-03 1:00	0.10	0.42	43.1	0	0	989.7	10.8	66	12.305
2023-06-03 2:00	0.20	0.56	50.7	0	0	989.9	10.5	56.6	12.276
2023-06-03 3:00	0.20	0.6	44.9	0	0	990.2	9.2	58.9	12.241
2023-06-03 4:00	0.20	0.67	48.7	0	0	990.6	8.3	58.4	12.205
2023-06-03 5:00	0.40	0.29	154.7	0	0	991.1	7.4	70	12.228
2023-06-03 6:00	0.20	0.51	65.6	0	0	991.6	9.5	61.9	12.438
2023-06-03 7:00	0.60	0.98	56.3	0	0	992	12.2	53	12.95
2023-06-03 8:00	1.00	1.31	75.5	0	0	992.2	15.2	46.9	13.383
2023-06-03 9:00	1.00	1.32	102.1	0	0	992.1	17.6	42.9	13.782
2023-06-03 10:00	1.00	1.38	95.1	0	0	992.1	20	39.6	13.852
2023-06-03 11:00	0.50	1.9	86.4	0	0	991.7	21.8	37.7	13.321
2023-06-03 12:00	0.40	1.81	93.5	0	0	991.3	23.3	35.8	13.218
2023-06-03 13:00	0.00	2	79.5	0	0	991	24.1	32.5	13.217
2023-06-03 14:00	0.20	2.14	90.8	0	0	990.5	24.7	27.9	13.218
2023-06-03 15:00	0.30	1.71	66.7	0	0	990	25.2	26.5	13.219
2023-06-03 16:00	0.20	1.58	107.9	0	0	989.7	25.3	24.7	13.219
2023-06-03 17:00	0.00	1.78	77.7	0	0	989.6	24.8	26.5	13.22
2023-06-03 18:00	0.10	1.49	111.1	0	0	989.4	23.7	26.2	13.112
2023-06-03 19:00	3.00	0.49	92.6	0	0	989.4	21	36.5	12.604
2023-06-03 20:00	1.00	0.35	51.7	0	0	989.6	16.8	57.2	12.484
2023-06-03 21:00	0.20	0.28	72.9	0	0	989.5	13.4	70.4	12.417
2023-06-03 22:00	0.20	0.32	144	0	0	989.6	11.1	79.1	12.371
2023-06-03 23:00	0.40	0.41	88.1	0	0	989.4	9.3	81.2	12.335
2023-06-04 0:00	0.10	0.41	131.9	0	0	989.3	7.7	82	12.294
2023-06-04 1:00	0.30	0.32	172	0	0	989.3	7.9	81.3	12.26
2023-06-04 2:00	0.20	0.28	88.7	0	0	989.2	6.9	84.7	12.222
2023-06-04 3:00	0.10	0.3	204.2	0	0	989.1	6.1	83.4	12.178
2023-06-04 4:00	0.10	0.3	84	0	0	989.2	5.5	84.9	12.151
2023-06-04 5:00	0.30	0.35	141.9	0	0	989.2	5.9	84.5	12.195
2023-06-04 6:00	0.20	0.5	153.3	0	0	989.1	9.8	74.3	12.392
2023-06-04 7:00	0.30	1.33	150.9	0	0	989.1	13.9	61.6	12.922
2023-06-04 8:00	0.30	1.23	192.6	0	0	988.7	18	47.3	13.459
2023-06-04 9:00	0.50	1.05	224.7	0	0	988.2	21.3	39.1	13.792
2023-06-04 10:00	0.00	1.89	223.2	0	0	987.5	23.8	29.6	13.768
2023-06-04 11:00	0.00	1.5	231.5	0	0	986.8	24.9	25.3	13.213
2023-06-04 12:00	0.00	1.48	252	0	0	986.1	25.9	23	13.214
2023-06-04 13:00	0.60	1.52	174.7	0	0	985.4	26.9	20.7	13.216
2023-06-04 14:00	0.00	1.55	219.3	0	0	984.8	26.8	21.4	13.216
2023-06-04 15:00	0.60	1.19	178.3	0	0	984.4	26.8	22.1	13.216
2023-06-04 16:00	2.80	0.82	137	0	0	983.8	26.2	25.4	13.212
2023-06-04 17:00	8.00	0.29	76.9	0	0	983.6	24.4	37.3	12.818
2023-06-04 18:00	0.40	0.78	43.6	0	0	983.7	22.5	42.2	12.55
2023-06-04 19:00	0.90	1.08	23.5	0	0	984.4	22.5	35.4	12.48
2023-06-04 20:00	1.10	1.06	22.6	0	0	984.5	21.4	36.3	12.421
2023-06-04 21:00	1.20	1.19	22	0	0	984.8	20.1	42.6	12.389
2023-06-04 22:00	0.50	1.24	5.1	0	0	985.1	19.3	42.1	12.37
2023-06-04 23:00	0.20	0.95	330.4	0	0	985.3	16.9	51.1	12.342
2023-06-05 0:00	0.20	1.05	339.5	0	0	983.3	15.1	57.9	12.311
2023-06-05 1:00	0.20	1.07	339.8	0	0	985.6	14	55.5	12.282
2023-06-05 2:00	0.00	1.25	341.5	0	0	985.9	12.9	55.8	12.246
2023-06-05 3:00	0.10	1.08	337.8	0	0	986.3	11.3	61.1	12.206
2023-06-05 4:00	0.20	1.15	338.6	0	0	986.7	10	68.3	12.171
2023-06-05 5:00	0.20	1.64	345.4	0	0	987.3	10.1	75.3	12.196
2023-06-05 6:00	0.20	1.89	348.1	0	0	987.8	11.1	74	12.351
2023-06-05 7:00	0.30	1.99	342.3	0	0	988.1	12.5	71.6	12.836
2023-06-05 8:00	0.10	2.56	336.4	0	0	988.3	13	67.5	13.411
2023-06-05 9:00	0.20	2.57	340.1	0	0	988.3	13.3	63.1	13.806
2023-06-05 10:00	0.50	3.1	348.7	0	0	988.5	14.7	58.1	13.873
2023-06-05 11:00	0.30	3.36	345.9	0	0	988.4	15.5	57.2	13.23
2023-06-05 12:00	0.20	3.3	345.6	0	0	987.7	16	55.7	13.221
2023-06-05 13:00	0.20	3.37	351.4	0	0	987.6	15.9	52.9	13.226
2023-06-05 14:00	0.20	2.94	351.7	0	0	987.3	16.6	47.4	13.227
2023-06-05 15:00	0.50	3.41	344.8	0	0	987.2	17	43.3	13.23
2023-06-05 16:00	0.40	3.22	349.1	0	0	987	16.8	42.2	13.23
2023-06-05 17:00	0.40	3.13	347.1	0	0	987.1	16.5	42.8	13.239
2023-06-05 18:00	0.20	2.62	354.5	0	0	987	15.9	43.2	13.139
2023-06-05 19:00	0.20	1.56	343.7	0	0	987	14.3	48.7	12.552
2023-06-05 20:00	0.20	1.51	354.3	0	0	987.3	12.5	51.5	12.424
2023-06-05 21:00	0.10	1.02	347	0	0	987.5	10.7	56.2	12.366
2023-06-05 22:00	0.10	0.82	336.1	0	0	987.5	8.9	62.7	12.321
2023-06-05 23:00	0.20	1.1	334.4	0	0	987.2	7.6	66.6	12.28
2023-06-06 0:00	0.10	0.93	307	0	0	986.9	6.2	70.7	12.246
2023-06-06 1:00	0.20	1.2	314.4	0	0	986.6	5.4	72.7	12.199
2023-06-06 2:00	0.10	1.31	331.9	0	0	986.3	4.4	75.1	12.152
2023-06-06 3:00	0.20	1.14	339.4	0	0	986.5	3.3	78.1	12.112
2023-06-06 4:00	0.10	1.18	336.5	0	0	986.6	2.6	79.7	12.072
2023-06-06 5:00	0.10	1.52	339	0	0	986.8	2.6	79.3	12.093
2023-06-06 6:00	0.20	1.69	344.9	0	0	986.7	4.2	74.4	12.192
2023-06-06 7:00	0.20	1.55	344.4	0	0	986.7	7	65.7	12.667
2023-06-06 8:00	0.30	1.49	334	0	0	986.7	10.3	56.4	13.516
2023-06-06 9:00	0.30	1.93	338.5	0	0	986	13.4	47.6	13.751
2023-06-06 10:00	0.30	3.03	356.4	0	0	985.8	15.2	39.3	13.664
2023-06-06 11:00	0.40	3.38	358.9	0	0	985.3	16	35.1	13.18

2023-06-06 12:00	0.20	3.28	357	0	0	984.8	17.1	31.7	13.182
2023-06-06 13:00	0.00	3.59	359.6	0	0	984	18.3	26.3	13.182
2023-06-06 14:00	0.30	3.52	356	0	0	983.4	18.9	23.1	13.182
2023-06-06 15:00	0.50	3.29	352.7	0	0	983	19.3	24.8	13.184
2023-06-06 16:00	0.10	3.57	356	0	0	982.6	19.3	24.8	13.184
2023-06-06 17:00	0.30	3.4	358.5	0	0	982.4	18.9	25.6	13.187
2023-06-06 18:00	0.20	3.21	4.5	0	0	982.6	17.7	25.7	13.132
2023-06-06 19:00	0.80	2.65	2.7	0	0	982.7	15.9	32.1	12.61
2023-06-06 20:00	0.10	1.74	358.6	0	0	982.9	13.8	40	12.444
2023-06-06 21:00	0.20	1.16	356.5	0	0	983.3	11.8	47	12.381
2023-06-06 22:00	0.10	1.47	1.5	0	0	983.4	10.8	49.2	12.337
2023-06-06 23:00	0.10	1.11	350.7	0	0	983.3	9.5	53.7	12.303
2023-06-07 0:00	0.10	1.14	339.3	0	0	983	8.4	56.9	12.268
2023-06-07 1:00	0.20	1.19	327.6	0	0	982.8	7	61.2	12.231
2023-06-07 2:00	0.20	1.26	326.6	0	0	982.8	6	65.3	12.185
2023-06-07 3:00	0.10	1.44	328.4	0	0	982.7	5.1	68.3	12.134
2023-06-07 4:00	0.10	1.64	333.2	0	0	982.7	4.5	70.3	12.084
2023-06-07 5:00	0.10	2.11	336.7	0	0	982.8	4.6	69.8	12.103
2023-06-07 6:00	0.10	1.94	342.7	0	0	982.9	6.1	64.5	12.212
2023-06-07 7:00	0.10	1.81	342.7	0	0	982.8	8.6	57.6	12.693
2023-06-07 8:00	0.30	2.27	348.8	0	0	982.6	11.8	50.2	13.482
2023-06-07 9:00	0.30	2.74	351.2	0	0	982	14.6	41.1	13.785
2023-06-07 10:00	0.30	3.98	353.2	0	0	981.2	16.3	34.9	13.704
2023-06-07 11:00	0.00	4.67	1.3	0	0	980.8	17.4	30.9	13.22
2023-06-07 12:00	0.20	3.76	356.1	0	0	980.3	18.4	29.7	13.221
2023-06-07 13:00	0.40	4.15	359.3	0	0	979.9	19.1	28	13.222
2023-06-07 14:00	0.20	3.79	0.4	0	0	979.5	19.6	27.4	13.221
2023-06-07 15:00	0.20	3.97	357.6	0	0	979.1	19.9	25.5	13.229
2023-06-07 16:00	0.00	3.7	357.5	0	0	978.9	20	24.6	13.236
2023-06-07 17:00	0.10	3.7	2.2	0	0	978.9	19.5	24.1	13.24
2023-06-07 18:00	0.50	3.41	4.4	0	0	979.2	18.6	24.8	13.166
2023-06-07 19:00	0.70	2.72	4.8	0	0	979.4	17.1	29.3	12.616
2023-06-07 20:00	0.50	1.5	353.3	0	0	979.5	15.3	35.7	12.471
2023-06-07 21:00	0.20	1.03	339	0	0	979.8	13.3	41.9	12.419
2023-06-07 22:00	0.10	1.06	333.9	0	0	979.7	12	44.7	12.371
2023-06-07 23:00	0.10	1.05	324.4	0	0	979.7	11	46.4	12.338
2023-06-08 0:00	0.10	1.18	338.9	0	0	979.5	10.6	49.3	12.306
2023-06-08 1:00	0.10	1.23	332.3	0	0	979.3	10.7	51.5	12.285
2023-06-08 2:00	0.10	1.36	326.9	0	0	979.2	10.5	54.6	12.253
2023-06-08 3:00	0.10	1.03	337.4	0	0	979.3	10.2	57.7	12.226
2023-06-08 4:00	0.20	1.14	326.1	0	0	979.5	10	60.2	12.193
2023-06-08 5:00	0.20	1.28	337.6	0	0	980	9.8	62.1	12.175
2023-06-08 6:00	0.10	1.07	331.8	0	0	980.3	9.8	63.5	12.166
2023-06-08 7:00	0.20	1.1	331.6	0	0	980.5	9.9	64.9	12.397
2023-06-08 8:00	0.20	1.06	337.5	0	0	980.3	10.8	64.3	12.842
2023-06-08 9:00	0.30	0.92	329.2	0	0	980.3	12.5	61.1	13.14
2023-06-08 10:00	0.10	0.9	329	0	0	980.2	14.4	55.9	13.332
2023-06-08 11:00	0.30	1.76	2.2	0	0	979.9	16.7	48.6	13.732
2023-06-08 12:00	0.30	2.36	7.8	0	0	979.6	17.6	45.3	13.743
2023-06-08 13:00	0.40	2.11	355	0	0	979.5	18.2	44.4	13.317
2023-06-08 14:00	0.20	1.77	18	0	0	979.2	19.1	41.2	13.216
2023-06-08 15:00	0.30	1.74	338.7	0	0	978.8	19.6	40.5	13.218
2023-06-08 16:00	0.20	1.25	4.2	0	0	978.6	19.7	40.2	13.224
2023-06-08 17:00	0.20	0.96	32.9	0	0	978.4	20.1	39.8	13.238
2023-06-08 18:00	0.50	0.9	318.8	0	0	978.4	20.5	39	13.139
2023-06-08 19:00	0.80	0.27	310.6	0	0	978.1	19.1	52.5	12.602
2023-06-08 20:00	0.10	0.3	279.4	0	0	977.9	15	66.8	12.465
2023-06-08 21:00	0.10	0.58	238.2	0	0	978	13.2	68.1	12.407
2023-06-08 22:00	0.10	0.54	242.3	0	0	978	12.9	65.4	12.358
2023-06-08 23:00	0.30	0.48	268	0	0	978	12.1	66.8	12.325
2023-06-09 0:00	0.30	0.29	36.4	0	0	977.8	9.7	78.3	12.289
2023-06-09 1:00	0.10	0.38	196.8	0	0	977.5	7.6	82.5	12.251
2023-06-09 2:00	0.30	0.36	249.1	0	0	977.1	7.1	81.8	12.218
2023-06-09 3:00	0.10	0.32	227.8	0	0	977	6.4	82.6	12.184
2023-06-09 4:00	0.20	0.35	115.3	0	0	977.1	4.9	83.8	12.154
2023-06-09 5:00	0.10	0.31	200.2	0	0	977	6.4	82.3	12.187
2023-06-09 6:00	0.10	0.64	268.8	0	0	977.1	11.7	72.2	12.246
2023-06-09 7:00	0.20	0.73	333.1	0	0	977.1	16.1	60	12.59
2023-06-09 8:00	0.50	1.32	328	0	0	976.8	18.6	49.2	13.398
2023-06-09 9:00	0.20	1.52	328	0	0	976.3	20	42	13.777
2023-06-09 10:00	0.00	2.07	333.4	0	0	975.8	21.3	35.4	13.808
2023-06-09 11:00	0.10	2.18	337.1	0	0	975.2	22.3	33.1	13.213
2023-06-09 12:00	0.30	2.02	322.2	0	0	974.8	23.3	30.8	13.215
2023-06-09 13:00	0.70	2.14	317.7	0	0	974.3	24.4	29.4	13.217
2023-06-09 14:00	0.40	1.5	356.6	0	0	973.7	24.6	29.7	13.215
2023-06-09 15:00	0.10	1.87	280.9	0	0	973.2	25.2	28	13.217
2023-06-09 16:00	0.30	1.87	322.7	0	0	972.8	25.7	26.1	13.219
2023-06-09 17:00	0.40	1.17	321.1	0	0	972.5	25.8	25.4	13.206
2023-06-09 18:00	0.80	1.11	324.6	0	0	972.4	25.5	26.1	13.192
2023-06-09 19:00	5.40	0.53	353.4	0	0	972.4	24.1	34.1	12.646
2023-06-09 20:00	2.30	0.24	55.8	0	0	972.4	18.8	58.4	12.48
2023-06-09 21:00	0.10	0.38	85.3	0	0	972.2	15.1	64.1	12.42
2023-06-09 22:00	0.10	0.54	206	0	0	972	13.9	68.2	12.365
2023-06-09 23:00	0.30	0.58	333.4	0	0	972.1	13.4	69.7	12.321
2023-06-10 0:00	0.10	0.85	3	0	0	972	12	72.3	12.294
2023-06-10 1:00	0.10	1.02	357.8	0	0	971.9	13.4	62.1	12.268
2023-06-10 2:00	0.20	0.71	326.7	0	0	972	12.4	69	12.23
2023-06-10 3:00	0.20	0.6	315.4	0	0	972.1	12.6	70	12.208
2023-06-10 4:00	0.10	1	329.2	0	0	972.6	12.9	71.5	12.181
2023-06-10 5:00	0.00	1.36	352.4	0	0	973.5	13.1	68.6	12.161

2023-06-10 6:00	0.10	2.08	348	0	0	974.5	12.2	68.2	12.173
2023-06-10 7:00	0.20	2.17	344.1	0	0	975.2	11	72.6	12.22
2023-06-10 8:00	0.10	2.39	346.3	0	0	975.9	10	74.9	12.315
2023-06-10 9:00	0.10	2.41	336.9	0	0	976.3	9.1	78.3	12.417
2023-06-10 10:00	0.10	2.66	340.7	0	0	976.9	8.4	77.8	12.828
2023-06-10 11:00	0.10	2.63	341.5	0	0	977.4	8.8	74.6	12.986
2023-06-10 12:00	0.10	2.58	346.7	0	0	977.9	8.9	74.7	13.107
2023-06-10 13:00	0.10	2.62	351.6	0	0	978.2	9.1	72.8	13.299
2023-06-10 14:00	0.00	2.67	1.8	0	0	978.5	9	70.6	13.518
2023-06-10 15:00	0.10	2.34	358.8	0	0	978.8	9.3	67.4	13.09
2023-06-10 16:00	0.40	2.19	356	0	0	979.3	9.1	66.8	12.885
2023-06-10 17:00	0.10	2.65	2	0	0	979.7	8.6	66	12.716
2023-06-10 18:00	0.30	1.98	359.9	0	0	980.3	8.2	68.6	12.436
2023-06-10 19:00	0.10	1.89	4	0	0	980.9	7.4	70.6	12.299
2023-06-10 20:00	0.20	1.56	10.3	0.2	0	981.3	6.6	74.5	12.194
2023-06-10 21:00	0.20	0.97	4	0.2	0	981.5	5.8	82.4	12.119
2023-06-10 22:00	0.20	0.93	351.8	0.1	0	981.5	5.7	83.9	12.042
2023-06-10 23:00	0.10	0.97	358.1	0.1	0	981.7	5.3	85.6	11.977
2023-06-11 0:00	0.30	1.12	2.9	0	0	981.8	5	85.8	11.948
2023-06-11 1:00	0.20	0.9	359.5	0	0	981.7	5.1	85.9	11.958
2023-06-11 2:00	0.10	1.19	2.1	0.2	0	981.7	4.6	86.1	11.907
2023-06-11 3:00	0.00	1.13	5.9	0	0	981.9	4.2	86.6	11.891
2023-06-11 4:00	0.10	1.15	358.8	0	0	981.9	4	86.4	11.886
2023-06-11 5:00	0.10	1.59	14.3	0	0	982.1	3.6	85.8	11.874
2023-06-11 6:00	0.10	1.32	10	0	0	982.5	3.5	85.6	11.905
2023-06-11 7:00	0.30	1.23	355	0	0	982.9	3.9	85.1	12.019
2023-06-11 8:00	0.10	1.4	359.6	0	0	983.1	4.2	84	12.18
2023-06-11 9:00	0.30	1.31	0.7	0	0	982.9	4.4	85.8	12.317
2023-06-11 10:00	0.10	1.33	348.7	0	0	982.8	4.8	85.8	12.199
2023-06-11 11:00	0.00	1.76	348.1	0	0	982.6	4.8	85.9	12.425
2023-06-11 12:00	0.10	1.4	350	0	0	982.2	5.3	85.6	12.272
2023-06-11 13:00	0.10	1.27	345.4	0	0	982	5.9	84.5	12.264
2023-06-11 14:00	0.10	1.45	350.5	0	0	981.7	7	81.9	12.769
2023-06-11 15:00	0.20	0.95	354.8	0	0	981.5	7.9	80.2	12.598
2023-06-11 16:00	0.10	1.19	329.4	0	0	980.9	9.1	77.2	12.777
2023-06-11 17:00	0.20	1.04	336.1	0	0	980.6	10.1	73.8	12.709
2023-06-11 18:00	0.20	1.11	314.6	0	0	980.5	10.5	71.6	12.327
2023-06-11 19:00	0.20	0.87	283.1	0	0	980.3	10.4	74.2	12.122
2023-06-11 20:00	0.20	0.94	292.7	0	0	980.1	9.9	77.3	12.007
2023-06-11 21:00	0.10	1.18	317.6	0	0	979.8	9.6	77.3	11.957
2023-06-11 22:00	0.10	1.18	340.6	0	0	979.4	9.3	77.9	11.925
2023-06-11 23:00	0.30	1	350.9	0	0	979	9.4	79.2	11.887
2023-06-12 0:00	0.20	1.27	4.3	0	0	978.4	9.7	78.4	11.871
2023-06-12 1:00	0.20	1.77	15.1	0	0	978	9.6	77.8	11.849
2023-06-12 2:00	0.10	2.01	22.4	0	0	977.7	9.4	77.8	11.84
2023-06-12 3:00	0.30	1.87	25.5	0.1	0	977.7	9.3	77.6	11.828
2023-06-12 4:00	0.10	1.64	33.8	0.3	0	977.8	8.4	81.2	11.788
2023-06-12 5:00	0.20	1.24	31.2	0.1	0	978	8.1	83.7	11.802
2023-06-12 6:00	0.00	1.51	25.9	0.2	0	977.8	8.2	85	11.89
2023-06-12 7:00	0.30	1.14	41	0	0	977.7	9.2	83.6	11.982
2023-06-12 8:00	0.10	0.7	13	0	0	977.4	10.4	83.5	12.147
2023-06-12 9:00	0.10	1.04	354.2	0	0	977.2	12.2	80.1	12.974
2023-06-12 10:00	0.10	1.12	9.7	0	0	976.7	15.9	69.1	13.628
2023-06-12 11:00	0.30	1.3	26.3	0	0	975.7	19.3	58	13.757
2023-06-12 12:00	0.30	1.52	65.3	0	0	974.9	21.4	52	13.262
2023-06-12 13:00	0.50	2.15	100.3	0	0	974.4	21.4	49.7	12.744
2023-06-12 14:00	0.30	1.44	131.4	0	0	974.3	19.8	59.9	12.67
2023-06-12 15:00	0.10	1.1	116.2	0	0	974	19.6	63.6	12.593
2023-06-12 16:00	0.10	0.3	353.2	0	0	973.7	19.7	70.3	12.515
2023-06-12 17:00	0.10	0.72	19.6	0	0	973.7	18.6	77.7	12.422
2023-06-12 18:00	0.30	0.73	2.4	0.1	0	973.7	17	83.2	12.338
2023-06-12 19:00	0.10	0.57	332.7	0	0	973.2	16.3	87.5	12.275
2023-06-12 20:00	0.10	0.79	9.5	0.3	0	973.2	15.9	88.3	12.226
2023-06-12 21:00	0.20	1.22	10.2	0.1	0	972.8	15.6	88.5	12.19
2023-06-12 22:00	0.20	2.03	24.3	0.1	0	972.1	15.7	85.5	12.163
2023-06-12 23:00	0.10	1.58	45.9	0	0	971.7	15.7	85.9	12.134
2023-06-13 0:00	0.10	1.24	44	0	0	971.2	15.5	87.2	12.102
2023-06-13 1:00	0.10	1.05	27.6	0	0	970.5	15.3	88.7	12.079
2023-06-13 2:00	0.20	0.67	354.5	0	0	969.6	15	90.4	12.052
2023-06-13 3:00	0.10	1.02	12.6	0	0	969.2	14.8	89.7	12.025
2023-06-13 4:00	0.20	1.17	17.7	0	0	968.7	14.4	85.8	11.993
2023-06-13 5:00	0.20	1.74	29.4	0	0	968.5	14.2	82.7	12.016
2023-06-13 6:00	0.30	1.52	47.8	0	0	968.8	14.8	81.5	12.152
2023-06-13 7:00	0.10	1.47	62.1	0	0	969.1	16	80.6	12.466
2023-06-13 8:00	0.30	1.29	65.9	0	0	968.9	17.5	78.5	12.434
2023-06-13 9:00	0.10	1.37	59	0	0	968.6	18.5	75.4	12.566
2023-06-13 10:00	0.30	1.78	75.3	0	0	968.4	20.1	67.7	13.212
2023-06-13 11:00	0.50	2.08	91.5	0.1	0	968.4	19.5	69.4	12.642
2023-06-13 12:00	0.40	0.82	359.5	0	0	967.9	19.4	77.5	13.432
2023-06-13 13:00	0.10	1.9	63.7	0	0	967.7	20.9	68.4	13.086
2023-06-13 14:00	0.20	1.87	130.8	0.5	0	967.9	19.2	80.5	12.919
2023-06-13 15:00	0.20	1.59	156.8	3.6	0	968.4	17.6	85.3	12.587
2023-06-13 16:00	0.40	1.05	130.6	3.2	0	968.7	16.6	89.1	12.531
2023-06-13 17:00	0.00	1.51	165.8	1.2	0	968.9	16.3	89.3	12.39
2023-06-13 18:00	0.10	1.76	169.7	0.5	0	969.4	15.3	89.6	12.334
2023-06-13 19:00	0.10	1.5	183.8	0	0	969.6	15	89.6	12.276
2023-06-13 20:00	0.30	1.63	194	0	0	969.6	14.5	89.1	12.233
2023-06-13 21:00	0.10	0.84	212.9	0	0	970.1	14.2	89.8	12.197
2023-06-13 22:00	0.10	1.5	174.2	0	0	969.7	13.7	89.9	12.161
2023-06-13 23:00	0.10	1.37	181.4	0	0	969.3	13.4	89.7	12.129

2023-06-14 0:00	0.10	1.52	182.1	0	0	969.3	13.2	89.4	12.095
2023-06-14 1:00	0.20	1.26	178.4	0	0	969.3	13	89.8	12.069
2023-06-14 2:00	0.10	1.1	182.3	0	0	969.1	12.9	89.7	12.044
2023-06-14 3:00	0.20	1.07	185.6	0.4	0	968.9	12.8	89.5	12.014
2023-06-14 4:00	0.10	1.48	190.9	0.1	0	968.8	12.7	89.3	11.986
2023-06-14 5:00	0.20	1.13	225.7	0	0	969	12.8	89.5	11.971
2023-06-14 6:00	0.10	0.73	216.6	0	0	969.3	12.9	89.4	11.952
2023-06-14 7:00	0.10	0.76	230.1	0.1	0	969.5	13	89.2	11.946
2023-06-14 8:00	0.10	1.08	250.5	0	0	969.6	13.2	89.5	11.997
2023-06-14 9:00	0.40	1.18	272.7	0	0	969.6	13.4	90.3	11.935
2023-06-14 10:00	0.20	0.66	274.7	0.1	0	969.7	13.7	90.7	11.916
2023-06-14 11:00	0.10	1.77	318.5	0	0	969.9	13.4	89.5	11.888
2023-06-14 12:00	0.20	1.88	328.6	0	0	970.5	11.9	87.2	11.925
2023-06-14 13:00	0.30	1.79	334.1	0	0	970.8	11.1	86.7	12.096
2023-06-14 14:00	0.20	1.55	323.5	0.3	0	970.9	10.9	87.4	11.908
2023-06-14 15:00	0.10	1.44	331.3	0	0	971.2	10.2	87.8	11.876
2023-06-14 16:00	0.10	1.11	316	0	0	971.4	10.2	87.2	11.906
2023-06-14 17:00	0.40	0.95	286.4	0	0	971.6	10.6	85.9	11.975
2023-06-14 18:00	0.20	0.68	212.5	0	0	971.4	10.8	86.8	11.833
2023-06-14 19:00	0.10	0.89	199.9	0	0	971.7	10.8	87.8	11.814
2023-06-14 20:00	0.30	0.91	253.8	0	0	972.1	10.8	88.1	11.778
2023-06-14 21:00	0.10	1.49	302.9	0	0	972.6	10.8	87.3	11.748
2023-06-14 22:00	0.20	1.84	324.5	0	0	972.8	9.4	84.5	11.718
2023-06-14 23:00	0.10	1.4	330	0	0	972.8	8.6	85.4	11.702
2023-06-15 0:00	0.20	1.25	336.1	0	0	972.7	8.4	85.8	11.685
2023-06-15 1:00	0.10	0.97	308.6	0.1	0	972.7	8.4	86.3	11.648
2023-06-15 2:00	0.10	1.02	311.1	0	0	972.6	8.4	86.4	11.642
2023-06-15 3:00	0.10	1.43	321.1	0	0	972.7	8.2	87.3	11.621
2023-06-15 4:00	0.10	1.27	325.2	0	0	973	8.2	88.1	11.606
2023-06-15 5:00	0.10	1.35	334.6	0	0	973.3	8	87.9	11.594
2023-06-15 6:00	0.10	1.35	342.7	0	0	973.8	7.9	87.3	11.594
2023-06-15 7:00	0.30	1.17	338.8	0	0	974.5	7.7	87.5	11.587
2023-06-15 8:00	0.00	1.62	321.8	0	0	974.9	7.1	87.1	11.594
2023-06-15 9:00	0.20	1.3	335.2	0	0	975.5	7.3	85.1	11.619
2023-06-15 10:00	0.10	1.37	323.1	0	0	975.8	7.4	84.3	11.883
2023-06-15 11:00	0.10	1.71	336.3	0	0	976	8	82.7	12.432
2023-06-15 12:00	0.10	1.3	329.7	0	0	976.4	8.9	82.1	12.394
2023-06-15 13:00	0.30	1.2	327.7	0	0	976.6	10.6	80.4	12.558
2023-06-15 14:00	0.10	1.17	332.8	0	0	976.5	12.4	77.3	12.667
2023-06-15 15:00	0.10	0.94	321.2	0	0	976.5	13.7	72.7	12.514
2023-06-15 16:00	0.20	0.62	298.7	0	0	976.4	15.5	68	12.906
2023-06-15 17:00	0.30	1.6	341.8	0	0	976.4	17.4	62.5	12.707
2023-06-15 18:00	0.30	1.85	336.6	0	0	976.9	17	63.2	12.378
2023-06-15 19:00	0.50	1.1	327.3	0	0	977.4	16.3	68	12.063
2023-06-15 20:00	0.10	1.07	330.6	0	0	978.1	15.5	72.2	11.961
2023-06-15 21:00	0.20	0.81	330.6	0	0	978.4	14.2	77.4	11.91
2023-06-15 22:00	0.20	1.05	326.2	0	0	978.8	13.2	78.8	11.859
2023-06-15 23:00	0.20	0.92	339.4	0	0	979	12	80.1	11.817
2023-06-16 0:00	0.30	0.9	334.4	0	0	979.2	10.6	81.9	11.776
2023-06-16 1:00	0.20	0.83	339.1	0	0	979.3	9.6	83.7	11.737
2023-06-16 2:00	0.20	1.08	326.2	0	0	979.5	8.8	84	11.692
2023-06-16 3:00	0.10	1.38	323.4	0	0	979.6	8	82.9	11.647
2023-06-16 4:00	0.10	1.39	322.7	0	0	979.9	7.2	82.6	11.61
2023-06-16 5:00	0.30	1.12	331.5	0	0	980.3	7	82.6	11.642
2023-06-16 6:00	0.20	1.36	329.5	0	0	980.7	8	75.2	11.743
2023-06-16 7:00	0.10	1.52	323.3	0	0	981.1	9.9	67.5	12.103
2023-06-16 8:00	0.10	1.97	320.3	0	0	981.3	12.4	62.4	12.751
2023-06-16 9:00	0.20	2.22	325.1	0	0	981.4	14.9	54.8	13.332
2023-06-16 10:00	0.60	1.92	335.5	0	0	981.2	16.8	50.1	13.714
2023-06-16 11:00	0.60	1.81	334.7	0	0	980.9	18.5	47.7	13.783
2023-06-16 12:00	0.40	1.92	341	0	0	980.5	19.9	44.1	13.318
2023-06-16 13:00	0.40	2.12	343.3	0	0	980	20.6	40.8	13.205
2023-06-16 14:00	0.30	2.29	338.4	0	0	979.5	21.5	38.1	13.203
2023-06-16 15:00	0.20	2.17	334	0	0	979.2	22.2	35.1	13.208
2023-06-16 16:00	0.00	2.06	355	0	0	978.9	22.4	32.6	13.206
2023-06-16 17:00	0.00	2.32	354.8	0	0	978.8	22.2	30.6	13.214
2023-06-16 18:00	0.30	1.74	345.4	0	0	979	21.7	32.2	12.914
2023-06-16 19:00	0.40	1.06	346.2	0	0	979.1	20.5	36.5	12.341
2023-06-16 20:00	0.60	0.49	330.3	0	0	979.3	17.6	49.4	12.227
2023-06-16 21:00	0.30	0.58	332.9	0	0	979.6	14	61.7	12.18
2023-06-16 22:00	0.20	0.56	342.9	0	0	979.8	12.1	68.1	12.132
2023-06-16 23:00	0.10	0.3	346	0	0	980.2	10.8	74.7	12.083
2023-06-17 0:00	0.20	0.26	245.2	0	0	980.3	8	79.3	12.024
2023-06-17 1:00	0.20	0.28	190.9	0	0	980.1	5.9	80.8	11.974
2023-06-17 2:00	0.10	0.35	150.2	0	0	980.1	4	85	11.931
2023-06-17 3:00	0.30	0.3	190.5	0	0	980.1	3.1	83.7	11.886
2023-06-17 4:00	0.20	0.36	188.3	0	0	980.3	2.1	84.4	11.853
2023-06-17 5:00	0.20	0.32	234.7	0	0	980.8	4.2	81.4	11.918
2023-06-17 6:00	0.10	0.53	308.5	0	0	981.3	9.5	68.7	12.033
2023-06-17 7:00	0.40	0.58	346.4	0	0	981.3	13.6	51.4	12.436
2023-06-17 8:00	0.50	0.89	18.5	0	0	981.3	16.3	39.4	13.364
2023-06-17 9:00	0.00	1.07	332.6	0	0	981.2	18	30.2	13.766
2023-06-17 10:00	0.00	1.41	331.4	0	0	980.9	19.3	25.2	13.745
2023-06-17 11:00	0.20	1.59	324.8	0	0	980.7	20.5	23.1	13.156
2023-06-17 12:00	0.20	1.59	0.1	0	0	980.2	21.6	19.8	13.208
2023-06-17 13:00	2.30	1.39	1.3	0	0	979.9	22.4	17.6	13.208
2023-06-17 14:00	0.40	1.52	3.3	0	0	979.5	23.4	18.3	13.203
2023-06-17 15:00	1.20	1.55	4.5	0	0	979.4	23.6	19.9	13.198
2023-06-17 16:00	1.00	1.43	1.2	0	0	979.6	22.3	22.6	13.195
2023-06-17 17:00	1.40	0.9	3.1	0	0	979.7	21.8	24.9	12.9

2023-06-17 18:00	1.50	1.04	1.3	0	0	979.5	22.7	22.5	13.047
2023-06-17 19:00	3.60	0.62	351.2	0	0	979.5	22.5	24.8	12.446
2023-06-17 20:00	5.20	0.37	18.5	0	0	979.6	17.9	50.6	12.264
2023-06-17 21:00	0.20	0.26	324.2	0	0	979.7	13	71.3	12.208
2023-06-17 22:00	0.10	0.21	64	0	0	979.7	10.4	64	12.158
2023-06-17 23:00	0.10	0.37	213.7	0	0	979.8	8.3	68.9	12.113
2023-06-18 0:00	0.10	0.27	156.7	0	0	979.8	6.8	76.1	12.076
2023-06-18 1:00	0.10	0.33	167.4	0	0	979.8	5.6	82.6	12.036
2023-06-18 2:00	0.00	0.36	159	0	0	979.8	4.7	84.1	12.003
2023-06-18 3:00	0.30	0.36	148.1	0	0	979.7	4	85.3	11.973
2023-06-18 4:00	0.10	0.24	171.4	0	0	980.1	4.3	84.8	11.958
2023-06-18 5:00	0.10	0.3	169.8	0	0	980.4	5.6	82.5	12.016
2023-06-18 6:00	0.20	0.44	204.2	0	0	980.7	7.8	80.1	12.215
2023-06-18 7:00	0.20	0.37	127.2	0	0	980.6	10.3	74.5	12.529
2023-06-18 8:00	0.10	0.6	158	0	0	980.6	14.8	64	13.408
2023-06-18 9:00	0.40	0.71	162.4	0	0	980.4	19.8	49.4	13.779
2023-06-18 10:00	0.00	0.89	47.9	0	0	980.2	22.8	33	13.539
2023-06-18 11:00	0.00	1.4	134.9	0	0	980	23.8	27.9	13.152
2023-06-18 12:00	0.00	1.24	184.6	0	0	979.8	24.5	27.7	13.17
2023-06-18 13:00	0.00	1.32	179.9	0	0	979.6	25.2	24.7	13.155
2023-06-18 14:00	0.20	1.28	142.4	0	0	979.3	25.7	24.9	13.15
2023-06-18 15:00	0.40	1.49	195.1	0	0	978.9	26.1	25.1	13.162
2023-06-18 16:00	1.30	0.91	5.4	0	0	978.7	26.5	24.8	13.165
2023-06-18 17:00	0.70	1.58	72.6	0	0	978.6	25.8	25.9	13.174
2023-06-18 18:00	1.80	0.91	111.7	0	0	979	24.4	29.2	12.806
2023-06-18 19:00	4.30	0.39	61.4	0	0	979.3	22.8	37.9	12.394
2023-06-18 20:00	1.50	0.39	66.5	0	0	979.6	18.3	51.9	12.266
2023-06-18 21:00	0.30	0.43	75.2	0	0	980	15.9	53	12.225
2023-06-18 22:00	0.00	0.46	76.8	0	0	980.4	13.3	64	12.185
2023-06-18 23:00	0.00	0.6	80.4	0	0	980.5	13	62.7	12.133
2023-06-19 0:00	0.10	0.59	85.1	0	0	980.8	12.6	63.3	12.097
2023-06-19 1:00	0.10	0.41	74	0	0	981.1	11.6	67.6	12.062
2023-06-19 2:00	0.10	0.25	346.3	0	0	981.3	9.4	80.7	12.025
2023-06-19 3:00	0.20	0.33	127.5	0	0	981.3	7.7	83.2	11.994
2023-06-19 4:00	0.20	0.27	83.6	0	0	981.6	7.1	84.9	11.973
2023-06-19 5:00	0.20	0.33	54.2	0	0	982.3	8.9	81.6	12.021
2023-06-19 6:00	0.10	0.56	90.2	0	0	982.9	12.9	74.4	12.144
2023-06-19 7:00	0.10	0.75	136.5	0	0	983.3	16.7	64.1	12.534
2023-06-19 8:00	0.60	0.85	111.1	0	0	983.7	20.4	53	13.433
2023-06-19 9:00	0.30	1.37	122	0	0	984	23.4	42.7	13.685
2023-06-19 10:00	0.00	1.93	112.2	0	0	983.9	25.1	33.8	13.677
2023-06-19 11:00	0.10	1.55	87.2	0	0	984	26.3	28	13.253
2023-06-19 12:00	0.00	1.72	60.1	0	0	984	26.8	26.4	13.182
2023-06-19 13:00	0.60	1.6	145.5	0	0	984	27.7	25.3	13.182
2023-06-19 14:00	0.20	1.81	133.1	0	0	983.8	28	25.2	13.179
2023-06-19 15:00	0.30	1.46	96.1	0	0	983.6	28.1	24.8	13.175
2023-06-19 16:00	1.70	1.25	124	0	0	983.7	28.6	25.2	13.178
2023-06-19 17:00	0.40	1.12	66.3	0	0	984	28.1	27.1	13.172
2023-06-19 18:00	1.10	1.02	92.3	0	0	984.2	27.6	27.7	12.997
2023-06-19 19:00	5.70	0.5	80.3	0	0	984.5	25.9	35.6	12.407
2023-06-19 20:00	1.90	0.35	69.2	0	0	985	21.1	51.8	12.308
2023-06-19 21:00	0.80	0.52	84.2	0	0	985.6	19	53.3	12.27
2023-06-19 22:00	0.10	0.42	58.3	0	0	986.2	16.7	64.9	12.237
2023-06-19 23:00	0.10	0.55	106.6	0	0	986.4	16.4	64.2	12.204
2023-06-20 0:00	0.10	0.25	27.4	0	0	986.5	14.8	75.2	12.169
2023-06-20 1:00	0.20	0.31	50.6	0	0	986.9	12.7	83.7	12.14
2023-06-20 2:00	0.10	0.26	41.2	0	0	987.2	11.6	85.6	12.103
2023-06-20 3:00	0.20	0.29	117.8	0	0	987.5	10.4	84.2	12.077
2023-06-20 4:00	0.10	0.27	116.1	0	0	988.2	9.6	85.3	12.055
2023-06-20 5:00	0.40	0.23	89.8	0	0	988.7	11.1	83	12.095
2023-06-20 6:00	0.10	0.5	145.5	0	0	989.3	15.6	72.7	12.199
2023-06-20 7:00	0.50	1.01	144.3	0	0	989.8	18.8	63.2	12.622
2023-06-20 8:00	0.40	0.89	179	0	0	989.9	22.1	53.7	13.453
2023-06-20 9:00	0.40	1.16	152.4	0	0	989.9	25.6	43.1	13.71
2023-06-20 10:00	0.10	1.39	125.5	0	0	989.7	27.9	32.4	13.727
2023-06-20 11:00	0.00	1.91	94	0	0	989.6	28.9	27.4	13.159
2023-06-20 12:00	0.30	1.82	79.6	0	0	989.5	29.2	26.5	13.084
2023-06-20 13:00	0.40	1.91	129.2	0	0	989.4	29.6	24.5	13.076
2023-06-20 14:00	0.00	1.91	134	0	0	989.3	30	22.9	13.075
2023-06-20 15:00	1.00	1.34	133	0	0	989	30.3	21.1	13.073
2023-06-20 16:00	3.70	1.12	140.8	0	0	988.7	29.7	25.5	13.07
2023-06-20 17:00	3.90	1.07	135.9	0	0	988.7	29.7	25.9	13.054
2023-06-20 18:00	7.00	0.43	118.4	0	0	988.4	29.1	29.2	12.903
2023-06-20 19:00	5.10	0.25	54.1	0	0	988.6	26.6	45.3	12.444
2023-06-20 20:00	1.90	0.54	89.1	0	0	988.7	23.2	47.5	12.338
2023-06-20 21:00	0.60	0.66	133.6	0	0	989	22	47	12.301
2023-06-20 22:00	0.10	0.5	162	0	0	989.1	19.6	56.2	12.269
2023-06-20 23:00	0.30	0.35	232.7	0	0	989.1	19	58.9	12.238
2023-06-21 0:00	0.30	1	192.5	0	0	989.4	17.6	60.9	12.206
2023-06-21 1:00	0.10	1.47	176.9	0	0	989.6	17.4	62.7	12.177
2023-06-21 2:00	0.20	1.39	182	0	0	989.8	16.8	65.9	12.146
2023-06-21 3:00	0.40	1.31	178.8	0	0	990.2	15.7	70.7	12.118
2023-06-21 4:00	0.20	0.96	179	0	0	990.9	14.6	75.5	12.096
2023-06-21 5:00	0.40	0.8	188.8	0	0	991.7	14.8	74.4	12.124
2023-06-21 6:00	0.10	1.05	218.3	0	0	992.4	17.1	65.9	12.26
2023-06-21 7:00	0.40	0.83	225.2	0	0	992.6	20.2	55.2	12.667
2023-06-21 8:00	0.20	0.96	296.5	0	0	992.2	23.9	42.6	13.283
2023-06-21 9:00	0.10	1.33	292.7	0	0	991.9	25.9	35.9	13.701
2023-06-21 10:00	0.10	1.34	171	0	0	991.2	27.3	31.3	13.777
2023-06-21 11:00	0.10	1.24	236.8	0	0	990.6	28.5	29.5	13.201

2023-06-21 12:00	0.10	1.98	200.7	0	0	989.8	29.3	28.6	13.165
2023-06-21 13:00	0.10	2.02	222.3	0	0	989.3	29.8	27.5	13.167
2023-06-21 14:00	0.00	2.56	242.3	0	0	988.8	30.2	27.9	13.176
2023-06-21 15:00	0.60	2.31	206	0	0	988.5	30.4	28.1	13.181
2023-06-21 16:00	0.20	2.15	190.5	0	0	988.1	30.5	26.7	13.182
2023-06-21 17:00	0.10	2.74	176.6	0	0	988	29.9	27.2	13.183
2023-06-21 18:00	0.50	1.84	198.9	0	0	987.9	29.3	28.3	13.03
2023-06-21 19:00	1.30	1	188.5	0	0	987.7	27.7	32.8	12.564
2023-06-21 20:00	2.00	0.43	145.4	0	0	987.7	23.2	45.8	12.443
2023-06-21 21:00	1.10	0.58	169.8	0	0	987.7	21.2	51.2	12.405
2023-06-21 22:00	0.10	0.42	154.6	0	0	987.7	18.8	58.9	12.373
2023-06-21 23:00	0.00	0.57	200.7	0	0	987.8	17.8	61.6	12.338
2023-06-22 0:00	0.00	0.45	173.4	0	0	987.9	16.4	66.5	12.302
2023-06-22 1:00	0.00	0.48	160.9	0	0	987.8	14.8	74.5	12.272
2023-06-22 2:00	0.10	0.26	93	0	0	987.6	13.5	80.2	12.232
2023-06-22 3:00	0.20	0.93	164.2	0	0	987.7	13.2	79.8	12.204
2023-06-22 4:00	0.00	0.6	207.9	0	0	987.8	13.4	77.6	12.185
2023-06-22 5:00	0.30	0.5	198.6	0	0	988	13.2	79.5	12.231
2023-06-22 6:00	0.10	0.63	180.7	0	0	988.3	15.3	76.4	12.437
2023-06-22 7:00	0.30	1.02	211.6	0	0	988.5	18.9	62.7	12.903
2023-06-22 8:00	0.50	1.74	222.7	0	0	988.3	22.1	51.5	13.417
2023-06-22 9:00	0.30	1.82	220.4	0	0	987.9	24.7	43.9	13.772
2023-06-22 10:00	0.30	1.9	211	0	0	987.7	26.5	39.1	13.75
2023-06-22 11:00	0.00	3.15	217.7	0	0	987.2	28	32.9	13.171
2023-06-22 12:00	0.00	3.48	213.3	0	0	986.2	29	30.5	13.179
2023-06-22 13:00	0.20	3.46	193.2	0	0	985.4	29.7	29.2	13.178
2023-06-22 14:00	0.10	3.23	201.5	0	0	984.5	30.1	27.3	13.181
2023-06-22 15:00	0.10	3.21	196.4	0	0	983.9	30.4	25.9	13.181
2023-06-22 16:00	0.10	3.04	202.7	0	0	983.2	30.5	24.1	13.182
2023-06-22 17:00	0.00	2.73	206.5	0	0	982.8	30.3	24.8	13.182
2023-06-22 18:00	0.10	2.27	193.7	0	0	982.6	29.6	26.1	13.072
2023-06-22 19:00	1.90	0.9	162.5	0	0	982.5	27.4	34.4	12.559
2023-06-22 20:00	1.40	0.68	157.8	0	0	982.2	23.7	43.4	12.449
2023-06-22 21:00	1.00	0.63	156.2	0	0	982.2	21.3	49.1	12.406
2023-06-22 22:00	0.10	0.66	194.6	0	0	982	19.8	52.6	12.367
2023-06-22 23:00	0.00	0.62	190.8	0	0	981.8	17.7	59.4	12.332
2023-06-23 0:00	0.10	0.51	209	0	0	981.7	16.8	62.3	12.297
2023-06-23 1:00	0.10	0.85	197.1	0	0	981.7	16.1	65.1	12.267
2023-06-23 2:00	0.10	0.88	188	0	0	981.7	15.6	67.7	12.236
2023-06-23 3:00	0.10	0.91	182.2	0	0	981.5	14.3	72.9	12.206
2023-06-23 4:00	0.10	0.87	193.7	0	0	981.6	13.8	75.9	12.187
2023-06-23 5:00	0.00	0.65	194.3	0	0	981.6	14.3	75.4	12.213
2023-06-23 6:00	0.30	1	225.2	0	0	981.7	17	66.7	12.329
2023-06-23 7:00	0.30	1.1	263.4	0	0	981.6	21.1	51.9	12.689
2023-06-23 8:00	0.30	1.91	271.1	0	0	981.4	24.7	42	13.406
2023-06-23 9:00	0.30	1.49	232	0	0	981	26.9	37.8	13.715
2023-06-23 10:00	0.00	2.13	232.9	0	0	980.6	28.5	33.4	13.667
2023-06-23 11:00	0.00	2.6	267.6	0	0	980.1	28.9	31.1	13.144
2023-06-23 12:00	0.00	2.58	244.4	0	0	979.6	29.6	27.3	13.146
2023-06-23 13:00	0.00	2.23	264.6	0	0	979.1	30.4	27.4	13.146
2023-06-23 14:00	0.00	2.27	252.9	0	0	978.8	30.9	26.4	13.146
2023-06-23 15:00	0.00	1.3	243.6	0	0	978.4	30.9	27.6	13.145
2023-06-23 16:00	0.00	1.41	254.3	0	0	977.8	31.5	26.6	13.145
2023-06-23 17:00	0.00	0.76	229.9	0	0	977.2	31.4	27	13.015
2023-06-23 18:00	3.20	1.66	313.6	0	0	977.4	28.7	43.2	12.802
2023-06-23 19:00	0.60	1.72	336.4	0	0	978.1	27.3	53	12.506
2023-06-23 20:00	0.20	1.95	345.4	0	0	979	25.1	60	12.382
2023-06-23 21:00	0.10	1.36	350.3	0	0	979.7	23.5	64.3	12.323
2023-06-23 22:00	0.10	2.09	329.7	2.4	0	980.3	22.2	67.3	12.308
2023-06-23 23:00	0.00	0.99	7.2	2	0	980.7	19.4	82.6	12.274
2023-06-24 0:00	0.20	1.1	56	0	0	980.8	18.7	83.2	12.236
2023-06-24 1:00	0.10	1.09	16.8	0	0	980.5	17.5	85.2	12.194
2023-06-24 2:00	0.20	0.52	54.1	0	0	980.4	15.8	87.5	12.158
2023-06-24 3:00	0.20	0.65	338	0	0	980.7	14.7	89.8	12.145
2023-06-24 4:00	0.30	0.77	339.8	0	0	981.2	14.6	85.8	12.131
2023-06-24 5:00	0.00	0.6	340.1	0	0	981.6	14.5	85.7	12.171
2023-06-24 6:00	0.10	0.85	358	0	0	982	16.5	76.4	12.233
2023-06-24 7:00	0.20	1.38	21.7	0	0	982.2	18.9	61	12.558
2023-06-24 8:00	0.70	2.15	32.7	0	0	981.9	20.9	47.9	13.539
2023-06-24 9:00	0.30	2	31.6	0	0	982.2	22.6	43.5	13.779
2023-06-24 10:00	0.10	1.96	19.5	0	0	982.4	23.5	41.7	13.678
2023-06-24 11:00	0.20	2.12	15.8	0	0	981.9	24.2	39.1	13.181
2023-06-24 12:00	0.50	1.91	5.3	0	0	981.4	24.9	36.4	13.181
2023-06-24 13:00	0.50	1.72	352.4	0	0	981.3	25.3	36.7	13.177
2023-06-24 14:00	0.90	1.72	355.9	0	0	981.2	24.5	40.2	13.178
2023-06-24 15:00	0.60	2.17	359.3	0	0	981.1	24.1	42.4	13.18
2023-06-24 16:00	0.70	1.87	355.8	0	0	981.1	24.3	42.5	13.18
2023-06-24 17:00	0.30	2.07	358.8	0	0	981.1	23.4	42.7	13.148
2023-06-24 18:00	0.20	1.46	2.8	0	0	981.3	22.4	47.1	12.669
2023-06-24 19:00	0.30	0.92	13	0	0	981.5	21.8	49.5	12.438
2023-06-24 20:00	0.10	0.28	356.4	0	0	981.4	20.1	64.7	12.292
2023-06-24 21:00	0.30	0.27	6.7	0	0	981.7	18	74.9	12.218
2023-06-24 22:00	0.30	0.91	29.4	0	0	981.5	18	66	12.169
2023-06-24 23:00	0.20	0.98	36	0	0	981.7	17.7	61.7	12.133
2023-06-25 0:00	0.10	1.43	26.2	0	0	982	17	64	12.08
2023-06-25 1:00	0.10	1.95	41	0	0	981.6	16.5	65.2	12.043
2023-06-25 2:00	0.20	1.5	39.4	0	0	981.4	15.5	68.7	12
2023-06-25 3:00	0.20	1.7	38.5	0	0	981.7	14.6	71.3	11.976
2023-06-25 4:00	0.20	1.42	44.9	0	0	982	13.6	73	11.938
2023-06-25 5:00	0.40	1.41	45.5	0	0	982	13	72.9	11.99

2023-06-25 6:00	0.20			1.28	50.6	0	0	982	13	71.5	12.164
2023-06-25 7:00	0.10			1.69	55.6	0	0	981.7	13.7	69.4	12.756
2023-06-25 8:00	0.20			1.84	69.9	0	0	981.4	15.2	65.3	13.463
2023-06-25 9:00	0.10			1.8	63.5	0	0	980.8	16.4	62	13.563
2023-06-25 10:00	0.40			1.8	73.6	0	0	980.5	17.3	59	13.598
2023-06-25 11:00	0.20			2.03	56.7	0	0	980.1	18.3	55.9	13.489
2023-06-25 12:00	0.30			1.74	48.4	0	0	979.8	18.7	55.6	13.419
2023-06-25 13:00	0.40			2.03	48.4	0	0	979.2	19.3	51.9	13.455
2023-06-25 14:00	0.40			1.37	55.4	0	0	979	19.4	52.6	12.821
2023-06-25 15:00	0.10			1.43	44.9	0	0	978.7	19.5	54.6	13.139
2023-06-25 16:00	0.30			1.17	27.6	0	0	978.2	18.8	60.4	12.421
2023-06-25 17:00	0.20			1.27	20.4	0	0	977.5	18.1	63.4	12.432
2023-06-25 18:00	0.20			1.41	31.8	0	0	977.2	18	63.4	12.307
2023-06-25 19:00	0.60			1.54	43.2	0	0	977	17.9	57.7	12.244
2023-06-25 20:00	0.70			1.61	46.6	0	0	976.8	17.7	50.7	12.188
2023-06-25 21:00	0.50			1.72	42.2	0	0	976.6	17.6	47.8	12.115
2023-06-25 22:00	0.50			1.41	56.5	0	0	976.5	17.3	49.9	12.055
2023-06-25 23:00	0.50			1.51	55.8	0	0	975.7	16.9	51.4	12.003
2023-06-26 0:00	0.70			1.32	60.5	0	0	975.2	16.5	52	11.967
2023-06-26 1:00	0.80			1.4	65.2	0	0	974.5	15.8	53	11.945
2023-06-26 2:00	0.80			1.33	54.8	0	0	974.1	15.4	53.6	11.92
2023-06-26 3:00	0.70			1.15	57.8	0	0	973.9	15	55.9	11.899
2023-06-26 4:00	1.20			1.23	47.9	0	0	973.7	15.2	56.9	11.876
2023-06-26 5:00	1.00			0.75	51.2	0	0	973.8	15.1	60.9	11.86
2023-06-26 6:00	0.90			0.46	66.5	0.8	0	974	14.1	77.8	11.846
2023-06-26 7:00	0.50			0.68	48.4	1	0	973.8	13.5	84.7	11.871
2023-06-26 8:00	0.40			1.14	60.1	4.5	0	973.9	13.8	88.6	11.845
2023-06-26 9:00	0.30			1.34	24.5	6.2	0	973.5	14.2	90.7	12.188
2023-06-26 10:00	0.20			1.08	22.8	0.1	0	973.4	15.4	87.3	12.693
2023-06-26 11:00	0.20			0.84	7.8	0.4	0	973.1	15.4	86	12.311
2023-06-26 12:00	0.40			1.12	4.6	0	0	973.1	15.3	86.3	12.218
2023-06-26 13:00	0.20			0.77	352.2	0	0	973.2	16	87.1	12.296
2023-06-26 14:00	0.30			0.69	357.9	0.2	0	973.1	16.3	89	12.199
2023-06-26 15:00	0.20			0.94	31.2	0.3	0	973.5	16.4	86.9	12.157
2023-06-26 16:00	0.20			1.53	22.1	0.5	0	973.9	15	82.3	12.049
2023-06-26 17:00	0.40			2.05	15.5	0.3	0	973.8	14.3	85.4	12.067
2023-06-26 18:00	0.30			1.29	357	1.3	0	973.7	13.7	84.1	11.97
2023-06-26 19:00	0.40			0.95	335.7	3.2	0	974.1	13.4	88.8	11.921
2023-06-26 20:00	0.30			1.67	336.4	2.6	0	974.3	13.8	89.6	11.899
2023-06-26 21:00	0.10			1.6	339.4	2.8	0	974.8	12.9	87.3	11.862
2023-06-26 22:00	0.30			1.4	342.4	0.7	0	974.8	11.6	85.8	11.837
2023-06-26 23:00	0.10			1.25	346.3	0.6	0	974.8	11	85.7	11.819
2023-06-27 0:00	0.20			1.67	346.4	0.1	0	974.9	10.6	85.8	11.8
2023-06-27 1:00	0.10			1.84	342.7	0.2	0	975	9.8	85.9	11.76
2023-06-27 2:00	0.20			1.62	338.4	0	0	975.2	9.1	86.3	11.739
2023-06-27 3:00	0.10			1.92	334.7	0.4	0	975.3	8.5	86.9	11.702
2023-06-27 4:00	0.10			2.19	332	0.3	0	975.6	7.9	86.9	11.677
2023-06-27 5:00	0.20			2.09	335.6	0.4	0	976.3	7.6	87.2	11.658
2023-06-27 6:00	0.10			2.16	330.6	0.8	0	976.7	7.3	87.2	11.657
2023-06-27 7:00	0.30			2.13	330.2	0.2	0	977.2	7	86.6	11.666
2023-06-27 8:00	0.10			2.23	335.5	0.1	0	977.4	6.6	86.7	11.699
2023-06-27 9:00	0.10			1.93	332.2	0.6	0	977.5	6.3	86.6	11.689
2023-06-27 10:00	0.20			1.72	330.8	0.4	0	977.8	6.7	86.6	11.988
2023-06-27 11:00	0.30			1.85	334.9	0	0	977.8	7.9	84.6	12.565
2023-06-27 12:00	0.40			1.5	338.1	0	0	977.6	10.1	83.6	13.105
2023-06-27 13:00	0.10			1.61	345	0	0	977.5	13.3	77	13.393
2023-06-27 14:00	0.00			2.48	318.4	0	0	977.6	14.6	66.9	13.346
2023-06-27 15:00	0.10			1.94	339.3	0	0	977.6	16.2	58.4	13.574
2023-06-27 16:00	0.50			2.1	340.7	0	0	977.7	17.7	50.2	13.636
2023-06-27 17:00	0.50			1.98	349.3	0	0	978	18.1	45.5	13.152
2023-06-27 18:00	0.30			1.43	343.8	0	0	978.2	16.9	48	12.527
2023-06-27 19:00	0.20			1.08	343.8	0	0	978.6	15.8	50.2	12.306
2023-06-27 20:00	0.10			0.5	327.9	0	0	979.1	13.3	62.6	12.166
2023-06-27 21:00	0.10			0.49	335.2	0	0	979.5	10.6	74.5	12.118
2023-06-27 22:00	0.20			0.51	335.3	0	0	979.8	9.5	74.4	12.074
2023-06-27 23:00	0.20			0.28	306.1	0	0	980.1	7	80.1	12.025
2023-06-28 0:00	0.10			0.28	249.8	0	0	980.5	4.5	81.7	11.966
2023-06-28 1:00	0.10			0.27	286.2	0	0	980.7	3.2	83.4	11.923
2023-06-28 2:00	0.30			0.41	316.5	0	0	980.6	3.8	82.1	11.878
2023-06-28 3:00	0.00			0.38	211.5	0	0	980.7	1.3	81.9	11.83
2023-06-28 4:00	0.30			0.39	225.5	0	0	981.3	0.5	84	11.786
2023-06-28 5:00	0.20			0.59	272.1	0	0	981.7	2.8	81.3	11.81
2023-06-28 6:00	0.10			1.25	293.3	0	0	982.4	6.1	74.2	11.86
2023-06-28 7:00	0.10			1.55	313.6	0	0	982.9	9	63	12.196
2023-06-28 8:00	0.40			1.28	319.9	0	0	983	12.3	50.9	13.275
2023-06-28 9:00	0.70	0.18	0.18	1.72	318.4	0	0	983.1	14.9	39.1	13.579
2023-06-28 10:00	0.40			1.38	337	0	0	983	16.8	33.5	13.628
2023-06-28 11:00	0.30			1.31	343.4	0	0	982.9	18.2	30.3	13.339
2023-06-28 12:00	0.00			1.47	315.6	0	0	982.8	19.5	28.6	13.182
2023-06-28 13:00	0.40			1.58	317.5	0	0	982.5	20.6	27.4	13.181
2023-06-28 14:00	0.30			1.48	325.4	0	0	982.2	21.4	24.7	13.184
2023-06-28 15:00	0.30			1.24	334.7	0	0	981.8	22.4	23.7	13.186
2023-06-28 16:00	0.10			1.24	338.8	0	0	981.5	22.9	23.4	13.189
2023-06-28 17:00	1.90			0.86	323.1	0	0	981.4	23.1	24.1	13.112
2023-06-28 18:00	2.10			0.66	338.7	0	0	981.5	22.2	29.4	12.935
2023-06-28 19:00	3.90			0.3	341	0	0	981.5	21.4	41.5	12.375
2023-06-28 20:00	0.90			0.47	50.7	0	0	981.8	16.5	49.1	12.267
2023-06-28 21:00	0.30			0.34	58.4	0	0	982.3	11.6	68.7	12.211
2023-06-28 22:00	0.10			0.44	100.7	0	0	982.4	8.9	79.1	12.168
2023-06-28 23:00	0.10			0.36	122.3	0	0	982.5	7.1	81.6	12.138

2023-06-29 0:00	0.20	0.25	184.8	0	0	982.6	6.3	81.5	12.106
2023-06-29 1:00	0.30	0.34	132.6	0	0	982.5	5.3	83.7	12.071
2023-06-29 2:00	0.20	0.35	145.8	0	0	982.5	4.1	84.8	12.04
2023-06-29 3:00	0.20	0.31	121.2	0	0	982.7	3.6	85.4	12.01
2023-06-29 4:00	0.20	0.3	107.4	0	0	983	3.3	85.1	11.988
2023-06-29 5:00	0.20	0.39	74.9	0	0	983.5	6.3	79.9	12.066
2023-06-29 6:00	0.10	0.43	119.2	0	0	983.6	10.8	69.5	12.142
2023-06-29 7:00	0.30	1.15	115.5	0	0	983.6	15.9	55.6	12.521
2023-06-29 8:00	0.50	1.57	139.3	0	0	983.6	19.7	42.5	13.289
2023-06-29 9:00	0.10	2.26	151.3	0	0	983.3	22.1	32.8	13.682
2023-06-29 10:00	0.10	2.47	152.1	0	0	983	23.2	29	13.665
2023-06-29 11:00	0.60	2.33	151.1	0	0	982.5	24	28.4	13.215
2023-06-29 12:00	1.30	1.74	147.6	0	0	982.3	23.7	31.5	13.176
2023-06-29 13:00	1.60	1.15	145.9	0	0	981.9	23.1	35.7	13.106
2023-06-29 14:00	0.30	1.73	134.2	0	0	981.4	24.3	31.9	13.17
2023-06-29 15:00	1.30	1.53	147.3	0	0	981	23.9	34.7	13.12
2023-06-29 16:00	1.40	0.73	127.4	0	0	980.8	22.8	42	12.957
2023-06-29 17:00	1.10	0.26	35.6	0	0	980.4	22.6	60.6	12.895
2023-06-29 18:00	0.50	0.36	57.4	0	0	980.1	22.3	53.9	12.53
2023-06-29 19:00	0.30	0.48	72	0	0	980	20.9	52.4	12.315
2023-06-29 20:00	0.30	0.43	96.4	0	0	979.9	19.9	54.6	12.272
2023-06-29 21:00	0.20	0.75	114.6	0	0	980	18.8	55	12.246
2023-06-29 22:00	0.30	1.07	142.4	0	0	979.8	18.4	57	12.219
2023-06-29 23:00	0.60	1.49	145.1	0	0	979.6	18.2	54	12.195
2023-06-30 0:00	0.50	1.16	152.6	0	0	979.7	17.7	48.5	12.168
2023-06-30 1:00	0.30	1.42	149.9	0	0	979.6	17.2	48.6	12.145
2023-06-30 2:00	0.40	1.74	138.1	0	0	979.3	17.2	48.4	12.116
2023-06-30 3:00	0.30	1.85	147.9	0	0	979	16.9	56.3	12.093
2023-06-30 4:00	0.20	1.4	152.4	0	0	978.9	16.2	62.1	12.081
2023-06-30 5:00	0.40	1.42	139.9	0	0	979	16.1	65.9	12.099
2023-06-30 6:00	0.30	1.55	144	0	0	979.4	16.3	67.9	12.159
2023-06-30 7:00	0.00	1.81	157	0	0	979.7	17.1	65.6	12.295
2023-06-30 8:00	0.10	1.94	161.2	0	0	979.7	17.7	64.6	12.79
2023-06-30 9:00	0.20	1.97	132.4	0	0	979.1	19.7	62.2	13.676
2023-06-30 10:00	0.30	2.63	135.1	0	0	978.7	21.1	60.8	13.742
2023-06-30 11:00	0.30	2.2	145.3	0	0	978.4	22.3	59.4	13.261
2023-06-30 12:00	0.30	1.98	145.8	0	0	978.1	23.2	57	13.205
2023-06-30 13:00	0.30	2.14	147.8	0	0	977.8	23.9	56.4	13.208
2023-06-30 14:00	0.40	2.41	150	0.7	0	977.3	24	55.6	12.879
2023-06-30 15:00	0.20	1.58	282.7	18.3	0	977.5	18.4	82.8	12.426
2023-06-30 16:00	0.20	0.85	187.4	0.4	0	977.4	19.6	85.2	12.73
2023-06-30 17:00	0.10	1.07	182.3	1.3	0	977.5	19.7	87.5	12.331
2023-06-30 18:00	0.30	1.02	122.8	0.3	0	977.4	17.6	86.9	12.331
2023-06-30 19:00	0.10	0.46	97.2	0	0	977.1	16.9	88.9	12.232
2023-06-30 20:00	0.10	0.81	185	0	0	977.2	16.7	90.2	12.161
2023-06-30 21:00	0.20	0.83	131.9	0	0	977.5	15.7	90.1	12.118
2023-06-30 22:00	0.20	0.73	131.6	0	0	977.4	15	91.6	12.087
2023-06-30 23:00	0.40	0.91	187.2	0	0	977.1	15.4	91.9	12.058
2023-07-01 0:00	0.20	0.93	190.8	0	0	977.2	15.7	92.3	12.032
2023-07-01 1:00	0.10	0.99	210.9	0	0	977	15.9	92.5	12.021
2023-07-01 2:00	0.10	0.89	211.2	0	0	977	16	92.5	12.003
2023-07-01 3:00	0.10	1.41	259.3	0	0	977.1	16.2	92.3	11.987
2023-07-01 4:00	0.20	1.4	258.8	0	0	977.3	16	92.2	11.978
2023-07-01 5:00	0.10	1.23	231.7	0	0	977.6	15.9	92.2	11.99
2023-07-01 6:00	0.10	1.38	224.1	0	0	977.7	16.1	92.3	12.089
2023-07-01 7:00	0.10	1.72	241.3	0	0	977.8	16.4	91.7	12.216
2023-07-01 8:00	0.10	1.5	250.4	0	0	977.9	16.8	90.2	12.303
2023-07-01 9:00	0.20	1.6	238.8	0	0	977.9	17.5	87.6	12.815
2023-07-01 10:00	0.20	1.57	239.7	0	0	978.1	18.6	82.5	13.345
2023-07-01 11:00	0.10	1.79	213.2	0	0	978.2	19.9	76.5	13.685
2023-07-01 12:00	0.20	1.82	216.6	0	0	977.7	21.3	70.3	13.799
2023-07-01 13:00	0.50	1.75	234.2	0	0	977.3	22.6	62.2	13.223
2023-07-01 14:00	0.80	1.21	257.1	0	0	977	22.8	61.6	13.193
2023-07-01 15:00	0.60	1.24	316.8	0.3	0	976.8	23.1	64.1	13.199
2023-07-01 16:00	0.50	1.51	311.1	0	0	976.3	24.3	54.9	13.201
2023-07-01 17:00	0.30	1.81	15	0	0	976.4	23.3	61.3	13.056
2023-07-01 18:00	0.30	1.34	15.9	0	0	976.5	22.5	64.3	12.812
2023-07-01 19:00	0.20	0.65	16.6	0	0	976.6	20.5	71.8	12.277
2023-07-01 20:00	0.20	0.34	54.6	0	0	976.9	18.1	83.7	12.205
2023-07-01 21:00	0.30	0.38	193.3	0	0	977.4	16.2	88.9	12.161
2023-07-01 22:00	0.20	0.33	337.7	0	0	977.4	15.1	90.7	12.113
2023-07-01 23:00	0.00	0.36	231.6	0	0	977.4	14.1	89.5	12.059
2023-07-02 0:00	0.30	0.27	57.2	0	0	977.5	13.1	89.8	12.028
2023-07-02 1:00	0.20	0.57	261	0	0	977.5	12.7	90	11.996
2023-07-02 2:00	0.20	0.45	89.3	0	0	977.2	11.9	89.4	11.961
2023-07-02 3:00	0.20	0.27	61.6	0	0	977.1	11.4	89.5	11.928
2023-07-02 4:00	0.30	0.3	12.5	0	0	977.1	11.1	89.3	11.907
2023-07-02 5:00	0.10	0.45	239.6	0	0	977.6	12	89.3	11.962
2023-07-02 6:00	0.30	0.47	329.8	0	0	978.1	14.7	89.6	12.05
2023-07-02 7:00	0.00	1.12	340.8	0	0	978.4	18.9	79.2	12.51
2023-07-02 8:00	0.40	1.1	356	0	0	978.7	21.3	66	13.308
2023-07-02 9:00	1.00	1.07	3.8	0	0	978.7	22.6	57.9	13.654
2023-07-02 10:00	0.70	1.05	343.8	0	0	978.5	23.9	54.2	13.757
2023-07-02 11:00	0.40	1.3	4.4	0	0	978.3	24.8	51.2	13.263
2023-07-02 12:00	0.40	1.24	15	0	0	978.1	25.7	47	13.172
2023-07-02 13:00	0.30	1.57	3.3	0	0	977.8	26	47	13.152
2023-07-02 14:00	1.30	1.41	31.3	0	0	977.6	26.8	44.4	13.147
2023-07-02 15:00	0.00	1.11	327	0	0	977.3	27.6	40.7	13.143
2023-07-02 16:00	0.60	1.26	75	0	0	977	27.7	39.4	13.141
2023-07-02 17:00	4.30	0.64	18.8	0	0	977	27.2	46.1	12.967

2023-07-02 18:00	1.80			0.69	51.7	0	0	977.2	27	43.9	12.857
2023-07-02 19:00	2.20			0.31	9.8	0	0	977.3	25.8	57	12.347
2023-07-02 20:00	0.60			0.34	62.6	0	0	977.4	21.7	74.5	12.223
2023-07-02 21:00	0.20			0.2	87.3	0	0	977.9	18.9	83.5	12.176
2023-07-02 22:00	0.00			0.29	251.5	0	0	978.1	17.2	86	12.128
2023-07-02 23:00	0.20			0.3	37.7	0	0	978.2	16.3	89.1	12.084
2023-07-03 0:00	0.10			0.27	98.9	0	0	978.2	15.2	89.4	12.053
2023-07-03 1:00	0.10			0.37	232.9	0	0	978.2	14.3	89	12.024
2023-07-03 2:00	0.10			0.4	99.4	0	0	978.2	13.5	89.2	11.994
2023-07-03 3:00	0.10			0.26	231.6	0	0	978.5	12.8	89.2	11.968
2023-07-03 4:00	0.20			0.36	166.9	0	0	978.6	12.6	89.3	11.923
2023-07-03 5:00	0.30			0.27	70.2	0	0	979	13.7	88.9	11.975
2023-07-03 6:00	0.10			0.22	184.8	0	0	979.5	17.6	81	12.092
2023-07-03 7:00	0.40			0.38	104.3	0	0	979.5	21.7	67.4	12.464
2023-07-03 8:00	0.60			0.41	273.3	0	0	979.4	25.4	55.3	13.137
2023-07-03 9:00	0.10			0.87	30.4	0	0	979.3	27.6	42.9	13.65
2023-07-03 10:00	0.00			1.25	149.9	0	0	979.3	28	40.6	13.732
2023-07-03 11:00	0.00			1.04	36.6	0	0	979	28.7	37.2	13.295
2023-07-03 12:00	0.30			1.37	144.4	0	0	978.7	28.9	38.5	13.162
2023-07-03 13:00	0.10			1.47	144.1	0	0	978.4	29.6	36.5	13.158
2023-07-03 14:00	0.00			1.37	131.8	0	0	978.3	29.9	35.2	13.152
2023-07-03 15:00	0.00			1.22	132.5	0	0	978.1	29.8	36.3	13.15
2023-07-03 16:00	0.50			1.21	138.3	0	0	977.8	30.5	33.3	13.155
2023-07-03 17:00	0.10			0.88	37.3	0	0	977.5	30.7	34.3	13.152
2023-07-03 18:00	0.40			0.79	130.8	0	0	977.6	29.4	39.4	12.964
2023-07-03 19:00	1.50			0.4	120.4	0	0	977.9	27.4	51.8	12.396
2023-07-03 20:00	0.60			0.31	107.6	0	0	978.4	23.7	65	12.258
2023-07-03 21:00	0.20			0.63	106.4	0	0	978.7	21.6	70.8	12.197
2023-07-03 22:00	0.20			0.4	89.9	0	0	978.6	19.3	79.1	12.143
2023-07-03 23:00	0.20			0.63	145.3	0	0	978.6	19.1	76.3	12.092
2023-07-04 0:00	0.10			0.51	170.6	0	0	978.7	18.5	77.1	12.053
2023-07-04 1:00	0.10			0.5	243.7	0	0	978.9	16.9	83.2	12.027
2023-07-04 2:00	0.10			0.55	216.9	0	0	979.3	17.1	82.4	11.998
2023-07-04 3:00	0.20			0.3	199.6	0	0	979.5	15.6	87.8	11.967
2023-07-04 4:00	0.10			0.35	196.7	0	0	979.9	15.2	89.3	11.94
2023-07-04 5:00	0.30			0.31	119	0	0	980.1	15.7	88.5	11.959
2023-07-04 6:00	0.40			0.71	202.1	0	0	980.2	19.1	76.9	12.056
2023-07-04 7:00	0.40			1.3	251.4	0	0	980.5	22	62.1	12.424
2023-07-04 8:00	0.30			1.58	218.1	0	0	980.6	24	55.2	13.111
2023-07-04 9:00	0.10			2.6	228.8	0	0	980.5	25.6	48.3	13.625
2023-07-04 10:00	0.20			2.86	224.4	0	0	980.6	27	41.3	13.807
2023-07-04 11:00	0.10			2.73	218.9	0	0	980.5	28.1	39	13.276
2023-07-04 12:00	0.10			2.94	227.6	0	0	980.2	28.9	36.6	13.198
2023-07-04 13:00	0.20			2.52	237.6	0	0	979.9	29.5	36.1	13.192
2023-07-04 14:00	0.20			2.06	239.4	0	0	979.4	30.2	36.5	13.189
2023-07-04 15:00	0.00			2.07	241.9	0	0	979.1	30.8	37.6	13.188
2023-07-04 16:00	0.00			1.66	225.4	0	0	978.8	30.6	38.1	13.15
2023-07-04 17:00	0.00			1.81	251.6	0	0	978.6	30.8	38.4	13.164
2023-07-04 18:00	0.00			1.19	219.8	0	0	978.5	30.5	39.8	12.961
2023-07-04 19:00	0.30			0.79	160.4	0	0	978.6	27.9	50	12.374
2023-07-04 20:00	0.60			0.45	168.9	0	0	978.9	25.3	59.8	12.26
2023-07-04 21:00	0.30			0.39	174.5	0	0	979.1	22.8	69.3	12.201
2023-07-04 22:00	0.30			0.58	165.8	0	0	979	22.1	71.4	12.146
2023-07-04 23:00	0.20			0.56	175.5	0	0	979	21.7	72.8	12.101
2023-07-05 0:00	0.10			0.75	178.1	0	0	979.3	21.2	74	12.066
2023-07-05 1:00	0.10			0.37	138.5	0	0	979.2	19.4	82	12.041
2023-07-05 2:00	0.20			1	169.7	0	0	979.2	19.3	82	12.015
2023-07-05 3:00	0.10			0.88	184.7	0	0	979	18.5	84.7	11.986
2023-07-05 4:00	0.10			0.91	167.3	0	0	979.3	17.7	87	11.956
2023-07-05 5:00	0.20			1.17	172.5	0	0	979.2	18	85.4	11.974
2023-07-05 6:00	0.10			1.59	190.2	0	0	979.1	20.1	78.9	12.145
2023-07-05 7:00	0.10			2.11	213.9	0	0	979.2	22.2	69.9	12.622
2023-07-05 8:00	0.40			2.05	225.4	0	0	979.3	23.9	59.5	13.335
2023-07-05 9:00	0.60			1.79	211.2	0	0	978.9	25.9	49.5	13.62
2023-07-05 10:00	0.10			2.32	181.1	0	0	978.2	27.5	43.5	13.627
2023-07-05 11:00	0.00			2.88	203	0	0	978	28.9	40	13.151
2023-07-05 12:00	0.00			2.66	216.8	0	0	977.5	29.2	43.1	13.161
2023-07-05 13:00	0.80			2.94	286.3	2.5	0	978	23.9	60.1	12.61
2023-07-05 14:00	0.10			1.27	128	2.6	0	978.9	19.9	86.5	12.796
2023-07-05 15:00	0.10			1.06	215.7	0	0	978.7	21.5	81.9	13.189
2023-07-05 16:00	0.10			1.24	231.7	0	0	978.2	24	70.4	13.112
2023-07-05 17:00	0.30			0.91	232.4	0.3	0	978.3	23.4	75.5	12.437
2023-07-05 18:00	0.10			1.12	222.3	4.6	0	978.5	20.9	87.9	12.294
2023-07-05 19:00	0.20			1.02	271	1.7	0	978.9	20.2	89.8	12.217
2023-07-05 20:00	0.10			0.43	175.8	0	0	978.9	19.9	91.2	12.165
2023-07-05 21:00	0.10			0.52	186	0	0	979.1	19.1	91.6	12.128
2023-07-05 22:00	0.10			0.79	259.8	0	0	979.6	18.9	91.9	12.094
2023-07-05 23:00	0.30			0.84	253.3	0	0	979.7	18.6	91	12.066
2023-07-06 0:00	0.20			0.71	263.3	0	0	979.9	18	91.3	12.035
2023-07-06 1:00	0.20			0.85	316.7	0	0	979.9	17.9	91.4	12.006
2023-07-06 2:00	0.10			0.95	314.4	0.3	0	980.2	17.7	91.3	11.972
2023-07-06 3:00	0.30			0.96	342.4	0	0	979.9	17.5	91.9	11.947
2023-07-06 4:00	0.00			1.24	329.8	0	0	980.3	16.9	91.4	11.921
2023-07-06 5:00	0.00			1.07	335.4	0	0	980.5	16.5	91.3	11.911
2023-07-06 6:00	0.20			1.19	335.6	0	0	980.5	16	91.2	11.917
2023-07-06 7:00	0.10			1.31	339.6	0	0	980.9	15.5	90.7	11.982
2023-07-06 8:00	0.10			1.32	354.4	0	0	981.1	15.4	88.7	12.039
2023-07-06 9:00	0.20			1.34	344.6	0	0	981	15.5	88.8	12.081
2023-07-06 10:00	0.20			1.33	349.1	0	0	981.2	15.3	88.8	12.402
2023-07-06 11:00	0.40	29.07	73.71	1.21	343.7	0	0	981.4	15.5	88.2	12.445

2023-07-06 12:00	0.00	25.515	31.815	1.4	346	0	0	981.4	15.4	88.7	12.69
2023-07-06 13:00	0.10	23.625	29.25	1.43	4.5	0	0	981.2	15.8	87.3	12.755
2023-07-06 14:00	0.10	34.785	41.94	2.02	21.7	0	0	980.9	16.3	83	12.922
2023-07-06 15:00	0.10	51.57	60.57	2.1	21.6	0	0	980.6	17.4	76.4	13.042
2023-07-06 16:00	0.10	42.39	51.435	1.52	38.7	0	0	980.6	17.6	72.4	12.841
2023-07-06 17:00	0.10	35.235	43.92	1.61	31.4	0	0	980.5	18.2	68.4	12.969
2023-07-06 18:00	0.20	28.98	35.82	1.19	33.5	0	0	980.4	17.7	66.6	12.645
2023-07-06 19:00	0.30	28.89	35.595	0.89	58.8	0	0	980	16.8	72.3	12.416
2023-07-06 20:00	0.20	31.095	48.33	0.32	292.9	0	0	979.8	15.5	84.8	12.308
2023-07-06 21:00	0.00	30.96	58.95	0.34	310.2	0	0	979.8	13.7	88.3	12.261
2023-07-06 22:00	0.10	28.62	60.255	0.29	157.8	0	0	979.7	12.4	88.6	12.206
2023-07-06 23:00	0.10	27.135	59.265	0.34	210.1	0	0	979.7	11.8	88.9	12.178
2023-07-07 0:00	0.30	26.595	60.12	0.32	329.3	0	0	979.6	11	88.6	12.15
2023-07-07 1:00	0.10	25.065	53.28	0.43	192.8	0	0	979.5	11	89.2	12.125
2023-07-07 2:00	0.20	25.65	43.38	0.43	281.4	0	0	979.8	11.6	89.3	12.105
2023-07-07 3:00	0.10	25.02	40.23	0.43	105.7	0	0	979.9	11.8	89.8	12.083
2023-07-07 4:00	0.10	24.03	40.905	0.57	252.1	0	0	979.8	11.6	88.9	12.059
2023-07-07 5:00	0.10	23.085	36.585	0.43	115.6	0	0	979.9	11.4	89	12.098
2023-07-07 6:00	0.10	25.83	33.66	0.72	231.5	0	0	980.3	13.4	87.5	12.359
2023-07-07 7:00	0.20	29.88	36.585	0.93	250.2	0	0	980.3	16.5	75.9	12.64
2023-07-07 8:00	0.20	25.515	29.7	1.21	256	0	0	980.4	18.2	67.8	13.038
2023-07-07 9:00	0.40	20.61	24.12	1.63	244.3	0	0	980.2	19.4	60.3	13.476
2023-07-07 10:00	0.60	19.62	22.41	1.56	259.7	0	0	980.1	19.9	54.6	13.423
2023-07-07 11:00	0.80	16.065	19.125	1.77	220	0	0	979.7	21.1	46.9	13.641
2023-07-07 12:00	0.50	15.525	18.135	1.95	252.7	0	0	979.4	21.6	44.8	13.237
2023-07-07 13:00	0.30	13.455	15.93	1.87	220.4	0	0	979.3	22.5	42	13.234
2023-07-07 14:00	0.30	12.105	14.625	2.45	218.2	0	0	979.2	23	39	13.244
2023-07-07 15:00	0.20	10.215	12.285	2.16	220.8	0	0	978.7	23.3	37.3	13.249
2023-07-07 16:00	0.50	7.605	9.765	2.17	205.1	0	0	978.5	23.5	36.3	13.213
2023-07-07 17:00	0.40	7.02	9.99	1.56	203.9	0	0	978.1	23.3	37.9	13.226
2023-07-07 18:00	0.20	6.66	8.325	1.54	221.3	0	0	977.8	23.4	36.4	13.096
2023-07-07 19:00	0.70	7.11	9.315	0.99	191	0	0	977.8	22	42.2	12.605
2023-07-07 20:00	0.20	9.72	16.245	0.49	152.1	0	0	978.3	18	60.7	12.47
2023-07-07 21:00	0.20	10.62	18.495	0.55	161	0	0	978.4	15.5	69	12.424
2023-07-07 22:00	0.20	10.845	19.125	0.47	204.9	0	0	978.5	14.2	72.9	12.385
2023-07-07 23:00	0.10	10.755	20.7	0.48	175.9	0	0	978.4	12.8	77.8	12.35
2023-07-08 0:00	0.10	8.505	13.41	0.72	205	0	0	978.4	13.9	67.3	12.318
2023-07-08 1:00	0.20	9.675	20.34	0.48	173.2	0	0	978.5	11.8	78.4	12.286
2023-07-08 2:00	0.20	8.82	16.515	0.88	174.8	0	0	978.6	11.6	76.1	12.26
2023-07-08 3:00	0.20	9.675	18.945	0.49	165.4	0	0	978.4	10.7	79.7	12.234
2023-07-08 4:00	0.10	9.72	18.36	0.45	203.3	0	0	978.5	10.4	80.4	12.219
2023-07-08 5:00	0.20	8.82	14.67	0.8	185.8	0	0	978.7	11	80.5	12.304
2023-07-08 6:00	0.10	8.055	12.195	0.86	205.5	0	0	978.9	12.8	76.6	12.692
2023-07-08 7:00	0.20	7.155	10.395	1.18	236.9	0	0	979.1	14.9	66.1	13.013
2023-07-08 8:00	0.10	6.84	9.99	1.1	283.2	0	0	979.1	16.7	60.9	13.476
2023-07-08 9:00	0.40	6.885	9.945	0.63	136.4	0	0	979	18.3	56.5	13.752
2023-07-08 10:00	0.40	7.155	10.215	0.72	210.7	0	0	979.1	18.8	57.1	13.582
2023-07-08 11:00	0.30	7.785	11.115	1.64	247.9	0	0	979	19.9	55.8	13.163
2023-07-08 12:00	0.30	9.54	12.6	2.1	302.1	0	0	978.8	20.1	57.2	13.195
2023-07-08 13:00	0.30	10.26	13.14	1.7	316.2	0.1	0	978.6	19.8	64.2	13.184
2023-07-08 14:00	0.30	18.72	21.33	1.86	314.8	0	0	978.7	19.7	65.6	13.137
2023-07-08 15:00	0.20	21.555	23.715	1.29	328.5	0	0	978.5	19.8	64.4	13.121
2023-07-08 16:00	0.20	18.27	19.89	1.65	305.4	0	0	978.4	20.6	58.3	13.152
2023-07-08 17:00	0.30	17.46	18.9	1.37	328.6	0	0	978.2	20.3	60.3	13.2
2023-07-08 18:00	0.20	16.695	19.17	1.31	338.7	0	0	978.1	19.7	61.2	13.101
2023-07-08 19:00	0.20	17.505	23.175	1.04	334.7	0	0	978.1	18.3	66.6	12.653
2023-07-08 20:00	0.00	18.72	20.34	0.55	353.7	0	0	978	16.6	72.5	12.5
2023-07-08 21:00	0.20	17.46	19.71	0.57	340.1	0	0	978.2	15.2	77.6	12.459
2023-07-08 22:00	0.10	17.145	19.755	0.54	345	0	0	978.2	14.9	78.9	12.422
2023-07-08 23:00	0.20	16.47	18.945	0.58	2.2	0	0	978.1	14.2	80.6	12.391
2023-07-09 0:00	0.10	21.15	24.21	0.66	20.6	0	0	978.3	13.4	82.3	12.358
2023-07-09 1:00	0.00	22.95	25.92	0.54	21.5	0	0	978.4	13.1	83	12.332
2023-07-09 2:00	0.20	22.23	28.26	0.47	337.7	0	0	978.2	12.3	85.2	12.295
2023-07-09 3:00	0.10	21.825	31.185	0.32	313.9	0	0	978.2	11.3	87.5	12.271
2023-07-09 4:00	0.40	21.645	27.315	0.53	56	0	0	978	10.8	87.6	12.244
2023-07-09 5:00	0.20	20.835	26.955	0.45	46.2	0	0	978	10.4	88.4	12.294
2023-07-09 6:00	0.20	18.315	21.51	0.62	82.1	0	0	977.9	13	83.5	12.468
2023-07-09 7:00	0.10	12.915	14.715	0.84	111.3	0	0	978	15.7	72.1	12.881
2023-07-09 8:00	0.20	14.76	16.155	1.15	139	0	0	977.8	18.1	61.9	13.593
2023-07-09 9:00	0.60	16.785	18.18	1.16	169.7	0	0	977.5	19.3	58.7	13.731
2023-07-09 10:00	0.40	16.74	18.54	1.2	104.3	0	0	976.9	20.3	55.4	13.478
2023-07-09 11:00	0.40	17.865	19.575	0.87	284.2	0	0	976.5	21.3	50.9	13.205
2023-07-09 12:00	0.40	20.34	22.14	1.53	199.8	0	0	975.9	22.3	45.8	13.192
2023-07-09 13:00	0.40	20.115	24.435	2.35	136.7	0.7	0	976.1	18.9	71.1	13.227
2023-07-09 14:00	0.10	13.815	16.83	1.44	129.4	0.3	0	975.5	19.7	67.7	13.137
2023-07-09 15:00	0.20	15.435	26.01	1.02	153.1	1.8	0	975.3	17.9	76.7	13.21
2023-07-09 16:00	0.20	16.83	21.6	0.92	111.2	0	0	974.9	20.3	68.8	13.213
2023-07-09 17:00	0.50	18	22.41	0.97	266	0	0	974.5	21.4	58.9	13.137
2023-07-09 18:00	0.20	20.385	24.03	0.63	245.9	0	0	974.6	20.9	59	12.964
2023-07-09 19:00	0.20	27.81	32.4	1.32	172.5	0	0	974.9	19.2	61.6	12.711
2023-07-09 20:00	0.20	34.38	44.235	0.88	168.1	0	0	974.8	16.3	71.6	12.499
2023-07-09 21:00	0.10	35.73	45	0.92	181.6	0	0	975.2	14.6	74.5	12.452
2023-07-09 22:00	0.20	33.75	43.83	0.68	179.9	0	0	975.3	13.5	76.5	12.407
2023-07-09 23:00	0.20	30.465	38.475	0.86	168.8	0	0	975	12.5	79	12.362
2023-07-10 0:00	0.30	24.525	30.285	1.62	168.9	0	0	974.2	12.5	75.2	12.304
2023-07-10 1:00	0.30	21.915	27.765	1.9	156.8	0	0	973.5	13.5	67	12.288
2023-07-10 2:00	0.10	22.455	27.63	2.24	164.6	0	0	973.2	13.6	66.8	12.261
2023-07-10 3:00	0.10	22.275	27.45	2.46	161.6	0	0	972.9	13.5	65.9	12.242
2023-07-10 4:00	0.00	21.69	27.585	2.74	165.7	0	0	972.6	13.7	65.9	12.23
2023-07-10 5:00	0.30	21.015	26.325	2.66	171.3	0	0	972.6	13.7	68.3	12.232

2023-07-10 6:00	0.20	19.17	23.94	2.5	165.9	0	0	972.1	14.3	68.7	12.498
2023-07-10 7:00	0.20	18.27	23.31	2.52	177.3	0	0	972.1	15.5	66.6	12.629
2023-07-10 8:00	0.20	18.27	23.355	2.68	168.7	0	0	971.9	16.2	68.2	13.096
2023-07-10 9:00	0.10	19.89	25.515	3.42	174.5	0	0	971.2	18.5	64.6	13.601
2023-07-10 10:00	0.20	23.31	28.89	3.16	171.8	0	0	971.1	20.3	62.7	13.463
2023-07-10 11:00	0.20	26.865	34.11	3.53	165	0	0	970.6	22.2	60.4	13.591
2023-07-10 12:00	0.40	34.425	42.525	3.59	195.4	0	0	970.7	23.2	56.3	13.013
2023-07-10 13:00	0.20	35.73	43.92	3.63	240.4	3	0	971.1	22.2	63.9	13.01
2023-07-10 14:00	0.30	20.25	28.575	2.07	324.4	0.1	0	972.3	17.4	84.5	13.173
2023-07-10 15:00	0.10	8.91	15.345	1.3	339.5	0	0	973.2	16.8	82.1	13.199
2023-07-10 16:00	0.10	10.215	15.93	1.1	333.8	0	0	973.8	17.8	74	13.167
2023-07-10 17:00	0.10	12.375	17.055	1.08	312.7	0	0	974.1	18.9	69.5	13.107
2023-07-10 18:00	0.10	16.065	20.25	1.16	280.6	0	0	974	19.6	68	13.093
2023-07-10 19:00	0.40	17.37	21.195	0.67	48	0	0	973.7	18.8	72.8	12.684
2023-07-10 20:00	0.40	15.93	21.285	0.49	67.4	0	0	973.2	16.2	84	12.508
2023-07-10 21:00	0.50	16.38	22.545	0.6	72.4	0	0	973.2	14.9	87.9	12.462
2023-07-10 22:00	0.20	17.73	23.985	0.69	99.3	0.5	0	972.9	15	89	12.423
2023-07-10 23:00	0.20	27.135	34.92	1.62	148.8	2.8	0	972.4	15.8	90.5	12.394
2023-07-11 0:00	0.20	53.64	61.155	2.06	196.8	1.8	0	972.3	16.1	88.4	12.367
2023-07-11 1:00	0.10	63.225	73.755	2.07	197.2	0	0	972.3	15.1	87.6	12.343
2023-07-11 2:00	0.10	54.09	65.07	1.79	209.7	0	0	972.8	14	87.2	12.303
2023-07-11 3:00	0.20	42.75	52.02	1.64	222.2	0	0	973.5	13	86.1	12.266
2023-07-11 4:00	0.30	36.45	46.08	1.07	231.6	0	0	973.6	11.9	86.3	12.243
2023-07-11 5:00	0.10	27.585	34.74	1.4	235.7	0	0	974	11.9	84.1	12.33
2023-07-11 6:00	0.20	18.495	23.94	1.94	252.9	0	0	974.4	12.9	78.7	12.472
2023-07-11 7:00	0.20	11.43	16.38	2.11	260.3	0	0	974.5	13.8	72.8	12.971
2023-07-11 8:00	0.10	9.225	14.22	1.94	252.3	0	0	974.4	14.9	66.9	13.616
2023-07-11 9:00	0.20	6.345	11.115	1.69	232.8	0	0	974.4	16.4	55.4	13.772
2023-07-11 10:00	0.50	4.77	9.27	2.33	229.6	0	0	974.6	17.7	48.8	13.45
2023-07-11 11:00	0.20	5.04	9.135	2.05	239.9	0	0	974.5	18.5	47.5	13.119
2023-07-11 12:00	0.40	5.4	9.225	2.69	232.3	0	0	974.5	18.9	47.8	13.115
2023-07-11 13:00	0.30	5.805	9.135	2.49	243	0	0	974.8	18.5	49.9	13.136
2023-07-11 14:00	0.20	6.75	10.125	2.8	253.8	0	0	975	18.7	49.5	13.121
2023-07-11 15:00	0.20	7.65	11.16	2.67	251.3	0	0	975.3	18.6	50.7	13.174
2023-07-11 16:00	0.40	3.69	6.075	2.61	271.6	0	0	975.4	18.9	47.2	13.185
2023-07-11 17:00	0.30	3.195	6.57	2.84	249.9	0	0	975.6	19.3	46.1	13.186
2023-07-11 18:00	0.30	2.79	4.95	1.46	260.5	0	0	975.9	18.3	51	13.043
2023-07-11 19:00	0.30	4.005	8.955	0.56	256.7	0	0	976.4	16.5	61	12.605
2023-07-11 20:00	0.20	3.915	8.775	0.96	262.3	0	0	977.2	15	66.4	12.494
2023-07-11 21:00	0.00	2.52	6.165	1.59	321.9	0	0	978.3	14.5	62.9	12.439
2023-07-11 22:00	0.20	3.465	9.585	0.87	299.3	0	0	978.7	12.8	67.3	12.383
2023-07-11 23:00	0.20	7.29	26.685	0.5	217.5	0	0	979.3	9.8	79	12.338
2023-07-12 0:00	0.30	5.94	20.475	0.38	243.2	0	0	979.5	8.9	83.6	12.307
2023-07-12 1:00	0.20	4.815	13.545	0.49	256.1	0	0	979.3	10.3	77.3	12.279
2023-07-12 2:00	0.10	5.76	17.91	0.54	209.9	0	0	979.4	8.3	82.3	12.244
2023-07-12 3:00	0.10	4.68	12.195	0.71	178.1	0	0	979.5	8.7	82.2	12.211
2023-07-12 4:00	0.00	4.905	12.15	0.89	207.7	0	0	980.3	7.6	83.4	12.18
2023-07-12 5:00	0.20	5.085	11.925	0.8	200.6	0	0	981	7.9	83.2	12.213
2023-07-12 6:00	0.10	4.23	7.83	0.97	249.9	0	0	981.5	10.6	78	12.404
2023-07-12 7:00	0.00	5.49	7.47	1.41	286.3	0	0	981.8	14	66.7	12.777
2023-07-12 8:00	0.20	6.03	7.695	1.5	285.2	0	0	981.6	15.5	56	13.585
2023-07-12 9:00	0.70	5.94	7.2	1.45	284	0	0	981.1	16.7	49.6	13.727
2023-07-12 10:00	0.50	5.76	7.02	1.53	300.9	0	0	981.1	17.8	46.6	13.452
2023-07-12 11:00	0.30	5.445	6.615	1.7	266.7	0	0	981.4	18.5	43.5	13.219
2023-07-12 12:00	0.40	5.04	6.435	1.3	285	0	0	981.2	19.3	40.1	13.225
2023-07-12 13:00	0.30	4.455	5.805	1.61	241	0	0	980.8	20.1	37.3	13.232
2023-07-12 14:00	0.40	4.815	6.66	1.61	248.9	0	0	980.4	21.2	35.3	13.234
2023-07-12 15:00	0.10	5.13	6.435	1.25	168.8	0	0	979.7	21.6	36	13.231
2023-07-12 16:00	0.70	5.67	6.93	0.96	332.8	0	0	979.3	21.8	36.3	13.228
2023-07-12 17:00	1.00	5.805	7.2	0.69	170	0	0	979.2	21.8	38.8	13.238
2023-07-12 18:00	0.90	6.075	8.73	0.51	124	0	0	979.1	20.1	51.1	12.904
2023-07-12 19:00	0.30	7.335	13.545	0.4	115.8	0	0	979.3	17.3	62.5	12.617
2023-07-12 20:00	0.20	6.615	10.305	0.67	109.6	0	0	979.3	16.5	60.6	12.51
2023-07-12 21:00	0.20	7.02	11.745	0.68	106	0	0	979.3	15.1	65	12.463
2023-07-12 22:00	0.10	7.695	13.59	0.81	108.6	0	0	979.2	14.7	64.6	12.425
2023-07-12 23:00	0.50	8.73	14.625	0.74	101.7	0	0	979.2	13.6	67.2	12.388
2023-07-13 0:00	0.30	9.135	13.77	0.68	95.8	0	0	978.8	12.4	71.8	12.353
2023-07-13 1:00	0.30	9.9	14.31	0.65	149.1	0	0	978.6	12.7	73.8	12.323
2023-07-13 2:00	0.20	9.63	13.23	0.59	115.9	0	0	978.4	13.1	72.9	12.3
2023-07-13 3:00	0.30	9.54	13.635	0.29	73.5	0	0	978.1	12.4	79	12.273
2023-07-13 4:00	0.40	9.585	13.86	0.43	58	0	0	977.8	12	79.1	12.248
2023-07-13 5:00	0.50	9.63	14.13	0.41	39.9	0	0	977.9	11.3	83.5	12.294
2023-07-13 6:00	0.20	9.81	13.41	0.55	54.2	0	0	978	12.4	80.4	12.508
2023-07-13 7:00	0.30	9.945	12.915	0.74	73.5	0	0	977.7	13.9	75.3	12.846
2023-07-13 8:00	0.40	9	11.565	0.66	136.2	0	0	977.4	17.7	61.2	13.551
2023-07-13 9:00	0.40	7.425	9.81	1.12	143.7	0	0	977	19.5	52.6	13.736
2023-07-13 10:00	0.50	7.245	10.305	1.35	75.8	0	0	976.6	21	41.8	13.449
2023-07-13 11:00	0.50	7.02	9.225	0.9	290.9	0	0	976.1	21.7	40.3	13.115
2023-07-13 12:00	0.00	7.245	8.955	1.47	140.8	0	0	975.4	22.6	37.8	13.104
2023-07-13 13:00	0.10	7.02	8.91	1.14	285.2	0	0	974.5	23.5	35.6	13.097
2023-07-13 14:00	0.10	6.885	8.505	0.91	265.4	0	0	974	24	33.7	13.111
2023-07-13 15:00	1.20	6.885	8.37	0.94	6	0	0	973.8	23.6	37	13.109
2023-07-13 16:00	1.30	6.93	8.55	0.77	300.7	0	0	973.7	24	36.1	13.112
2023-07-13 17:00	2.50	6.885	8.595	0.49	73.1	0	0	973.6	23.4	42.4	13.114
2023-07-13 18:00	1.80	7.245	9.675	0.27	81.2	0	0	973.4	21.8	56.2	13.123
2023-07-13 19:00	0.20	8.055	11.34	0.35	139.5	0	0	973.4	21	57.4	12.706
2023-07-13 20:00	0.30	9.315	14.355	0.33	139.4	0	0	973.3	18.1	65.1	12.531
2023-07-13 21:00	0.20	10.89	18.675	0.26	114.4	0	0	973.3	14.7	77.4	12.477
2023-07-13 22:00	0.30	12.015	22.14	0.31	185.9	0	0	973.3	13.5	81.1	12.432
2023-07-13 23:00	0.20	10.845	15.93	0.83	194.7	0	0	973.4	14.1	75.3	12.394

2023-07-14 0:00	0.10	10.305	14.13	0.76	201.2	0	0	973.6	13.8	70.6	12.357
2023-07-14 1:00	0.10	10.17	13.68	0.72	202.9	0	0	973.8	13.1	70.1	12.314
2023-07-14 2:00	0.00	10.08	13.365	0.86	204.2	0	0	974.1	12.4	70	12.275
2023-07-14 3:00	0.10	10.305	14.85	0.72	180.5	0	0	974.2	11	75.1	12.238
2023-07-14 4:00	0.30	10.89	16.335	0.51	153.2	0	0	974.4	9.5	80.2	12.217
2023-07-14 5:00	0.10	11.07	14.94	1.04	171	0	0	974.8	10.1	80.5	12.246
2023-07-14 6:00	0.10	10.53	13.41	1.6	177.8	0	0	975	12.3	76.1	12.457
2023-07-14 7:00	0.00	9.135	12.06	2.01	174.6	0	0	974.8	15.9	64.3	12.953
2023-07-14 8:00	0.40	7.605	10.035	2.68	179.8	0	0	974.7	19.4	52.3	13.596
2023-07-14 9:00	0.20	7.605	10.575	3.11	185.7	0	0	974.7	21.9	46.5	13.74
2023-07-14 10:00	0.20	8.235	12.42	3.86	193.3	0	0	974.7	23	42.3	13.439
2023-07-14 11:00	0.30	7.965	11.025	3.16	192.5	0	0	974.8	22.7	42.7	13.208
2023-07-14 12:00	0.10	9.99	22.41	3.51	172.8	0	0	974.8	24.1	41.1	13.215
2023-07-14 13:00	0.30	8.37	12.735	3.96	178.5	0	0	974.6	24.7	37.7	13.216
2023-07-14 14:00	0.30	7.56	11.115	3.8	196.9	0	0	974.5	25.5	34.4	13.212
2023-07-14 15:00	0.00	8.145	13.365	4.08	195.1	0	0	974.8	25.3	35.5	13.215
2023-07-14 16:00	0.40	8.28	12.105	3.41	200.8	0	0	975.1	24.5	37.7	13.216
2023-07-14 17:00	0.50	8.145	10.89	2.23	204.3	0	0	975.2	23.5	41.2	13.277
2023-07-14 18:00	0.10	8.19	10.755	1.77	206.9	0	0	975.1	23.3	43.9	13.189
2023-07-14 19:00	0.30	8.64	11.34	1.06	169	0	0	975.2	21.8	51.9	12.668
2023-07-14 20:00	0.10	9.27	12.825	0.9	156.2	0	0	975.2	20.1	59.8	12.523
2023-07-14 21:00	0.10	10.125	13.185	1.09	156.5	0	0	975.4	19.4	62.2	12.474
2023-07-14 22:00	0.00	11.7	15.66	0.98	171.6	0	0	975.5	18.3	65.6	12.44
2023-07-14 23:00	0.20	12.33	16.425	1.03	169.2	0	0	975.8	17.5	71.1	12.408
2023-07-15 0:00	0.10	12.78	16.695	0.81	157.8	0	0	975.6	16.2	76.5	12.378
2023-07-15 1:00	0.10	13.545	17.01	1.22	149.6	0	0	975.2	15.9	78.2	12.36
2023-07-15 2:00	0.30	14.355	17.955	1.11	145.8	0	0	975	15.6	80.8	12.332
2023-07-15 3:00	0.20	15.345	18.585	0.84	122.2	0	0	975	15	83.7	12.298
2023-07-15 4:00	0.30	16.83	20.52	0.91	139	0	0	975.2	14.4	87.7	12.271
2023-07-15 5:00	0.30	17.865	21.105	1.53	149.3	0	0	975.5	15.3	87.4	12.316
2023-07-15 6:00	0.30	18.135	21.24	1.55	160.9	0	0	975.4	16.5	84.8	12.591
2023-07-15 7:00	0.20	18.81	21.33	2.26	168.3	0	0	975.4	17.9	81.2	13.117
2023-07-15 8:00	0.20	19.53	21.87	2.25	168.1	0	0	975.2	18.6	78.8	13.596
2023-07-15 9:00	0.10	22.14	24.165	1.88	171.8	0	0	975.3	18.4	80.5	13.548
2023-07-15 10:00	0.10	25.11	27.09	1.79	162.9	0	0	975.2	19.4	78.8	13.832
2023-07-15 11:00	0.20	27.36	29.61	1.51	157	0	0	974.9	20.4	76.2	13.236
2023-07-15 12:00	0.10	32.31	34.695	1.73	144.1	0	0	974.5	21.8	71.5	13.241
2023-07-15 13:00	0.30	55.755	59.535	2.09	172.6	0	0	974.1	23.4	62.1	13.243
2023-07-15 14:00	0.80	65.07	75.105	2.33	189.2	0	0	973.6	24.4	54.7	13.237
2023-07-15 15:00	0.30	66.195	68.94	2.16	157.8	0	0	973.4	23.9	58.5	13.218
2023-07-15 16:00	0.40	81.495	83.385	2.25	185.5	0	0	973.1	24.8	51.2	13.218
2023-07-15 17:00	0.60	113.67	115.47	2.3	197.9	0	0	972.9	24.7	48.8	13.217
2023-07-15 18:00	0.30	123.48	125.145	1.84	203.8	0	0	973.3	24	52.7	13.12
2023-07-15 19:00	0.40	128.655	130.86	0.99	190.9	0	0	973.3	22.4	59.3	12.646
2023-07-15 20:00	0.30	129.285	132.12	0.68	193.9	0	0	973.3	20.3	67.8	12.525
2023-07-15 21:00	0.10	126.135	129.645	0.79	184.6	0	0	973.8	18.8	74.7	12.477
2023-07-15 22:00	0.20	123.525	127.035	0.84	201.9	0	0	973.9	18.2	78.2	12.44
2023-07-15 23:00	0.10	119.43	123.57	0.51	182	0	0	973.8	17.5	81.7	12.412
2023-07-16 0:00	0.30	118.845	122.85	0.61	196.2	0	0	973.7	16.4	87.1	12.382
2023-07-16 1:00	0.10	116.19	120.42	0.4	193.3	0	0	973.7	15.5	89.6	12.358
2023-07-16 2:00	0.10	112.455	116.325	0.53	177.2	0	0	973.5	14.8	90.9	12.322
2023-07-16 3:00	0.10	106.65	112.095	0.88	193.3	0	0	973.7	14.1	90.4	12.285
2023-07-16 4:00	0.10	101.7	105.705	0.78	221.8	0	0	973.8	14.1	89.8	12.26
2023-07-16 5:00	0.20	90.81	95.04	0.75	225.4	0	0	974	13.9	88.3	12.319
2023-07-16 6:00	0.00	75.33	79.29	1.06	232.6	0	0	974.2	14.4	86.6	12.365
2023-07-16 7:00	0.00	65.385	73.17	1.12	246.6	0	0	974.6	14.5	85.3	12.313
2023-07-16 8:00	0.10	60.345	63.495	1.02	266.8	0	0	974.5	14.4	85.3	12.273
2023-07-16 9:00	0.30	53.865	56.745	0.64	261.4	0	0	974.5	15.2	82.5	12.843
2023-07-16 10:00	0.10	53.01	56.115	1.32	147.9	0	0	974.9	15.8	81.6	12.838
2023-07-16 11:00	0.30	53.685	56.61	1.38	158.5	0	0	974.8	15.8	82	12.959
2023-07-16 12:00	0.10	51.525	56.205	1.29	168.1	0	0	974.4	16.2	82.3	13.333
2023-07-16 13:00	0.10	48.96	51.75	1.02	144.7	0	0	974	17.8	76.1	13.564
2023-07-16 14:00	0.30	41.805	44.28	1.05	126.8	0	0	973.6	20.9	57.4	13.777
2023-07-16 15:00	0.50	35.325	38.25	1.15	141.2	0	0	973	21.7	51.2	13.235
2023-07-16 16:00	0.40	29.565	31.815	1.12	165.3	0	0	972.8	23.1	38.2	13.128
2023-07-16 17:00	0.80	29.655	31.185	1.17	162.4	0	0	972.6	23.2	36.8	13.101
2023-07-16 18:00	2.10	34.875	36.495	0.61	131.9	0	0	972.4	22.6	42.3	13.075
2023-07-16 19:00	0.40	31.905	34.29	0.31	46.5	0	0	972.3	19.5	66.6	12.623
2023-07-16 20:00	0.10	36.63	40.41	1.25	263.1	0.2	0	972.6	18.3	66.4	12.514
2023-07-16 21:00	0.10	34.695	40.23	0.52	146.7	0	0	972.7	15.5	86.6	12.467
2023-07-16 22:00	0.10	34.92	39.51	0.42	152.4	0	0	972.6	15.3	85.4	12.425
2023-07-16 23:00	0.20	53.19	56.61	0.75	180.5	0	0	972.5	16.1	83.5	12.397
2023-07-17 0:00	0.20	52.155	57.96	0.53	172.7	0	0	972.3	15.1	88.1	12.367
2023-07-17 1:00	0.20	53.46	57.87	0.75	222.8	0	0	971.9	14.7	86.7	12.334
2023-07-17 2:00	0.00	47.7	55.26	0.53	104.7	0	0	971.8	13.2	88.8	12.284
2023-07-17 3:00	0.10	49.005	55.62	0.51	189.8	0	0	971.6	13	89.1	12.254
2023-07-17 4:00	0.10	51.39	56.52	0.73	183.1	0	0	971.7	12.9	89.1	12.227
2023-07-17 5:00	0.20	37.98	41.805	1	291.2	0	0	971.7	13.2	86.7	12.286
2023-07-17 6:00	0.30	15.93	18.675	1.74	284.2	1.6	0	971.9	14	83	12.652
2023-07-17 7:00	0.20	14.265	17.685	0.97	271.2	2.2	0	972.2	13.6	87.9	12.76
2023-07-17 8:00	0.00	10.71	13.095	1.24	254	0	0	972.2	15.2	82	13.307
2023-07-17 9:00	0.20	10.53	12.69	0.92	224.4	0	0	972.1	15.8	79.4	13.565
2023-07-17 10:00	0.10	10.89	13.365	1.6	234.9	0	0	972.3	16.7	73.8	13.468
2023-07-17 11:00	0.40	9.99	13.365	1.51	268.3	1.4	0	972.6	16.6	76.1	13.668
2023-07-17 12:00	0.20	11.43	17.64	1.79	258.8	3.4	0	972.8	15.8	83	13.232
2023-07-17 13:00	0.10	9.495	12.51	2.63	260.8	0	0	973	17.6	72.2	13.236
2023-07-17 14:00	0.00	8.01	11.385	2.06	250.7	0.2	0	973	18	68.6	13.239
2023-07-17 15:00	0.10	6.345	9.315	2.3	257.2	0.2	0	973.2	18.2	62.7	13.241
2023-07-17 16:00	0.20	5.625	8.19	2.55	247.2	0	0	973.5	19.4	55.9	13.241
2023-07-17 17:00	0.10	5.22	7.785	2.04	235.6	0.1	0	974	18.4	63.2	13.243

2023-07-17 18:00	0.20	4.815	7.02	1.6	241.6	0	0	974.4	18.7	61.1	13.209
2023-07-17 19:00	0.20	4.275	6.435	0.8	246.3	0	0	974.9	17.8	62.2	12.639
2023-07-17 20:00	0.30	5.085	8.685	0.83	247.2	0	0	975.3	16.4	68.8	12.508
2023-07-17 21:00	0.20	6.435	13.185	0.69	202	0	0	975.8	14.2	79	12.46
2023-07-17 22:00	0.10	7.605	16.56	0.57	219.2	0	0	976	13.2	82.3	12.417
2023-07-17 23:00	0.30	5.805	11.835	0.66	227	0	0	976.3	12.1	81.9	12.376
2023-07-18 0:00	0.20	5.22	10.485	0.54	218.7	0	0	976.4	11.1	82.9	12.346
2023-07-18 1:00	0.20	5.535	11.79	0.64	202.1	0	0	976.5	10.2	85.1	12.286
2023-07-18 2:00	0.20	5.625	10.845	0.53	214.2	0	0	976.6	10.2	86.3	12.256
2023-07-18 3:00	0.10	6.48	11.07	0.89	220.6	0	0	976.9	10.7	87.3	12.219
2023-07-18 4:00	0.10	11.925	20.61	1.51	238.9	0	0	977.3	11.4	88.4	12.183
2023-07-18 5:00	0.10	11.745	16.56	1.2	226.5	0	0	977.8	11.8	89	12.217
2023-07-18 6:00	0.20	10.53	12.915	1.85	237.4	0	0	978.4	12.4	87.5	12.495
2023-07-18 7:00	0.10	12.78	15.12	1.84	244.1	0	0	978.8	13	86.6	12.779
2023-07-18 8:00	0.30	6.84	8.37	1.75	234.7	0	0	979.1	14	83.6	13.255
2023-07-18 9:00	0.10	5.13	6.165	2.07	239	0	0	979.4	14.4	83.1	13.451
2023-07-18 10:00	0.30	7.515	9.225	1.77	239.1	0	0	979.6	15.1	82.8	13.809
2023-07-18 11:00	0.00	6.255	8.145	1.84	261.8	1.2	0	979.6	15.4	82.3	13.65
2023-07-18 12:00	0.10	4.95	6.57	2.26	274.6	0	0	979.3	16.9	78.1	13.25
2023-07-18 13:00	0.20	4.14	6.255	2.54	249.1	0	0	979.3	16.8	75.7	13.244
2023-07-18 14:00	0.20	4.5	6.39	2.42	243.6	0.3	0	979.6	17.5	75.5	13.249
2023-07-18 15:00	0.10	3.6	5.445	2.23	262.5	0.5	0	980	18.4	71.4	13.235
2023-07-18 16:00	0.20	5.67	12.6	1.06	337.4	2.4	0	980.7	14.7	87.3	12.913
2023-07-18 17:00	0.20	5.58	9.855	1.13	217.9	0.1	0	980.7	15.8	85.5	13.253
2023-07-18 18:00	0.10	5.67	10.125	0.78	249.6	0	0	980.7	16.5	83.4	13.237
2023-07-18 19:00	0.10	6.3	12.15	0.53	236.2	0	0	980.9	16.8	83.6	12.786
2023-07-18 20:00	0.00	8.145	18.585	0.44	209.5	0	0	981.1	15.2	88.6	12.511
2023-07-18 21:00	0.10	9.81	30.33	0.8	231.4	0	0	981.6	14	91.1	12.463
2023-07-18 22:00	0.20	32.355	41.85	0.66	340.6	0	0	982.2	13.6	88.4	12.426
2023-07-18 23:00	0.10	39.555	50.895	0.41	339.9	0	0	982.6	12.7	89	12.397
2023-07-19 0:00	0.10	32.805	60.3	0.3	242.7	0	0	982.8	11	87.2	12.359
2023-07-19 1:00	0.10	25.38	60.345	0.38	227.9	0	0	983	9.8	86.7	12.322
2023-07-19 2:00	0.10	9.63	39.96	0.3	228.7	0	0	983.2	8.8	87.5	12.287
2023-07-19 3:00	0.10	6.03	26.64	0.26	221.9	0	0	983.5	8.1	86.9	12.243
2023-07-19 4:00	0.10	5.76	39.555	0.22	224.9	0	0	984	7.7	86.7	12.204
2023-07-19 5:00	0.10	6.66	34.83	0.28	222.5	0	0	984.3	8	87.5	12.213
2023-07-19 6:00	0.10	17.595	21.825	0.51	229.7	0	0	984.8	9.6	89.4	12.499
2023-07-19 7:00	0.10	38.25	42.3	0.57	283.9	0	0	984.9	12.1	89.2	13.179
2023-07-19 8:00	0.10	34.335	38.205	1.02	312.5	0	0	985.2	14.5	81.2	13.706
2023-07-19 9:00	0.20	19.62	22.95	1.26	328.4	0	0	985	16.3	68.7	13.78
2023-07-19 10:00	0.40	21.645	25.155	1.3	328.5	0	0	984.6	17.3	64.4	13.22
2023-07-19 11:00	0.20	19.485	23.445	1.15	324.6	0	0	984.5	18.1	62.2	13.181
2023-07-19 12:00	0.40	21.51	24.21	1.13	289.3	0	0	984.2	19.2	57.7	13.179
2023-07-19 13:00	0.40	23.67	26.415	1.22	278.8	0	0	984.2	19.8	55.2	13.169
2023-07-19 14:00	0.40	22.995	25.65	0.95	335.3	0	0	984.1	20.4	55.3	13.152
2023-07-19 15:00	0.50	23.13	25.47	1.04	320.1	0	0	983.6	20.8	54	13.15
2023-07-19 16:00	0.20	27.585	30.105	0.97	344	0	0	983.4	21.5	49.7	13.125
2023-07-19 17:00	0.40	28.08	30.555	0.97	273.1	0	0	983.4	22.1	49.2	13.14
2023-07-19 18:00	0.20	27.045	29.385	0.46	4	0	0	983.2	21.5	55.2	13.23
2023-07-19 19:00	0.20	27.045	30.78	0.26	9.7	0	0	983	20.2	69.5	12.719
2023-07-19 20:00	0.10	28.125	32.715	0.51	54.5	0	0	982.8	16.6	78.5	12.538
2023-07-19 21:00	0.30	26.64	30.69	0.63	72	0	0	982.7	15.4	78.9	12.481
2023-07-19 22:00	0.20	26.19	30.24	0.55	62.3	0	0	982.4	14.2	81.8	12.427
2023-07-19 23:00	0.20	27.36	31.14	0.66	79.4	0	0	982.2	13.8	82.4	12.398
2023-07-20 0:00	0.30	28.485	32.76	0.61	53.4	0	0	981.8	13.3	83.9	12.367
2023-07-20 1:00	0.20	27.855	31.95	0.78	48.9	0	0	981.4	12.9	84.4	12.34
2023-07-20 2:00	0.10	26.955	30.915	0.55	75	0	0	981.1	12.8	84.5	12.311
2023-07-20 3:00	0.10	26.505	31.14	0.78	331.9	0	0	981	13	84.9	12.282
2023-07-20 4:00	0.30	24.3	27.72	0.83	76.2	0	0	980.8	13.7	83.7	12.261
2023-07-20 5:00	0.30	23.355	27.315	0.68	273.4	0	0	981	13.8	85.4	12.263
2023-07-20 6:00	0.20	21.465	24.345	0.97	302.9	0	0	980.8	14.5	84.7	12.324
2023-07-20 7:00	0.30	16.02	17.865	0.91	46.5	0	0	980.3	15.6	82.5	12.828
2023-07-20 8:00	0.10	13.725	15.39	0.79	73	0	0	979.9	17.2	75.4	13.294
2023-07-20 9:00	0.50	10.125	11.565	0.78	344.9	0	0	979.8	20.1	58.8	13.784
2023-07-20 10:00	0.40	9.54	12.15	1	335.9	0	0	979.5	20.6	59.1	13.694
2023-07-20 11:00	0.40	10.35	13.23	1.25	302.5	0	0	979.3	21	56.8	13.203
2023-07-20 12:00	0.20	11.565	15.3	1.25	304.3	0	0	979.1	19.9	63	13.213
2023-07-20 13:00	0.20	11.88	16.245	0.82	316.2	0	0	978.9	20.8	58.9	13.219
2023-07-20 14:00	0.40	11.475	14.76	1.04	317.2	0	0	978.5	21.6	51	13.22
2023-07-20 15:00	0.60	11.565	13.365	1.26	331.2	0	0	978.2	22.6	42.9	13.209
2023-07-20 16:00	0.50	13.23	15.12	1.8	316.5	0	0	977.9	22.7	48	13.187
2023-07-20 17:00	0.30	15.705	17.235	1.26	321.3	0	0	977.8	21.1	56.6	13.182
2023-07-20 18:00	0.20	17.325	19.305	0.91	335.3	0	0	977.9	20.3	64.4	12.981
2023-07-20 19:00	0.10	19.89	22.14	0.96	359.2	0	0	977.8	19.6	65.2	12.633
2023-07-20 20:00	0.20	26.28	28.62	0.96	65.9	0	0	978.4	17.9	71.2	12.517
2023-07-20 21:00	0.10	31.05	40.59	0.35	284.9	0	0	978.4	15.8	82	12.468
2023-07-20 22:00	0.30	30.015	39.915	0.56	275.3	0	0	978.5	14.4	85.3	12.431
2023-07-20 23:00	0.10	28.62	40.32	0.31	303.4	0	0	978.4	13.2	86.5	12.396
2023-07-21 0:00	0.10	27.495	45.855	0.43	87.9	0	0	978.3	11.4	87.9	12.364
2023-07-21 1:00	0.10	29.295	41.13	0.47	329.6	0	0	978.3	11.7	89.3	12.337
2023-07-21 2:00	0.00	32.895	39.825	0.75	340.6	0	0	978.3	12.4	88.4	12.284
2023-07-21 3:00	0.10	33.93	39.375	0.88	342.1	0	0	978.4	12.1	88.8	12.242
2023-07-21 4:00	0.20	31.635	36.18	0.72	347.5	0	0	978.7	11.8	88.7	12.214
2023-07-21 5:00	0.30	29.16	32.58	1.07	340	0	0	979.4	11.4	88.7	12.228
2023-07-21 6:00	0.30	29.835	38.34	1.16	350.8	0	0	980	11.6	89.6	12.439
2023-07-21 7:00	0.10	22.5	24.255	1.4	352.4	0	0	980.5	12.1	88.5	12.77
2023-07-21 8:00	0.10	20.295	21.69	1.42	355.3	0	0	980.9	12.4	86.8	13.019
2023-07-21 9:00	0.10	19.935	21.015	1.23	346.9	0	0	981.2	13.8	81.6	13.566
2023-07-21 10:00	0.10	22.77	23.805	1.07	341.6	0	0	981.2	16.8	69.3	13.838
2023-07-21 11:00	0.20	20.7	22.275	1.46	329.6	0	0	981.1	18.9	60.4	13.482

2023-07-21 12:00	0.30	12.285	13.905	1.85	338.8	0	0	980.9	20	51.6	13.173
2023-07-21 13:00	0.50	10.485	12.375	2.05	320.3	0	0	980.8	20.8	49	13.111
2023-07-21 14:00	0.40	10.935	12.825	1.96	323.6	0	0	980.6	21.1	45.6	13.098
2023-07-21 15:00	0.20	9.135	10.71	1.94	319.7	0	0	980.6	21.1	43.5	13.121
2023-07-21 16:00	0.00	8.775	10.62	1.87	327.6	0	0	980.5	20.9	43.5	13.137
2023-07-21 17:00	0.00	5.67	7.155	1.8	335.9	0	0	980.4	20.9	39.8	13.18
2023-07-21 18:00	0.20	2.925	4.14	1.44	326	0	0	980.4	20.4	36.7	13.162
2023-07-21 19:00	0.50	2.925	4.095	0.82	334.6	0	0	980.4	18.9	41.8	12.685
2023-07-21 20:00	0.30	3.915	7.56	0.35	349.1	0	0	980.3	15.6	58.8	12.524
2023-07-21 21:00	0.20	5.445	13.095	0.27	335.6	0	0	980.4	12	77.8	12.458
2023-07-21 22:00	0.20	5.355	13.14	0.2	18.7	0	0	980.4	10.1	82.2	12.416
2023-07-21 23:00	0.10	4.455	9.09	0.48	40.3	0	0	980.5	9.8	73.1	12.376
2023-07-22 0:00	0.10	5.22	12.51	0.26	85.2	0	0	980.6	8.2	77.8	12.336
2023-07-22 1:00	0.10	7.155	20.7	0.24	207.8	0	0	980.4	6.4	82.7	12.292
2023-07-22 2:00	0.30	6.03	18.045	0.26	184.1	0	0	980.2	5	83.9	12.25
2023-07-22 3:00	0.10	5.535	15.975	0.23	203.3	0	0	980	4.1	83.6	12.203
2023-07-22 4:00	0.20	4.455	12.42	0.32	160.9	0	0	980	3	84.7	12.163
2023-07-22 5:00	0.10	4.005	9.855	0.19	62.5	0	0	980.1	4.2	83.6	12.196
2023-07-22 6:00	0.20	4.5	8.1	0.3	64.7	0	0	980.3	8.9	76.8	12.319
2023-07-22 7:00	0.10	5.895	8.01	0.8	133.4	0	0	980.5	12.8	67.7	12.738
2023-07-22 8:00	0.40	4.365	5.895	0.92	128	0	0	980.3	16.2	58.4	13.545
2023-07-22 9:00	0.60	3.555	4.635	0.97	327.5	0	0	980.1	18.5	45.4	13.814
2023-07-22 10:00	0.30	3.24	4.005	1.17	331.5	0	0	979.6	19.8	40.7	13.453
2023-07-22 11:00	0.30	3.6	4.41	1.19	267.3	0	0	978.9	20.8	38.4	13.149
2023-07-22 12:00	0.00	3.735	4.5	1.16	291.1	0	0	978.5	22	35.6	13.093
2023-07-22 13:00	0.20	3.87	4.725	1.42	127.6	0	0	978.2	22.9	33.7	13.099
2023-07-22 14:00	0.10	4.32	5.04	1.24	203.3	0	0	977.6	23.7	31.5	13.1
2023-07-22 15:00	0.20	4.635	5.445	1.3	101.3	0	0	977	24.3	31	13.103
2023-07-22 16:00	0.30	4.725	5.715	1.18	124.1	0	0	976.5	24.6	30.6	13.088
2023-07-22 17:00	0.50	4.905	6.165	1.03	119.4	0	0	976.3	24.8	31.2	13.14
2023-07-22 18:00	1.00	5.265	6.525	0.77	140.5	0	0	976.1	24.5	35.1	13.124
2023-07-22 19:00	1.20	5.67	7.29	0.34	83.6	0	0	976.1	21.8	50.3	12.671
2023-07-22 20:00	0.30	6.93	10.575	0.36	61	0	0	976.4	17.2	70.4	12.532
2023-07-22 21:00	0.10	7.155	9.81	0.45	71.1	0	0	976.4	14.3	75	12.465
2023-07-22 22:00	0.10	8.145	12.285	0.22	94.7	0	0	976.4	12.6	79.7	12.414
2023-07-22 23:00	0.10	8.505	14.085	0.32	121.2	0	0	976.5	11.1	83.3	12.375
2023-07-23 0:00	0.30	9.135	16.155	0.27	215.3	0	0	976.6	10.6	83.5	12.34
2023-07-23 1:00	1.00	10.17	16.335	0.54	219.9	0	0	976.5	11.6	77.8	12.312
2023-07-23 2:00	0.30	12.105	16.515	0.58	205.5	0	0	976.6	10.1	81.4	12.277
2023-07-23 3:00	0.20	15.795	19.665	0.61	178.6	0	0	976.8	10.4	81.1	12.246
2023-07-23 4:00	0.10	19.305	22.86	0.67	187.6	0	0	977.2	10	82.3	12.214
2023-07-23 5:00	0.20	26.37	29.385	0.78	191.3	0	0	977.6	10.9	81.3	12.24
2023-07-23 6:00	0.10	33.075	35.1	1.05	208.7	0	0	978	13.4	75.8	12.462
2023-07-23 7:00	0.10	34.335	36.135	1.07	209.8	0	0	978.4	17.1	64.4	12.944
2023-07-23 8:00	0.40	37.125	38.925	1.27	220.2	0	0	978.6	20.9	53.7	13.532
2023-07-23 9:00	0.40	39.015	40.905	2	216.9	0	0	978.6	22.9	48	13.696
2023-07-23 10:00	0.20	41.535	43.875	2.2	205.4	0	0	978.4	24	45.3	13.554
2023-07-23 11:00	0.10	43.335	45.63	2.36	197.4	0	0	978.1	25.2	43.1	13.234
2023-07-23 12:00	0.10	45.585	48.285	3.28	201.5	0	0	977.7	26.2	39.6	13.225
2023-07-23 13:00	0.20	44.19	46.395	3.01	199.5	0	0	977.1	26.4	38.6	13.221
2023-07-23 14:00	0.60	35.82	37.935	2.64	228.7	0	0	976.9	26.1	41	13.22
2023-07-23 15:00	0.50	33.165	38.34	3.48	207.4	0	0	977.1	24.3	47.8	13.224
2023-07-23 16:00	0.30	27.585	31.005	3.76	185.6	0	0	977.5	23.5	48.1	13.229
2023-07-23 17:00	0.10	27.36	29.745	2.49	261	0	0	978.2	21.3	60.1	12.891
2023-07-23 18:00	0.00	35.73	37.98	1.22	320	0.1	0	979.2	19.4	70.7	12.633
2023-07-23 19:00	0.10	35.235	38.52	0.47	99.3	0.3	0	979.1	18.1	83.7	12.564
2023-07-23 20:00	0.30	35.37	40.905	0.52	211.4	0	0	979.1	17.1	89	12.469
2023-07-23 21:00	0.20	34.785	37.98	0.51	183.3	0	0	979.9	16.5	88.8	12.431
2023-07-23 22:00	0.20	32.985	38.25	0.43	172.8	0	0	980	15.5	90.4	12.405
2023-07-23 23:00	0.10	34.2	37.305	0.71	209.4	0	0	980.2	15	90.5	12.378
2023-07-24 0:00	0.20	37.755	41.49	0.81	205.1	0	0	980.4	15.4	91	12.351
2023-07-24 1:00	0.30	31.815	38.34	1.24	278.5	0	0	980.4	15.8	91.6	12.329
2023-07-24 2:00	0.10	21.96	25.785	1.24	265.6	0	0	980.5	15.7	91.2	12.303
2023-07-24 3:00	0.10	18.405	25.92	1.17	283.1	0	0	980.8	15.3	91.5	12.274
2023-07-24 4:00	0.10	25.47	33.93	1.36	305.8	0	0	981.1	14.7	91.3	12.251
2023-07-24 5:00	0.00	29.025	35.955	1.57	298.7	0	0	981.5	14.1	89.6	12.23
2023-07-24 6:00	0.20	29.16	35.82	1.18	296.8	0	0	982.1	14	89	12.381
2023-07-24 7:00	0.10	36	42.435	1.24	309.1	0	0	982.3	14.2	88.2	12.442
2023-07-24 8:00	0.00	34.2	40.77	1.53	301.9	0	0	982.6	14.4	87.5	12.653
2023-07-24 9:00	0.10	37.125	40.5	1.48	307.5	0	0	982.8	15.3	84.5	13.152
2023-07-24 10:00	0.10	34.29	36.72	1.52	318.5	0	0	983	17.1	73.7	13.65
2023-07-24 11:00	0.30	36.135	38.34	1.57	313.4	0	0	983.1	18.7	63.2	13.834
2023-07-24 12:00	0.40	31.95	34.965	1.54	321	0	0	982.9	20.2	54.7	13.309
2023-07-24 13:00	0.60	23.13	27.225	1.35	355.9	0	0	982.6	21.4	46.9	13.242
2023-07-24 14:00	0.50	23.085	27	1.3	8.1	0	0	982.3	21.7	45.9	13.242
2023-07-24 15:00	0.40	24.39	27.72	1.09	336.3	0	0	982.2	21.9	46.1	13.25
2023-07-24 16:00	0.30	25.29	28.395	1.13	358.9	0	0	982.4	22	46.7	13.251
2023-07-24 17:00	0.40	23.58	26.19	0.83	359.8	0	0	982.6	21.5	50.5	13.253
2023-07-24 18:00	0.20	20.385	22.995	0.53	341.2	0	0	982.6	21.5	52.3	13.173
2023-07-24 19:00	0.20	20.61	24.3	0.32	95.8	0	0	982.8	19.5	69.1	12.68
2023-07-24 20:00	0.10	22.14	27.36	0.3	63.2	0	0	982.9	16.1	81.5	12.524
2023-07-24 21:00	0.20	23.535	30.735	0.3	233	0	0	983.2	13.5	86.1	12.463
2023-07-24 22:00	0.10	22.68	29.385	0.28	125	0	0	983.3	12.2	87.3	12.406
2023-07-24 23:00	0.10	22.14	29.79	0.3	229.7	0	0	983.5	11.3	86.5	12.377
2023-07-25 0:00	0.00	21.42	29.25	0.3	126.9	0	0	983.9	10.1	86.7	12.352
2023-07-25 1:00	0.10	21.645	28.8	0.25	191.4	0	0	983.8	9.6	85.5	12.324
2023-07-25 2:00	0.10	19.8	25.83	0.34	174.8	0	0	983.5	8.3	85.2	12.286
2023-07-25 3:00	0.20	19.35	26.19	0.31	234	0	0	983.6	7.8	84.5	12.251
2023-07-25 4:00	0.10	17.145	21.33	0.41	210.1	0	0	983.9	7.5	86.3	12.209
2023-07-25 5:00	0.30	16.29	20.475	0.32	208.3	0	0	984	8.3	86.2	12.227

2023-07-25 6:00	0.00	17.145	19.71	0.83	189.1	0	0	984.2	11.7	84.4	12.373
2023-07-25 7:00	0.00	13.815	15.75	1.33	204	0	0	984.3	15.4	72.8	12.826
2023-07-25 8:00	0.00	9.855	13.635	1.68	210.5	0	0	984.1	19.1	58.6	13.562
2023-07-25 9:00	0.40	6.93	8.685	2.08	230.5	0	0	983.8	21.7	47.1	13.796
2023-07-25 10:00	0.40	8.91	16.65	2.36	242.5	0	0	983.6	23	40	13.546
2023-07-25 11:00	0.20	11.16	20.025	2.1	234.6	0	0	983.2	23.7	37.2	13.217
2023-07-25 12:00	0.10	12.15	13.635	2.29	214.7	0	0	982.6	24.9	34	13.205
2023-07-25 13:00	0.30	15.21	16.785	2.34	201.8	0	0	981.9	25	34.3	13.164
2023-07-25 14:00	0.20	18.63	20.43	2.49	207.3	0	0	981.5	25.5	33	13.135
2023-07-25 15:00	0.20	20.7	28.395	2.82	220.8	0	0	981.2	25.7	33.6	13.127
2023-07-25 16:00	0.30	20.88	24.615	2.4	220.7	0	0	980.8	25.6	34	13.113
2023-07-25 17:00	0.30	21.915	23.445	2.1	207.2	0	0	980	25.5	33.7	13.116
2023-07-25 18:00	0.70	23.13	26.28	1.68	164.5	0	0	979.5	24.6	37.7	13.081
2023-07-25 19:00	0.30	24.705	26.595	0.96	174.2	0	0	979.3	22.7	44.9	12.659
2023-07-25 20:00	0.30	34.65	88.29	0.94	171.5	0	0	979.2	19.6	55.1	12.526
2023-07-25 21:00	0.00	26.19	29.7	0.92	181.2	0	0	979.2	18.1	60.2	12.471
2023-07-25 22:00	0.10	26.325	29.16	0.62	185.3	0	0	979.2	17.9	60.8	12.435
2023-07-25 23:00	0.00	26.64	29.745	0.8	203.2	0	0	979.1	16.5	65.2	12.406
2023-07-26 0:00	0.20	22.59	24.93	0.98	209.9	0	0	979.1	16.5	62.5	12.377
2023-07-26 1:00	0.10	20.97	23.4	1.04	182.8	0	0	978.5	15.5	65.2	12.351
2023-07-26 2:00	0.20	20.475	23.67	0.65	163.4	0	0	977.6	13.6	71.3	12.303
2023-07-26 3:00	0.20	22.185	24.93	0.76	169.2	0	0	977.5	12.2	76.8	12.267
2023-07-26 4:00	0.30	22.14	24.525	1.14	179.5	0	0	977.4	11.6	79.2	12.233
2023-07-26 5:00	0.20	22.005	24.345	0.99	174	0	0	977.3	11.8	80	12.266
2023-07-26 6:00	0.30	24.84	27.72	1.35	180.1	0	0	977	13.7	76.8	12.438
2023-07-26 7:00	0.10	30.24	42.075	1.62	200.2	0	0	977.3	16.6	70.1	12.997
2023-07-26 8:00	0.20	38.88	44.01	1.89	204.2	0	0	977.2	18.4	68.4	13.211
2023-07-26 9:00	0.30	50.67	65.925	2.1	212.9	0	0	977	19.6	68.4	13.684
2023-07-26 10:00	0.10	56.16	67.455	2.1	210.3	0	0	976.8	21	67.8	13.792
2023-07-26 11:00	0.30	58.185	60.75	1.79	198.5	0.1	0	976.6	20.3	76.2	13.239
2023-07-26 12:00	0.10	63.045	65.295	1.97	229.8	0	0	976.5	20.3	75.8	13.202
2023-07-26 13:00	0.30	63.18	65.61	1.83	221.9	0	0	976.6	21	73.4	13.2
2023-07-26 14:00	0.00	50.49	52.875	1.87	254.8	0	0	977	21	72.5	13.186
2023-07-26 15:00	0.10	44.145	47.34	1.83	267	0	0	976.9	21.1	73.4	13.236
2023-07-26 16:00	0.10	42.975	44.1	2.13	261.7	0	0	976.9	21.5	71.1	13.219
2023-07-26 17:00	0.30	45.36	46.17	1.84	288.6	0	0	977	21.6	70.5	13.22
2023-07-26 18:00	0.00	46.575	47.295	1.09	309.9	0	0	977.1	21.4	71.5	12.913
2023-07-26 19:00	0.20	31.275	31.86	0.56	353	0	0	977.2	20.4	75.3	12.539
2023-07-26 20:00	0.20	24.39	24.975	0.35	21.3	0	0	977.5	19.4	79.5	12.479
2023-07-26 21:00	0.10	23.49	24.21	0.27	220.9	0	0	977.7	18.1	85	12.438
2023-07-26 22:00	0.40	23.175	24.075	0.32	80.9	0	0	977.8	15.8	89.5	12.404
2023-07-26 23:00	0.40	23.985	24.93	0.28	161	0	0	977.9	14.3	90.5	12.378
2023-07-27 0:00	0.10	26.055	30.24	0.38	160.5	0	0	978.2	13.4	89.6	12.349
2023-07-27 1:00	0.20	32.31	42.66	0.35	319.3	0	0	978	12.5	89.4	12.317
2023-07-27 2:00	0.00	30.285	44.325	0.37	17.5	0	0	978	11.4	89.7	12.282
2023-07-27 3:00	0.20	23.355	33.93	0.39	187.7	0	0	978.3	10.7	89	12.244
2023-07-27 4:00	0.20	14.76	18.945	0.25	159.8	0	0	978.5	9.9	88.3	12.216
2023-07-27 5:00	0.40	10.71	16.965	0.32	124.8	0	0	978.6	9.9	89.4	12.232
2023-07-27 6:00	0.20	6.345	10.935	0.36	277.4	0	0	979.1	12.2	91.3	12.53
2023-07-27 7:00	0.20	9.585	13.545	0.67	174.3	0	0	979.4	14.6	91.4	13.072
2023-07-27 8:00	0.30	16.965	20.25	1.13	160.7	0	0	979.6	18.7	78	13.615
2023-07-27 9:00	0.30	19.665	21.15	1.73	166.3	0	0	979.5	21.9	62.3	13.804
2023-07-27 10:00	0.60	24.075	24.66	2.23	189	0	0	979.4	22.7	59.4	13.489
2023-07-27 11:00	0.40	27	27.81	2.76	185.5	0	0	978.8	22.7	62.1	13.198
2023-07-27 12:00	0.10	25.65	26.37	3.01	188.6	0	0	978.1	23.5	61.1	13.205
2023-07-27 13:00	0.30	15.705	16.245	2.64	204.4	0	0	977.7	23.4	63.1	13.21
2023-07-27 14:00	0.30	12.285	12.87	2.78	213.7	0	0	977.3	24.4	60.9	13.212
2023-07-27 15:00	0.30	10.125	10.665	2.99	206.2	0	0	976.6	25.9	56.9	13.211
2023-07-27 16:00	0.50	8.235	9	2.94	212.5	0	0	976.3	26.4	53.1	13.207
2023-07-27 17:00	0.40	8.19	9	2.94	210.4	0	0	975.8	27.1	51.6	13.19
2023-07-27 18:00	0.30	8.415	9.72	3.03	208.9	0	0	975.2	26.9	51.4	13.169
2023-07-27 19:00	0.10	9.72	12.465	1.74	204.5	0	0	975	25.9	56.1	12.661
2023-07-27 20:00	0.20	10.62	11.25	1.31	191.8	0	0	975.3	23.5	64.6	12.525
2023-07-27 21:00	0.10	12.6	13.365	1.86	207.4	0	0	975.4	22.5	66.8	12.474
2023-07-27 22:00	0.00	10.845	11.61	2.55	221.2	0	0	975	22.6	66.5	12.44
2023-07-27 23:00	0.20	10.17	10.98	2.44	232.9	0	0	975.7	21.9	68.9	12.412
2023-07-28 0:00	0.10	8.19	8.775	2.12	246.4	0	0	976.3	21.4	69.6	12.388
2023-07-28 1:00	0.40	6.975	7.56	1.72	244.2	0	0	976.7	20.5	72.7	12.366
2023-07-28 2:00	0.40	6.435	7.155	1.72	274.1	0	0	977	19.8	75.7	12.34
2023-07-28 3:00	0.10	6.795	7.245	1.35	305.7	0	0	977.2	18.7	80.5	12.32
2023-07-28 4:00	0.20	5.355	5.715	1.17	324.5	0	0	977.5	17.2	78.5	12.299
2023-07-28 5:00	0.10	5.175	5.625	1.13	307.7	0	0	978	16.4	81	12.303
2023-07-28 6:00	0.20	4.41	4.905	2.17	302.3	0	0	978.8	17.1	75.9	12.477
2023-07-28 7:00	0.20	2.925	3.51	2.82	306.6	0	0	979.5	17.6	69.1	12.768
2023-07-28 8:00	0.30	1.26	1.98	2.91	300.4	0	0	980.3	17.3	63.3	13.444
2023-07-28 9:00	0.10	0.72	1.8	3	316	0	0	981.1	16.1	64.7	13.786
2023-07-28 10:00	0.20	0.36	0.945	2.68	311.7	0	0	981.9	15.4	62.7	13.818
2023-07-28 11:00	0.40	0.27	0.72	2.56	309.1	0	0	982.3	16.1	60.5	13.265
2023-07-28 12:00	0.40	0.225	0.63	2.49	312.2	0	0	982.3	17.8	53.6	13.275
2023-07-28 13:00	0.80	0.18	0.54	2.27	309.3	0	0	982.7	18	50.3	13.276
2023-07-28 14:00	0.40	0.18	0.495	2.51	301.3	0	0	982.7	18.8	48.1	13.277
2023-07-28 15:00	0.30	0.27	0.54	2.33	304.7	0	0	982.7	19	48.2	13.279
2023-07-28 16:00	0.40	0.405	0.9	1.96	320.9	0	0	982.9	19	49.2	13.279
2023-07-28 17:00	0.10	0.45	0.81	1.89	319.9	0	0	983.1	18.6	50	13.278
2023-07-28 18:00	0.30	0.585	1.17	1.72	325.6	0	0	983.3	18.4	52.1	13.273
2023-07-28 19:00	0.30	0.72	1.08	1.39	347.6	0	0	983.8	16.6	58.3	12.664
2023-07-28 20:00	0.10	0.54	0.9	1.37	342.5	0	0	984.6	15	60.6	12.511
2023-07-28 21:00	0.20	0.45	0.765	1.01	355	0	0	985	13.9	64.2	12.452
2023-07-28 22:00	0.30	0.45	0.72	0.73	8.4	0	0	984.9	13.2	65	12.398
2023-07-28 23:00	0.30	0.765	1.53	0.3	16.4	0	0	984.4	10.6	76.6	12.365

2023-07-29 0:00	0.20	1.305	2.475	0.34	196.7	0	0	984.1	8.7	82	12.325
2023-07-29 1:00	0.20	1.53	2.61	0.25	264	0	0	984.4	7.2	80.8	12.293
2023-07-29 2:00	0.20	1.26	2.16	0.39	217.1	0	0	984	5.6	82.3	12.249
2023-07-29 3:00	0.10	1.35	2.115	0.26	228.4	0	0	983.8	4.4	83.4	12.211
2023-07-29 4:00	0.20	1.665	4.725	0.29	216.9	0	0	983.8	3.8	84.1	12.168
2023-07-29 5:00	0.30	1.08	1.71	0.28	255.9	0	0	984.4	4.8	83.7	12.178
2023-07-29 6:00	0.00	0.945	1.305	0.94	231.1	0	0	984.8	8.2	81.6	12.271
2023-07-29 7:00	0.20	0.585	0.855	1.38	252.9	0	0	984.7	12.8	68.2	12.741
2023-07-29 8:00	0.10	0.585	0.675	1.42	292.9	0	0	984.3	15.3	56.8	13.414
2023-07-29 9:00	0.20	0.72	0.81	1.37	299.1	0	0	983.9	15.8	57	13.576
2023-07-29 10:00	0.30	0.945	1.26	1.92	304.8	0	0	983.4	18	48.9	13.879
2023-07-29 11:00	0.50	1.26	1.53	2.15	299.7	0	0	983	19.2	46.6	13.52
2023-07-29 12:00	0.50	1.485	1.755	2.16	295.8	0	0	982.4	19.9	44.1	13.237
2023-07-29 13:00	0.40	1.575	1.98	1.96	272.4	0	0	982	20.9	41.6	13.239
2023-07-29 14:00	0.30	1.8	2.61	2.76	297.2	0	0	982	20.7	46.4	13.237
2023-07-29 15:00	0.20	1.575	1.89	1.32	284.8	0	0	982	18.5	56.6	13.242
2023-07-29 16:00	0.30	1.53	1.71	1.32	274	0	0	981.8	20.1	46.5	13.245
2023-07-29 17:00	0.20	2.07	2.61	1.02	335.4	0.6	0	981.8	18.3	60.2	12.977
2023-07-29 18:00	0.10	2.115	3.15	1.25	176.2	0	0	981.8	15.8	79.9	12.849
2023-07-29 19:00	0.00	2.025	3.465	0.91	194.3	0	0	981.4	14.8	82.2	12.585
2023-07-29 20:00	0.30	2.295	3.51	0.6	205.7	0	0	981.3	13.3	86.2	12.491
2023-07-29 21:00	0.20	2.205	3.15	0.56	210.1	0	0	981.2	12.4	87.8	12.447
2023-07-29 22:00	0.10	2.16	2.925	0.77	201.8	0	0	981.1	12.3	87	12.412
2023-07-29 23:00	0.40	2.34	3.06	0.53	198.1	0	0	981	12.3	85.7	12.38
2023-07-30 0:00	0.00	2.61	3.105	1.1	254.7	0	0	980.8	12.3	81.2	12.347
2023-07-30 1:00	0.50	2.925	3.375	1.06	244.5	0	0	980.8	11.9	78.1	12.317
2023-07-30 2:00	0.20	2.925	3.42	0.78	224.7	0	0	980.6	10.7	80.8	12.282
2023-07-30 3:00	0.20	2.925	3.285	0.65	224	0	0	980.5	10.6	80.6	12.249
2023-07-30 4:00	0.20	2.88	3.69	0.7	188.3	0	0	980.6	9.3	83.1	12.203
2023-07-30 5:00	0.20	3.015	3.69	0.76	210.3	0	0	980.8	9.7	83.3	12.196
2023-07-30 6:00	0.40	2.97	3.42	0.74	218	0	0	981.1	10.8	83.3	12.347
2023-07-30 7:00	0.50	3.015	3.42	1.51	250.2	0	0	981.4	13.1	80.1	13.015
2023-07-30 8:00	0.10	3.015	3.555	1.73	285.1	0	0	981.6	15.2	74	13.596
2023-07-30 9:00	0.40	2.88	3.15	1.84	258.7	0	0	981.3	17	66.7	13.817
2023-07-30 10:00	0.20	2.79	3.105	2.15	282.5	0	0	981.2	18.1	61.3	13.569
2023-07-30 11:00	0.20	3.015	3.69	2.35	290.8	2.5	0	980.9	17.7	65	13.075
2023-07-30 12:00	0.30	2.88	3.78	1.71	290.2	0.3	0	980.8	15	84.4	13.226
2023-07-30 13:00	0.10	3.105	3.915	2.06	305.3	0	0	980.7	17.9	71	13.219
2023-07-30 14:00	0.40	2.745	3.33	2.41	305.8	0	0	980.5	18.9	57.5	13.22
2023-07-30 15:00	0.60	2.34	3.24	2.86	332.9	0	0	980.7	19.3	52	13.222
2023-07-30 16:00	0.30	2.025	2.61	2	346.4	0	0	980.9	18.2	53.6	13.222
2023-07-30 17:00	0.40	1.845	2.16	1.53	348.4	0	0	981.3	18	54.7	13.193
2023-07-30 18:00	0.40	1.575	1.89	1.05	343.6	0	0	981.7	17	52.6	12.927
2023-07-30 19:00	0.30	1.755	2.475	0.43	314.1	0	0	982.1	15.6	63.4	12.617
2023-07-30 20:00	0.20	2.385	3.69	0.23	284.3	0	0	982.6	12.8	77.5	12.48
2023-07-30 21:00	0.10	3.105	5.22	0.27	296.2	0	0	983	10.6	80.6	12.425
2023-07-30 22:00	0.30	2.79	4.815	0.24	246.6	0	0	983.1	8.6	81.9	12.388
2023-07-30 23:00	0.20	3.06	5.445	0.3	260.8	0	0	983.2	7.6	82.2	12.349
2023-07-31 0:00	0.10	2.43	4.005	0.36	211.5	0	0	983.4	6.1	84.6	12.314
2023-07-31 1:00	0.30	2.295	3.51	0.28	266.7	0	0	983.6	6.9	85.2	12.292
2023-07-31 2:00	0.20	2.16	3.285	0.23	328.9	0	0	983.6	7.6	84.7	12.263
2023-07-31 3:00	0.20	1.98	3.195	0.37	209.8	0	0	983.7	6.3	84.4	12.213
2023-07-31 4:00	0.20	1.98	2.79	0.27	221.6	0	0	984.1	6.1	84.7	12.177
2023-07-31 5:00	0.20	1.755	2.34	0.53	250.7	0	0	984.8	6.1	86.1	12.161
2023-07-31 6:00	0.50	1.53	1.89	0.45	40.6	0	0	985.5	9	81.4	12.374
2023-07-31 7:00	0.30	1.26	1.53	0.62	139.2	0	0	985.9	12.2	75.1	12.744
2023-07-31 8:00	0.20	1.035	1.17	1.2	306.9	0	0	986.2	14.8	62.7	13.552
2023-07-31 9:00	0.50	0.99	1.17	1.25	322.6	0	0	986.2	16	56.7	13.683
2023-07-31 10:00	0.50	0.945	1.125	1.5	318.8	0	0	986.6	16.8	51.2	13.818
2023-07-31 11:00	0.40	0.99	1.215	1.77	317.4	0	0	986.5	17.3	48.2	13.343
2023-07-31 12:00	0.50	1.035	1.44	2.23	316.8	0	0	986.2	18.7	41.1	13.246
2023-07-31 13:00	0.40	1.035	1.395	2.53	308.5	0	0	986	19.3	39.1	13.243
2023-07-31 14:00	0.30	1.215	1.485	1.89	332.8	0	0	985.8	19.3	38.2	13.25
2023-07-31 15:00	0.40	1.395	1.845	2.09	344.1	0	0	986	18.9	41.9	13.251
2023-07-31 16:00	0.40	1.395	1.755	1.97	339.3	0	0	986.1	18.7	42.8	13.254
2023-07-31 17:00	0.10	1.485	1.8	1.91	342.1	0	0	986.1	18.9	41.6	13.253
2023-07-31 18:00	0.20	1.44	1.665	0.99	0.3	0	0	986.3	17.4	49	12.939
2023-07-31 19:00	0.20	1.395	1.665	0.32	22	0	0	986.5	16.4	62.2	12.603
2023-07-31 20:00	0.10	1.53	1.89	0.17	104.7	0	0	987	12.9	79.2	12.499
2023-07-31 21:00	0.30	1.8	2.25	0.34	132.5	0	0	987.4	10.4	82.9	12.447
2023-07-31 22:00	0.30	1.8	2.295	0.26	187.3	0	0	987.7	9.2	83.3	12.401
2023-07-31 23:00	0.20	1.8	2.385	0.38	146.5	0	0	987.9	8.5	85.9	12.373
2023-08-01 0:00	0.20	1.89	2.565	0.19	219	0	0	988	8.5	83.7	12.344
2023-08-01 1:00	0.20	1.755	2.16	0.56	73.4	0	0	988.1	7.9	84.3	12.303
2023-08-01 2:00	0.00	1.8	2.475	0.3	90.8	0	0	988.3	6.6	85.2	12.27
2023-08-01 3:00	0.10	1.71	2.385	0.43	97.8	0	0	988.4	5.4	86.4	12.225
2023-08-01 4:00	0.30	1.755	2.34	0.39	94.1	0	0	988.8	4.5	85.8	12.182
2023-08-01 5:00	0.40	1.62	2.25	0.4	129.8	0	0	989.3	4.4	86.2	12.164
2023-08-01 6:00	0.20	1.485	1.845	0.46	102.3	0	0	989.8	7.9	83.2	12.268
2023-08-01 7:00	0.40	1.17	1.44	1.1	113.8	0	0	990.2	13.3	69.3	12.692
2023-08-01 8:00	0.20	1.035	1.215	1.04	105	0	0	990.2	16.4	55.1	13.526
2023-08-01 9:00	0.20	1.08	1.215	1.27	52.9	0	0	990.1	18	46.9	13.8
2023-08-01 10:00	0.40	1.125	1.305	1.3	18.7	0	0	989.7	19.1	41.7	13.58
2023-08-01 11:00	0.10	1.17	1.305	1.4	266.5	0	0	989.6	19.6	37.5	13.187
2023-08-01 12:00	0.00	1.215	1.395	1.42	144.2	0	0	989.1	20.7	35.2	13.169
2023-08-01 13:00	0.30	1.35	1.665	1.41	147.7	0	0	988.7	21.3	31.8	13.107
2023-08-01 14:00	0.10	1.395	1.665	1.02	83.5	0	0	988.5	21.8	32	13.102
2023-08-01 15:00	0.10	1.485	1.62	0.97	280.4	0	0	988	22.4	29.6	13.101
2023-08-01 16:00	0.80	1.485	1.665	1.05	127.7	0	0	987.6	22.8	30.1	13.107
2023-08-01 17:00	0.50	1.53	1.665	0.88	124.4	0	0	987.2	22.6	31.5	13.111

2023-08-01 18:00	1.80	1.62	1.935	0.61	127.3	0	0	987.1	21.3	41.7	12.982
2023-08-01 19:00	0.30	1.845	2.25	0.31	104.1	0	0	987	17.3	62.2	12.61
2023-08-01 20:00	0.00	2.025	2.655	0.65	96.6	0	0	987	15.5	64.4	12.5
2023-08-01 21:00	0.40	2.205	3.375	0.77	102.4	0	0	986.9	14.7	63.7	12.451
2023-08-01 22:00	0.10	2.43	3.735	0.83	118	0	0	986.8	14.4	62.1	12.41
2023-08-01 23:00	0.20	2.61	3.825	0.36	94.6	0	0	986.7	12.2	71.7	12.364
2023-08-02 0:00	0.10	1.89	2.475	0.3	87.7	0	0	986.5	10.1	79.5	12.328
2023-08-02 1:00	0.20	1.755	2.205	0.39	134.7	0	0	986.1	10.4	77.8	12.308
2023-08-02 2:00	0.40	1.845	2.295	0.89	111	0	0	985.8	10.8	76.9	12.275
2023-08-02 3:00	0.20	1.935	2.34	0.61	139.2	0	0	985.4	10.3	78.6	12.244
2023-08-02 4:00	0.40	2.115	2.565	0.61	191.9	0	0	985.1	9.9	80.4	12.209
2023-08-02 5:00	0.30	2.745	3.105	1.15	176.4	0	0	984.9	11.3	79.3	12.212
2023-08-02 6:00	0.20	4.68	5.67	1.44	178.3	0	0	984.6	12.4	79.4	12.411
2023-08-02 7:00	0.20	6.795	7.29	1.71	172.2	0	0	984.1	13.8	78.7	12.827
2023-08-02 8:00	0.10	11.025	13.635	1.76	166	0	0	983.7	15.4	76.9	12.859
2023-08-02 9:00	0.20	12.195	12.915	1.36	167.7	0.7	0	983.3	15.5	79.5	12.497
2023-08-02 10:00	0.10	14.04	14.985	0.8	164.2	4.1	0	983.1	14.7	88	12.297
2023-08-02 11:00	0.30	17.46	18.27	1.01	144.4	4.8	0	982.8	14.8	90.9	12.238
2023-08-02 12:00	0.30	21.51	22.32	1.35	94.5	5.8	0	982	15.2	91.2	12.277
2023-08-02 13:00	0.40	23.085	23.985	1.92	102.1	5	0	980.4	15.9	91.1	12.696
2023-08-02 14:00	0.20	29.52	30.195	2.48	124.3	0.1	0	979	16.6	90.4	12.389
2023-08-02 15:00	0.20	42.525	43.38	1.96	140.6	0.3	0	978	17	89.4	12.191
2023-08-02 16:00	0.20	49.14	49.95	1.75	152.8	10.7	0	977.8	17.3	90.3	12.449
2023-08-02 17:00	0.40	39.06	39.735	1.26	170.7	0	0	977.2	18.3	89	12.845
2023-08-02 18:00	0.30	34.875	35.955	0.89	175.3	0.1	0	977	17.8	90.8	12.364
2023-08-02 19:00	0.20	29.52	31.095	0.58	198.2	0	0	976.6	17.7	91.4	12.224
2023-08-02 20:00	0.10	19.8	21.735	1.08	245.3	0	0	976.3	17.5	91.6	12.171
2023-08-02 21:00	0.10	14.31	15.975	0.91	264.4	0	0	976.1	17.2	91.3	12.168
2023-08-02 22:00	0.20	17.415	38.565	0.74	208.8	0	0	976.6	16.2	91.7	12.165
2023-08-02 23:00	0.20	12.33	33.435	0.89	184.5	0	0	976.2	15.5	92.1	12.162
2023-08-03 0:00	0.00	13.5	51.615	0.64	198.1	0	0	975.8	15.1	92.2	12.152
2023-08-03 1:00	0.20	10.305	11.34	1.36	240.6	0	0	975.4	15.1	91.6	12.146
2023-08-03 2:00	0.10	10.17	11.34	0.85	248.2	0	0	975.5	15.1	89.5	12.128
2023-08-03 3:00	0.00	9.72	11.16	0.77	235.2	0	0	975.5	14.3	90.3	12.108
2023-08-03 4:00	0.10	9.45	10.575	0.84	221.5	0	0	975.6	13.9	90.5	12.108
2023-08-03 5:00	0.00	9.27	10.26	1.38	242.7	0	0	975.8	14	89.6	12.123
2023-08-03 6:00	0.20	7.74	8.685	1.96	256	0	0	975.8	14.7	87.6	12.3
2023-08-03 7:00	0.20	6.66	7.695	2.52	267.3	0	0	975.8	15.9	85.2	12.756
2023-08-03 8:00	0.10	6.525	7.605	2.64	280.1	0	0	975.9	17.3	81.7	13.209
2023-08-03 9:00	0.20	7.2	8.235	2.08	288.5	0	0	975.9	17.4	82.7	12.938
2023-08-03 10:00	0.10	8.235	9.18	1.35	285.5	0	0	975.8	18	82.1	12.973
2023-08-03 11:00	0.20	9.63	10.71	2.09	263.4	0	0	976	18.4	81	13.185
2023-08-03 12:00	0.20	12.465	13.59	1.95	268.5	0	0	975.7	20	73.6	13.647
2023-08-03 13:00	0.20	13.68	14.94	1.2	318.6	0.4	0	975.8	18.8	81.8	12.805
2023-08-03 14:00	0.40	11.07	11.925	1.42	250.9	0.3	0	975.8	17.9	87.5	13.256
2023-08-03 15:00	0.30	10.935	11.61	1.78	255.2	0	0	975.9	19.3	80.3	13.7
2023-08-03 16:00	0.10	12.015	13.095	1.83	293.2	0	0	975.7	20.8	73.5	13.221
2023-08-03 17:00	0.20	12.15	13.23	1.79	279.8	0	0	976.1	20.7	76.8	13.222
2023-08-03 18:00	0.20	12.96	14.535	1.66	311.1	1.2	0	976.6	19.5	76.4	12.819
2023-08-03 19:00	0.30	13.41	14.94	1.12	303.1	2.5	0	977.2	16.9	88.5	12.52
2023-08-03 20:00	0.60	14.4	16.245	1.27	308.3	0	0	977.8	16.2	89.4	12.461
2023-08-03 21:00	0.30	16.74	18.135	1.14	327.2	0	0	978.2	16	90.5	12.424
2023-08-03 22:00	0.30	19.035	20.385	0.88	328.9	0	0	978.6	16	91.2	12.394
2023-08-03 23:00	0.50	30.6	31.68	1.05	332.9	0	0	979	15.8	91.2	12.366
2023-08-04 0:00	0.10	48.105	49.23	1.27	332.3	0	0	979.4	15.4	90.5	12.34
2023-08-04 1:00	0.20	49.545	50.49	1.2	337.8	0	0	979.9	15.1	90.4	12.318
2023-08-04 2:00	0.10	46.8	47.655	1.16	332.1	0	0	980.4	14.9	90.3	12.299
2023-08-04 3:00	0.30	43.11	44.1	1.17	331	0	0	980.7	14.7	90.3	12.275
2023-08-04 4:00	0.30	40.185	41.31	1.42	319.8	0	0	981.1	14	89.7	12.255
2023-08-04 5:00	0.20	26.325	27.36	1.44	317.8	0	0	981.7	12.9	88.5	12.241
2023-08-04 6:00	0.30	16.245	16.92	1.72	325.9	0	0	982.4	12.7	87.6	12.29
2023-08-04 7:00	0.20	11.61	12.195	1.88	336.8	0	0	983.2	12.8	84.6	12.728
2023-08-04 8:00	0.10	9.09	9.495	1.62	334.4	0	0	983.7	13.7	81.8	13.27
2023-08-04 9:00	0.20	7.83	8.46	1.83	333.5	0	0	984.1	14.9	77	13.629
2023-08-04 10:00	0.10	6.3	6.975	1.94	338.6	0	0	984.4	16.6	68.1	13.881
2023-08-04 11:00	0.40	6.39	7.2	2.03	345.1	0	0	984.5	17.7	63	13.538
2023-08-04 12:00	0.50	6.345	6.975	2.07	340.7	0	0	984.8	18.5	58.6	13.233
2023-08-04 13:00	0.50	5.985	6.525	2.01	338.9	0	0	984.6	19	56.4	13.229
2023-08-04 14:00	0.50	5.58	5.985	1.91	347	0	0	984.8	19.3	54.1	13.231
2023-08-04 15:00	0.20	4.995	5.535	2.06	342.8	0	0	985.1	19.8	51.2	13.236
2023-08-04 16:00	0.40	4.905	5.4	1.81	339.9	0	0	985.5	20.1	48.3	13.24
2023-08-04 17:00	0.40	4.455	4.86	1.6	327.2	0	0	985.4	20.1	47.6	13.218
2023-08-04 18:00	0.30	4.095	4.455	1.3	314.2	0	0	985.2	19.9	50.5	13.14
2023-08-04 19:00	0.20	4.545	5.22	0.84	304.4	0	0	985.3	17.9	60.3	12.604
2023-08-04 20:00	0.10	5.4	6.795	0.48	280.5	0	0	985.5	14.7	74.4	12.499
2023-08-04 21:00	0.30	6.165	8.19	0.37	312.9	0	0	985.6	13.3	78.5	12.44
2023-08-04 22:00	0.20	6.84	9.225	0.26	317.8	0	0	985.5	11.9	82.8	12.392
2023-08-04 23:00	0.20	7.11	10.26	0.23	304.3	0	0	985.9	10.2	84.6	12.348
2023-08-05 0:00	0.10	6.525	10.035	0.28	236.8	0	0	986.5	8.3	84.2	12.31
2023-08-05 1:00	0.20	5.94	8.595	0.31	203.7	0	0	986.7	7.5	84.9	12.275
2023-08-05 2:00	0.10	5.445	7.38	0.19	207.8	0	0	986.8	6.5	84.8	12.249
2023-08-05 3:00	0.10	4.23	6.705	0.23	226	0	0	986.9	5.9	84	12.21
2023-08-05 4:00	0.10	3.87	14.04	0.22	224.6	0	0	987	4.8	85.2	12.187
2023-08-05 5:00	0.20	3.285	7.38	0.23	234.4	0	0	987.2	4.9	85.3	12.182
2023-08-05 6:00	0.30	3.24	3.825	0.52	266.9	0	0	987.7	8.2	83.9	12.259
2023-08-05 7:00	0.20	4.275	4.5	0.93	293	0	0	988	13.6	74.5	12.67
2023-08-05 8:00	0.10	3.645	3.915	1.28	323.3	0	0	988.1	17.3	57	13.481
2023-08-05 9:00	0.60	6.345	6.66	1.55	320.3	0	0	988.1	19	48.1	13.739
2023-08-05 10:00	0.50	6.93	7.2	1.57	314	0	0	987.9	19.7	46.1	13.635
2023-08-05 11:00	0.30	5.94	6.345	1.8	319.7	0	0	987.6	20.1	44.3	13.183

2023-08-05 12:00	0.20	5.715	6.03	1.46	327.1	0	0	987.2	20.8	41.9	13.181
2023-08-05 13:00	0.30	5.94	6.345	1.71	323.9	0	0	986.9	21.8	39.3	13.177
2023-08-05 14:00	0.60	6.21	6.48	1.27	341.5	0	0	986.5	22.1	38.3	13.177
2023-08-05 15:00	0.20	6.435	6.705	1.35	338.5	0	0	986	22.8	37.2	13.172
2023-08-05 16:00	0.60	6.885	7.2	1.31	343.9	0	0	985.7	22.9	37.4	13.167
2023-08-05 17:00	0.40	7.2	7.38	0.81	348.7	0	0	985.5	22.6	38.9	13.124
2023-08-05 18:00	1.10	7.425	7.605	0.53	338.9	0	0	985.3	22.6	41.8	13.078
2023-08-05 19:00	0.20	6.975	7.47	0.24	9.4	0	0	985.2	19.6	63.1	12.625
2023-08-05 20:00	0.10	7.56	8.415	0.26	127.1	0	0	985.3	14.5	78	12.516
2023-08-05 21:00	0.20	7.875	8.685	0.26	145.6	0	0	985.3	12.4	84.9	12.461
2023-08-05 22:00	0.10	7.875	9.045	0.31	148.1	0	0	985.2	11.1	86.4	12.419
2023-08-05 23:00	0.20	7.605	8.865	0.3	207.4	0	0	985.1	10	86	12.381
2023-08-06 0:00	0.20	7.02	8.325	0.27	162.7	0	0	984.9	9.1	85	12.348
2023-08-06 1:00	0.20	6.75	8.01	0.22	193.2	0	0	984.7	8.4	85.5	12.317
2023-08-06 2:00	0.20	7.47	8.595	0.23	255.7	0	0	984.7	8.5	83.9	12.282
2023-08-06 3:00	0.30	7.29	8.1	0.27	196.6	0	0	984.5	8.1	85.1	12.256
2023-08-06 4:00	0.20	6.255	7.29	0.22	145.6	0	0	984.4	7.5	84.7	12.229
2023-08-06 5:00	0.20	5.715	6.795	0.2	156.4	0	0	984.6	7.2	85.7	12.231
2023-08-06 6:00	0.30	6.705	7.29	0.51	160.9	0	0	984.4	10.6	83.1	12.313
2023-08-06 7:00	0.20	6.975	7.335	0.88	149.3	0	0	984.4	14.8	73.6	12.768
2023-08-06 8:00	0.30	4.86	5.31	1.32	174.2	0	0	984.5	19.4	54.7	13.486
2023-08-06 9:00	0.40	4.815	5.265	1.59	183.2	0	0	984.3	21.7	46.2	13.764
2023-08-06 10:00	0.30	6.84	7.155	1.39	174	0	0	983.8	22.9	41.3	13.585
2023-08-06 11:00	0.00	8.595	9	1.46	181.8	0	0	983.4	23.7	38	13.228
2023-08-06 12:00	0.30	9.225	9.585	1.63	183	0	0	982.8	24.2	36.5	13.217
2023-08-06 13:00	0.30	10.215	10.485	1.6	159.7	0	0	982.3	24.6	35.9	13.217
2023-08-06 14:00	0.30	10.8	11.115	1.5	157.9	0	0	981.8	25.3	35	13.216
2023-08-06 15:00	0.70	10.89	11.205	1.65	143.7	0	0	981.4	25.4	34.7	13.216
2023-08-06 16:00	1.40	11.205	11.61	1.14	167.8	0	0	981.1	25.8	33.8	13.214
2023-08-06 17:00	1.70	10.26	10.755	1.33	159.5	0	0	980.8	25.4	36.4	13.215
2023-08-06 18:00	1.40	9.54	10.215	0.86	130.3	0	0	980.5	24	43.3	13.168
2023-08-06 19:00	0.80	9.27	9.99	0.46	82.4	0	0	980.3	21.5	58.6	12.639
2023-08-06 20:00	0.20	8.775	9.81	0.54	92.7	0	0	980.2	19.5	59.9	12.522
2023-08-06 21:00	0.10	8.505	9.54	0.52	91.1	0	0	980.2	17.8	65.1	12.468
2023-08-06 22:00	0.20	8.235	8.955	0.74	98.9	0	0	980	16.9	67.4	12.431
2023-08-06 23:00	0.10	8.325	9.18	0.81	110.4	0	0	980.1	16.7	68	12.4
2023-08-07 0:00	0.10	8.55	9.675	0.98	110	0	0	979.9	16.5	69.9	12.369
2023-08-07 1:00	0.20	8.415	9.405	0.73	107.7	0	0	979.6	16	72.3	12.343
2023-08-07 2:00	0.30	8.19	9.315	0.52	98.9	0	0	979.4	15.3	75.6	12.321
2023-08-07 3:00	0.30	7.92	9.09	0.29	66.7	0	0	978.9	14.1	81.8	12.3
2023-08-07 4:00	0.30	8.19	9.63	0.43	69.4	0	0	978.7	13.6	82.3	12.274
2023-08-07 5:00	0.20	7.83	9.36	0.24	78.4	0	0	978.6	13.2	84.4	12.277
2023-08-07 6:00	0.10	8.19	9.765	0.34	72.4	0	0	978.7	13.5	85.8	12.354
2023-08-07 7:00	0.20	8.505	9.72	0.41	99.6	0	0	978.8	15.3	80.5	12.709
2023-08-07 8:00	0.10	8.685	9.945	0.65	110.9	0	0	978.8	17.2	75.7	13.137
2023-08-07 9:00	0.10	8.19	9.135	1.12	139.5	0	0	978.8	18.9	70.8	13.594
2023-08-07 10:00	0.40	6.93	7.785	1.75	156.7	0	0	978.5	21.5	59.1	13.866
2023-08-07 11:00	0.50	6.57	7.56	1.21	162	0	0	978.1	22.7	53.6	13.534
2023-08-07 12:00	0.40	6.165	7.02	1.1	159.1	0	0	977.7	23.3	49.8	13.24
2023-08-07 13:00	0.70	6.21	7.425	1.21	136.2	0	0	977.4	24.1	42.5	13.226
2023-08-07 14:00	0.20	5.805	6.66	1.3	143.6	0	0	977.3	24.2	41.9	13.229
2023-08-07 15:00	0.60	5.175	5.85	0.78	151.1	0	0	977.1	23.2	48.5	13.232
2023-08-07 16:00	0.40	5.085	6.525	0.99	151.1	0	0	976.9	23.3	50.3	13.238
2023-08-07 17:00	0.40	4.905	6.975	2.04	151.4	0	0	976.8	23.4	48.3	13.236
2023-08-07 18:00	0.30	4.95	6.66	1.6	147	0	0	976.8	22.5	50.5	13.202
2023-08-07 19:00	0.20	7.875	8.685	1.1	125.2	0	0	976.8	20.1	54.6	12.649
2023-08-07 20:00	0.30	8.595	9.45	0.77	130.2	0	0	977.1	17.7	62.4	12.512
2023-08-07 21:00	0.00	9.045	10.26	0.29	132.3	0	0	977.1	14.6	76.6	12.453
2023-08-07 22:00	0.10	9.225	10.71	0.46	98.9	0	0	976.8	12.5	84.1	12.397
2023-08-07 23:00	0.40	9.45	10.71	0.71	130.9	0	0	976.5	13.1	78.3	12.369
2023-08-08 0:00	0.30	9.585	10.755	0.59	316.8	0	0	976.7	12.4	80.9	12.336
2023-08-08 1:00	0.30	9.045	10.26	0.34	100	0	0	976.3	10.3	85.8	12.302
2023-08-08 2:00	0.20	8.595	9.855	0.34	183.8	0	0	976.2	9.3	86.2	12.269
2023-08-08 3:00	0.10	8.325	9.675	0.33	84.7	0	0	976	9.1	86.5	12.239
2023-08-08 4:00	0.10	7.785	9.09	0.24	111.7	0	0	975.9	8.8	86.7	12.21
2023-08-08 5:00	0.20	7.65	8.685	0.29	255.1	0	0	976.2	8.6	86.1	12.207
2023-08-08 6:00	0.30	8.325	9.045	0.49	244.7	0	0	976.5	10.9	85.3	12.333
2023-08-08 7:00	0.00	9.09	9.675	0.93	260.9	0	0	976.8	15.2	72.8	12.816
2023-08-08 8:00	0.20	8.775	9.855	1.43	268.4	0	0	976.9	18.5	57.1	13.584
2023-08-08 9:00	0.30	7.965	9.405	1.53	275.4	0	0	976.8	19.5	51.5	13.814
2023-08-08 10:00	0.30	7.65	7.965	1.45	242.6	0	0	976.6	20.8	47.9	13.619
2023-08-08 11:00	0.20	7.83	8.235	1.55	257.4	0	0	976.1	22.4	43.4	13.182
2023-08-08 12:00	0.60	7.65	8.775	1.48	291.1	0	0	975.4	23.6	43.1	13.171
2023-08-08 13:00	0.30	7.74	8.775	1.78	261.9	0	0	974.8	24.5	42.9	13.148
2023-08-08 14:00	0.30	8.28	8.73	1.51	302.8	0	0	974.3	25.3	42.4	13.15
2023-08-08 15:00	0.30	8.865	9.36	1.33	327.3	0	0	974.4	25	44.7	13.16
2023-08-08 16:00	0.60	9.315	9.675	1.75	289.9	0	0	974.3	24.6	47.8	13.168
2023-08-08 17:00	0.20	9.495	9.855	1.58	315.8	0	0	974.1	24.1	50.8	13.176
2023-08-08 18:00	0.50	9.63	9.945	0.79	330.5	0	0	973.8	24	51.9	13.091
2023-08-08 19:00	0.10	9.9	10.8	0.21	320.1	0	0	973.7	21.8	66.8	12.629
2023-08-08 20:00	0.20	10.71	11.475	0.25	239	0	0	973.8	17.4	80.5	12.522
2023-08-08 21:00	0.20	10.395	11.025	0.45	191.3	0	0	973.4	15.2	83.8	12.47
2023-08-08 22:00	0.30	10.44	11.205	0.47	212.8	0	0	973.2	14.8	84.3	12.433
2023-08-08 23:00	0.10	11.25	11.88	0.78	224.9	0	0	973.1	15.4	83.6	12.4
2023-08-09 0:00	0.20	10.98	11.52	0.46	190.7	0	0	972.9	14.3	86.7	12.37
2023-08-09 1:00	0.20	10.575	11.07	0.54	191.8	0	0	972.5	13.9	87.9	12.344
2023-08-09 2:00	0.20	10.935	11.43	0.74	194	0	0	972.2	14.2	87.6	12.314
2023-08-09 3:00	0.20	10.44	10.845	0.79	188.4	0	0	972.2	14	87.9	12.287
2023-08-09 4:00	0.10	10.305	10.8	0.8	176	0	0	972.3	13.6	87.9	12.258
2023-08-09 5:00	0.10	10.8	11.25	0.95	186.6	0	0	972.5	13.2	87.6	12.247

2023-08-09 6:00	0.20	11.25	11.745	1.14	185.3	0	0	972.4	14.2	85.5	12.351
2023-08-09 7:00	0.10	14.895	16.38	2.22	239.9	0	0	972.7	16.8	74.8	12.833
2023-08-09 8:00	0.10	17.73	19.08	2.28	252.9	0	0	972.4	18.9	67.3	13.498
2023-08-09 9:00	0.10	17.775	18.315	2.3	276.4	0	0	972.4	19.8	63.5	13.76
2023-08-09 10:00	0.30	16.47	16.92	2.03	271.9	0	0	972.2	19.9	61.1	13.741
2023-08-09 11:00	0.40	16.425	17.46	1.57	211.8	0	0	971.7	20.6	58.9	13.249
2023-08-09 12:00	0.50	15.48	16.245	2.44	200.9	0	0	971.1	22	54.4	13.239
2023-08-09 13:00	0.40	17.055	19.17	2.67	191.3	0	0	970.5	23.3	51.1	13.239
2023-08-09 14:00	0.30	16.74	18.54	2.8	194.6	0	0	969.7	24	48.1	13.239
2023-08-09 15:00	0.20	14.4	18.495	2.08	275.5	0	0	969.6	22.3	53.6	13.094
2023-08-09 16:00	0.20	11.88	12.375	1.02	356.9	0	0	969.6	18.9	69.5	13.11
2023-08-09 17:00	0.10	12.105	15.93	1.26	267.6	7.6	0	969.4	17.4	75.5	12.723
2023-08-09 18:00	0.20	11.43	13.365	1	173	0.1	0	969.1	16.6	84.7	12.704
2023-08-09 19:00	0.00	14.445	16.02	1.17	21.6	6.5	0	969.6	15.8	87.7	12.507
2023-08-09 20:00	0.10	13.5	14.94	0.6	149.1	0	0	969.8	14.3	89.6	12.429
2023-08-09 21:00	0.10	12.78	13.635	0.67	133.4	0	0	969.8	13.6	90.7	12.401
2023-08-09 22:00	0.30	12.6	13.32	0.92	227.4	2.5	0	969.7	14	89.7	12.374
2023-08-09 23:00	0.20	11.52	12.555	0.67	142.4	0.1	0	968.9	14	88	12.338
2023-08-10 0:00	0.10	11.385	12.195	0.93	265.8	0	0	969	13.4	86.8	12.297
2023-08-10 1:00	0.00	9.675	11.295	0.37	177.4	0	0	968.7	11.6	87.4	12.251
2023-08-10 2:00	0.20	10.575	33.345	0.69	245.4	0	0	968.7	10.9	88.5	12.209
2023-08-10 3:00	0.10	11.025	49.59	0.52	225	0	0	968.7	10.5	88	12.185
2023-08-10 4:00	0.20	5.895	7.38	0.53	236	0	0	968.7	10.3	88.3	12.168
2023-08-10 5:00	0.10	5.265	6.435	0.58	209.8	0	0	969	10	88.5	12.177
2023-08-10 6:00	0.20	5.355	6.12	0.75	260.9	0	0	969.5	11.4	88.8	12.285
2023-08-10 7:00	0.20	4.14	4.815	1.17	298.5	0	0	969.6	13.1	87.5	12.725
2023-08-10 8:00	0.00	2.79	3.285	1.31	309.8	0	0	969.9	15.4	80.4	13.49
2023-08-10 9:00	0.10	1.98	2.61	2.09	272.5	0	0	970	16.5	75.1	13.803
2023-08-10 10:00	0.10	1.44	2.16	2.65	273.4	2.6	0	970.6	15.2	79.1	13.506
2023-08-10 11:00	0.20	1.17	1.62	2.16	288.8	0	0	970.7	15.2	78	13.422
2023-08-10 12:00	0.10	1.26	1.485	2.08	291.5	0.2	0	970.4	15.6	78.7	13.255
2023-08-10 13:00	0.10	1.305	1.62	1.73	276	0	0	970.2	16.7	73.7	13.257
2023-08-10 14:00	0.30	1.17	1.575	2.51	265.8	0	0	969.9	19.1	56.8	13.26
2023-08-10 15:00	0.40	1.8	2.115	2.41	290.1	0	0	970	19.7	52.1	13.255
2023-08-10 16:00	0.40	1.755	2.07	1.86	311.8	0	0	970.2	19.5	52.4	13.217
2023-08-10 17:00	0.10	2.115	2.7	2.07	298.4	5.6	0	970.8	17.4	65.7	12.975
2023-08-10 18:00	0.30	2.385	3.465	0.87	132.9	2.7	0	971.6	13.8	87	13.067
2023-08-10 19:00	0.00	2.115	2.88	0.61	202.1	0	0	971.7	15	88.1	12.849
2023-08-10 20:00	0.10	2.475	3.51	0.74	216	0	0	972.3	13.6	88.6	12.497
2023-08-10 21:00	0.10	2.475	3.375	0.95	265	0	0	972.9	13.1	87.9	12.443
2023-08-10 22:00	0.40	3.375	3.87	1.54	319.4	0	0	973.5	13.5	88.3	12.386
2023-08-10 23:00	0.40	5.805	6.48	1.48	327.2	0	0	973.8	13.5	89.5	12.369
2023-08-11 0:00	0.10	8.28	8.865	1.41	320.4	0	0	974	13.4	88.2	12.343
2023-08-11 1:00	0.20	9.45	10.08	1.33	321.1	0	0	974.2	13.1	88.1	12.314
2023-08-11 2:00	0.20	7.875	8.37	1.34	319.9	0	0	974.5	13	88.2	12.289
2023-08-11 3:00	0.10	6.12	6.615	1.26	331	0	0	975.2	12.8	86.7	12.259
2023-08-11 4:00	0.20	3.78	4.41	1.12	342.4	0	0	975.9	12	88	12.214
2023-08-11 5:00	0.20	2.925	3.375	1.2	321.7	0	0	976.6	11.5	87	12.181
2023-08-11 6:00	0.20	3.24	3.87	1.1	330.2	0	0	976.4	11.5	87.3	12.273
2023-08-11 7:00	0.10	5.175	5.49	1.38	317.5	0	0	977.2	11.4	85.6	12.228
2023-08-11 8:00	0.20	5.625	5.985	1.32	298.5	0	0	977.6	11.5	85.9	12.323
2023-08-11 9:00	0.10	5.985	6.255	1.82	289.5	0	0	978.1	12.1	83.8	13.041
2023-08-11 10:00	0.10	7.83	8.055	1.57	311.2	0	0	978.1	13	78.7	13.517
2023-08-11 11:00	0.00	5.49	5.805	1.25	316.6	0	0	977.7	15	69.4	13.857
2023-08-11 12:00	0.20	3.915	4.365	1.28	354.3	0	0	977.3	16.9	61.6	13.629
2023-08-11 13:00	0.20	3.645	4.005	1.11	0.7	0	0	977.1	18.5	54.9	13.15
2023-08-11 14:00	0.60	3.825	4.185	0.78	141.8	0	0	977	19	52.2	13.133
2023-08-11 15:00	0.30	4.275	4.545	1.14	231.5	0	0	976.8	19.8	49.4	13.147
2023-08-11 16:00	0.50	4.59	4.995	0.72	245.3	0	0	976.9	19.4	53.6	13.072
2023-08-11 17:00	0.30	5.22	5.625	0.68	177.1	0	0	977.1	18.1	64.7	12.667
2023-08-11 18:00	0.20	5.85	6.345	0.38	150.6	0	0	977.2	17.3	73.6	12.594
2023-08-11 19:00	0.10	6.84	7.83	0.28	89	0	0	977.1	15.8	82.5	12.493
2023-08-11 20:00	0.10	7.29	8.28	0.32	60.1	0	0	977.1	14.4	87.1	12.44
2023-08-11 21:00	0.10	7.92	9.045	0.41	84.2	0	0	977	14.1	86.2	12.406
2023-08-11 22:00	0.10	8.955	10.395	0.31	76.4	0	0	976.8	13.6	87.5	12.375
2023-08-11 23:00	0.10	9.405	10.71	0.34	72.1	0	0	976.8	13.3	87	12.348
2023-08-12 0:00	0.20	9.81	10.935	0.35	67.4	0	0	976.7	13.2	85.7	12.316
2023-08-12 1:00	0.30	10.35	11.34	0.56	61.6	0.1	0	976.8	13	85.9	12.277
2023-08-12 2:00	0.20	9.945	10.98	0.78	52.8	0	0	976.3	12.6	87.4	12.24
2023-08-12 3:00	0.10	8.82	9.54	0.76	64.3	0	0	976	12.4	87.7	12.214
2023-08-12 4:00	0.20	7.2	7.695	0.94	52.6	0	0	976	12.5	86.8	12.19
2023-08-12 5:00	0.30	5.76	6.435	1.08	46.1	0.1	0	975.9	12.5	86.2	12.163
2023-08-12 6:00	0.30	5.805	6.435	1.23	51.8	0.2	0	975.9	12.4	87.2	12.165
2023-08-12 7:00	0.20	6.66	7.245	0.85	69.5	0.1	0	975.9	12.7	88.3	12.216
2023-08-12 8:00	0.10	7.605	8.01	0.98	57.8	0.3	0	975.7	13.2	89.1	12.319
2023-08-12 9:00	0.20	8.325	8.685	1.43	48.3	0	0	975.2	13.7	89.1	12.876
2023-08-12 10:00	0.10	7.83	8.1	1.68	51.1	0.3	0	975.1	14.5	88.2	13.164
2023-08-12 11:00	0.20	7.29	7.65	1.87	53.8	0.4	0	975	15.2	86.2	13.21
2023-08-12 12:00	0.20	7.155	7.65	1.85	55.4	0.4	0	975.1	14.6	88.1	13.082
2023-08-12 13:00	0.20	6.705	7.425	1.51	30.4	0.9	0	975.2	14.7	88.2	13.147
2023-08-12 14:00	0.20	6.435	7.155	1.41	27.5	0.4	0	975.3	14.6	89.3	12.924
2023-08-12 15:00	0.10	6.75	7.38	1.25	21.8	0.4	0	975.5	14.8	89.9	12.912
2023-08-12 16:00	0.20	6.795	7.47	1.47	13.7	0.4	0	975.8	14.4	88.8	12.731
2023-08-12 17:00	0.10	6.885	7.515	1.16	7.5	0.2	0	976.1	14.2	90.4	12.587
2023-08-12 18:00	0.10	6.84	7.56	0.83	354.7	0.1	0	976.5	14.3	90.7	12.451
2023-08-12 19:00	0.30	5.85	6.39	0.96	347.4	0	0	976.7	14.2	90.5	12.374
2023-08-12 20:00	0.10	9	9.765	1.07	343.7	0	0	977.1	14	90.5	12.321
2023-08-12 21:00	0.10	15.12	15.84	1.2	343.2	0	0	977.4	13.8	90.2	12.266
2023-08-12 22:00	0.10	16.785	17.505	1.15	345.6	0	0	977.4	13.6	89.7	12.227
2023-08-12 23:00	0.20	23.625	24.345	1.12	341.3	0	0	977.5	13.3	89.5	12.183

2023-08-13 0:00	0.10	29.925	30.78	1.1	335.9	0	0	977.5	13.1	89.7	12.15
2023-08-13 1:00	0.10	37.575	38.52	1.14	336.4	0	0	977.7	13	89.8	12.135
2023-08-13 2:00	0.20	26.46	27.36	1.19	330.6	0	0	977.9	12.9	89.9	12.117
2023-08-13 3:00	0.00	18.36	19.215	1.52	328.4	0	0	978.1	12.6	89.3	12.1
2023-08-13 4:00	0.10	7.29	8.28	1.35	323	0	0	978.8	11.5	86.9	12.088
2023-08-13 5:00	0.20	4.95	5.805	1.11	329.8	0	0	979.4	11.3	87.3	12.082
2023-08-13 6:00	0.30	3.375	4.14	1.5	317.9	0	0	979.8	11.1	87.2	12.087
2023-08-13 7:00	0.10	2.565	3.015	1.23	324	0	0	980.2	11.4	87.2	12.238
2023-08-13 8:00	0.10	2.52	3.105	1.38	325.9	0	0	980.4	12.5	85.4	13.085
2023-08-13 9:00	0.10	2.79	3.375	1.64	322	0	0	980.7	14.2	79.3	13.724
2023-08-13 10:00	0.20	3.915	4.545	1.85	314.9	0	0	981.4	15.8	73.4	13.846
2023-08-13 11:00	0.00	12.285	13.005	1.94	311.4	0	0	981.8	16.2	73.5	13.332
2023-08-13 12:00	0.00	33.84	34.65	2.13	327.8	0	0	981.7	17.3	70.9	13.22
2023-08-13 13:00	0.10	31.095	31.815	2.08	313.4	0	0	981.9	17.9	70.4	13.204
2023-08-13 14:00	0.30	33.795	34.605	2.3	314.5	0	0	982.2	18	70.4	13.202
2023-08-13 15:00	0.20	50.4	51.165	2.34	318.5	0	0	982.8	17.2	73.8	13.214
2023-08-13 16:00	0.30	170.235	171.27	2.01	321.5	0	0	983	17.4	72.3	13.217
2023-08-13 17:00	0.30	152.28	153.18	1.32	320.5	0	0	983.1	17.7	70.9	13.222
2023-08-13 18:00	0.30	141.3	142.245	0.69	290.8	0	0	983.2	17.2	76.2	12.751
2023-08-13 19:00	0.20	138.375	139.455	0.83	268	0	0	983.5	16.1	81.2	12.514
2023-08-13 20:00	0.30	96.93	98.19	0.62	292.5	0	0	983.7	14.8	84.8	12.453
2023-08-13 21:00	0.00	50.49	51.525	0.96	292.3	0	0	983.9	14.1	86	12.412
2023-08-13 22:00	0.20	28.485	29.43	0.83	295.3	0	0	984.3	13.3	87	12.371
2023-08-13 23:00	0.20	17.01	18.135	0.63	303.2	0	0	984.3	12.4	87.3	12.332
2023-08-14 0:00	0.10	12.195	13.995	0.46	305.8	0	0	984.1	11.3	85.8	12.299
2023-08-14 1:00	0.30	7.155	8.145	0.84	315.3	0	0	984.1	10.7	85.3	12.273
2023-08-14 2:00	0.10	5.445	7.155	0.71	261.6	0	0	984.2	9.5	83.1	12.238
2023-08-14 3:00	0.10	4.725	6.345	0.76	275.2	0	0	984.2	8.2	84.4	12.208
2023-08-14 4:00	0.10	4.095	5.13	0.72	269.6	0	0	984.3	7.8	82.9	12.184
2023-08-14 5:00	0.10	3.42	4.14	0.81	287.8	0	0	984.6	7.5	83	12.165
2023-08-14 6:00	0.10	3.15	3.78	1	288.8	0	0	985.1	8	82.9	12.309
2023-08-14 7:00	0.20	2.88	3.51	1.6	309.3	0	0	985.5	10.1	78.9	12.825
2023-08-14 8:00	0.10	2.835	3.24	1.25	313.1	0	0	985.6	12.8	73.5	13.499
2023-08-14 9:00	0.10	2.565	3.15	1.69	310.7	0	0	985.5	15.4	64.6	13.801
2023-08-14 10:00	0.20	2.295	2.745	1.84	314.8	0	0	985.2	17.4	58.6	13.586
2023-08-14 11:00	0.30	2.205	2.835	1.85	328.4	0	0	985	18.3	55.4	13.229
2023-08-14 12:00	0.20	2.16	2.745	1.99	330	0	0	984.6	19.4	52.2	13.228
2023-08-14 13:00	0.60	2.16	2.61	1.99	344.7	0	0	984.1	20	49.4	13.228
2023-08-14 14:00	0.40	2.385	2.79	1.74	335.8	0	0	984	20.7	46.1	13.23
2023-08-14 15:00	0.40	2.43	2.835	1.43	2.6	0	0	983.7	21	44.5	13.235
2023-08-14 16:00	0.60	2.25	2.7	1.38	349.4	0	0	983.4	21.2	43.7	13.237
2023-08-14 17:00	0.30	2.295	2.61	1.32	329.7	0	0	983.1	21.2	42.8	13.242
2023-08-14 18:00	0.30	2.295	2.655	0.71	337.6	0	0	983.1	20.5	45.9	13.084
2023-08-14 19:00	0.10	2.97	3.78	0.24	139.3	0	0	983.1	17.3	67.7	12.578
2023-08-14 20:00	0.30	3.42	4.59	0.26	275.6	0	0	983.3	12.9	81	12.481
2023-08-14 21:00	0.30	3.645	4.95	0.2	241.4	0	0	983.5	11.1	83.4	12.426
2023-08-14 22:00	0.10	3.735	5.13	0.28	199.7	0	0	983.3	10.1	85.6	12.384
2023-08-14 23:00	0.20	3.96	5.4	0.29	240.7	0	0	983.2	9.5	85.3	12.349
2023-08-15 0:00	0.20	4.41	5.85	0.56	19.9	0	0	983.2	9.4	84.7	12.31
2023-08-15 1:00	0.20	5.4	5.985	0.54	75.1	0	0	983	10.6	80.2	12.287
2023-08-15 2:00	0.20	5.265	5.985	0.3	104.9	0	0	982.7	8.6	84.3	12.263
2023-08-15 3:00	0.20	5.355	6.975	0.24	260.7	0	0	982.6	7.1	84.4	12.23
2023-08-15 4:00	0.20	5.04	6.66	0.3	250	0	0	982.4	5.9	85.3	12.204
2023-08-15 5:00	0.10	4.545	6.255	0.38	100.8	0	0	982.3	5.2	86.8	12.186
2023-08-15 6:00	0.10	4.05	4.905	0.28	98.6	0	0	982.5	7.7	84.9	12.254
2023-08-15 7:00	0.30	5.22	5.76	0.41	96	0	0	982.8	12.8	75.6	12.591
2023-08-15 8:00	0.20	6.21	6.66	1.3	145.2	0	0	982.8	16.1	65.6	13.442
2023-08-15 9:00	0.30	5.94	6.705	1.21	174.4	0	0	982.4	19.4	54.7	13.83
2023-08-15 10:00	0.40	4.365	4.905	1.44	188.9	0	0	981.9	20.8	43.9	13.772
2023-08-15 11:00	0.10	5.85	6.345	1.79	214.5	0	0	981.2	21.6	42.3	13.218
2023-08-15 12:00	0.00	6.3	6.705	1.81	205.6	0	0	980.5	22.3	40.2	13.219
2023-08-15 13:00	0.30	6.705	6.975	1.95	216.9	0	0	979.7	23.1	37.7	13.224
2023-08-15 14:00	0.70	7.515	8.055	2.46	188	0	0	978.9	23.7	36.9	13.228
2023-08-15 15:00	0.10	8.37	9	2.13	198.1	0.1	0	978.4	24.3	36.4	13.23
2023-08-15 16:00	0.40	7.515	7.965	2.62	211.5	0	0	978	24.4	35.3	13.23
2023-08-15 17:00	0.10	6.165	6.615	2.38	209.2	0	0	977.5	24	36.7	13.233
2023-08-15 18:00	0.60	6.165	6.525	1.32	205.9	0	0	977.2	22.1	41.4	12.789
2023-08-15 19:00	0.40	6.21	6.885	0.68	173.9	0	0	976.9	18.8	54.6	12.543
2023-08-15 20:00	0.10	6.57	7.515	0.47	162.6	0	0	977	16.1	66.9	12.475
2023-08-15 21:00	0.20	6.705	7.56	0.9	189.9	0	0	977.2	16	67.7	12.433
2023-08-15 22:00	0.20	9.405	10.125	1.45	232.9	0.3	0	977.5	17	64.7	12.39
2023-08-15 23:00	0.10	12.555	13.05	0.83	197.4	0	0	977.5	15.7	76.6	12.372
2023-08-16 0:00	0.10	12.87	13.68	1.64	230	0.6	0	977.7	15.3	77.7	12.325
2023-08-16 1:00	0.10	12.24	12.69	1.54	195	0.2	0	977.7	14.1	86.7	12.292
2023-08-16 2:00	0.20	14.04	14.535	1.12	205.2	0	0	977.7	13.7	88	12.272
2023-08-16 3:00	0.10	15.21	15.75	0.93	215.6	0	0	977.7	13	88.2	12.239
2023-08-16 4:00	0.10	15.525	16.065	0.93	223.2	0	0	977.9	12.5	88.2	12.213
2023-08-16 5:00	0.10	15.12	15.57	0.75	205.4	0	0	978.2	12.2	87.7	12.206
2023-08-16 6:00	0.20	14.67	15.165	0.55	208.4	0	0	978.3	12.3	89.1	12.308
2023-08-16 7:00	0.10	15.3	15.75	0.84	225	0	0	978.4	13.6	87.1	12.77
2023-08-16 8:00	0.10	16.065	16.515	0.9	229.4	0	0	978.6	15.6	76.8	13.423
2023-08-16 9:00	0.40	16.515	17.1	1.33	141.9	0	0	978.4	17.3	70.2	13.804
2023-08-16 10:00	0.50	15.075	15.75	1.68	143.9	0	0	977.9	19.1	66.5	13.804
2023-08-16 11:00	0.20	12.465	13.23	1.82	184.3	0	0	977.4	20.6	60.9	13.243
2023-08-16 12:00	0.40	12.015	12.78	1.67	175.4	0	0	976.9	21.8	55.9	13.226
2023-08-16 13:00	0.20	12.42	13.185	1.46	156.7	0	0	976.3	22	56.6	13.23
2023-08-16 14:00	0.40	11.385	12.42	2.22	156.7	0	0	975.5	23.6	51.8	13.231
2023-08-16 15:00	0.30	10.575	11.43	2.38	170.8	0	0	974.8	24.3	48.4	13.232
2023-08-16 16:00	0.20	14.13	14.94	2.33	186.4	0	0	974.4	24.3	46.6	13.221
2023-08-16 17:00	0.50	15.66	16.335	0.69	125.7	0	0	973.8	22.4	59	12.769

2023-08-16 18:00	0.10	16.92	17.73	0.9	118.2	0	0	973	21.3	65.8	12.586
2023-08-16 19:00	0.00	15.525	16.47	1.21	133.6	0	0	972.3	20.8	67.1	12.494
2023-08-16 20:00	0.10	9.72	10.935	1.82	144.7	0	0	971.6	20.8	69.2	12.442
2023-08-16 21:00	0.40	8.1	9.63	2.48	157.2	0	0	971.1	20.8	71.8	12.41
2023-08-16 22:00	0.30	6.84	8.01	2.93	167	0	0	970.8	20.7	74.4	12.381
2023-08-16 23:00	0.30	6.345	7.605	2.97	165	0	0	970.1	20.7	74.2	12.363
2023-08-17 0:00	0.10	6.435	7.785	2.75	163.2	0	0	969.2	20.2	73.8	12.333
2023-08-17 1:00	0.20	6.885	8.28	2.87	158.3	0	0	968.5	19.7	74.6	12.305
2023-08-17 2:00	0.30	6.93	8.235	3.15	168.3	0	0	967.8	19.7	75.2	12.273
2023-08-17 3:00	0.20	7.155	8.37	3.53	170.7	0	0	967.2	19.7	74.5	12.259
2023-08-17 4:00	0.40	6.885	8.235	3.68	171.8	0	0	966.4	19.5	72.7	12.236
2023-08-17 5:00	0.20	6.885	8.28	3.87	172.1	0	0	965.8	19.2	71.4	12.226
2023-08-17 6:00	0.30	7.695	9.135	4.05	167.7	0	0	965.6	18.9	70.8	12.254
2023-08-17 7:00	0.60	9.045	10.8	4.03	160.5	0	0	965.2	18.9	70.9	12.334
2023-08-17 8:00	0.30	9.81	11.565	3.91	169.2	0	0	964.9	19.2	70.8	12.735
2023-08-17 9:00	0.20	10.26	11.745	3.89	168.4	0	0	965.2	20	69	13.301
2023-08-17 10:00	0.10	10.215	11.835	4.02	164.5	0	0	965.3	20.2	69.8	13.089
2023-08-17 11:00	0.30	10.215	11.43	2.44	154.1	0.4	0	965.1	18.9	80.5	12.977
2023-08-17 12:00	0.30	10.08	11.16	2.3	150.2	1.7	0	965	18.5	83.8	12.773
2023-08-17 13:00	0.20	10.215	11.295	2.81	158.1	6.6	0	964.6	18.4	85.4	12.937
2023-08-17 14:00	0.10	9.045	9.855	3.83	161.7	1.4	0	964.6	18.7	84.3	13.659
2023-08-17 15:00	0.20	7.83	8.46	3	165	0	0	964.9	18.5	82.1	13.459
2023-08-17 16:00	0.10	7.875	8.37	2.22	162.6	0.1	0	965.1	18.2	81.7	12.928
2023-08-17 17:00	0.40	9.99	10.485	1.45	151.5	0.1	0	965.7	17.4	85.5	12.616
2023-08-17 18:00	0.40	11.25	11.745	1.37	145.7	0.2	0	965.8	17	88.3	12.482
2023-08-17 19:00	0.10	9.09	9.765	1.43	186.8	0.5	0	966.1	16.7	89.1	12.413
2023-08-17 20:00	0.10	7.11	8.28	0.71	260.1	0	0	966.7	15.8	89.8	12.371
2023-08-17 21:00	0.10	6.75	7.875	0.81	235.6	0	0	966.8	15.3	90.5	12.341
2023-08-17 22:00	0.10	6.615	7.695	1.2	278.5	0	0	967.4	15.2	90.3	12.312
2023-08-17 23:00	0.20	3.285	4.05	2.31	309.8	0.2	0	968	14.6	89	12.272
2023-08-18 0:00	0.10	1.575	2.16	2.46	312	0.1	0	968.6	12.8	87	12.2
2023-08-18 1:00	0.00	1.17	1.71	2.37	298.1	0	0	969.4	11.7	86.8	12.166
2023-08-18 2:00	0.10	0.945	1.305	2.28	301.3	0	0	969.7	11.5	87.4	12.128
2023-08-18 3:00	0.10	0.945	1.305	2.25	308	0	0	970.1	11.4	87.4	12.111
2023-08-18 4:00	0.10	1.08	1.395	2.54	308.6	0.4	0	970.9	11	87.6	12.083
2023-08-18 5:00	0.20	0.99	1.305	2.67	310.4	0.7	0	971.8	10.8	87.4	12.073
2023-08-18 6:00	0.30	0.9	1.035	2.53	317.7	0	0	973	10.7	87.3	12.088
2023-08-18 7:00	0.20	1.845	2.025	2.66	318.7	0	0	973.5	10.7	87.1	12.145
2023-08-18 8:00	0.10	4.275	4.5	2.83	323.3	0	0	974.2	10.6	86.3	12.23
2023-08-18 9:00	0.20	12.015	12.42	2.83	323.1	0	0	974.8	11	84.2	12.749
2023-08-18 10:00	0.10	14.715	15.39	2.99	328.5	0	0	975.5	11.9	79.2	13.268
2023-08-18 11:00	0.10	14.58	15.48	2.74	335.5	0	0	976.2	13.8	71.7	13.612
2023-08-18 12:00	0.10	9.9	10.98	2.65	332	0	0	976.6	15.6	60	13.825
2023-08-18 13:00	0.40	5.67	7.38	3.61	318.9	0	0	976.4	17.2	50.5	13.312
2023-08-18 14:00	0.30	4.725	6.57	4.01	312.7	0	0	976.7	18.1	45.8	13.254
2023-08-18 15:00	0.40	4.365	5.85	3.29	315.1	0	0	976.8	18.7	44.8	13.26
2023-08-18 16:00	0.40	4.14	5.31	2.99	318.3	0	0	976.9	18.9	43.2	13.266
2023-08-18 17:00	0.30	4.095	4.725	2	323.2	0	0	977.1	18.8	44.4	13.269
2023-08-18 18:00	0.30	4.05	4.725	1.49	315	0	0	977.4	17.7	48.5	13.073
2023-08-18 19:00	0.30	4.365	5.445	0.63	306.2	0	0	978	15.3	60.7	12.558
2023-08-18 20:00	0.20	5.445	8.37	0.3	242.6	0	0	978.6	11.2	77.7	12.473
2023-08-18 21:00	0.20	5.49	7.83	0.25	247.2	0	0	978.6	9.2	82.7	12.42
2023-08-18 22:00	0.10	5.625	8.37	0.33	229.3	0	0	978.6	7.5	82.7	12.369
2023-08-18 23:00	0.00	5.355	7.29	0.37	180.7	0	0	978.8	6.5	85.1	12.328
2023-08-19 0:00	0.10	5.535	7.695	0.36	202.1	0	0	979.2	5.9	84.7	12.276
2023-08-19 1:00	0.20	5.49	7.38	0.25	162.7	0	0	979.3	5.3	84.8	12.255
2023-08-19 2:00	0.20	5.895	7.47	0.53	221.9	0	0	979.8	5.3	86	12.211
2023-08-19 3:00	0.30	5.85	7.65	0.33	262.2	0	0	980	5.1	84.5	12.181
2023-08-19 4:00	0.20	5.49	6.885	0.42	124.2	0	0	980.4	4.2	86.6	12.137
2023-08-19 5:00	0.00	5.895	7.245	0.25	265	0	0	980.7	4.7	85.5	12.117
2023-08-19 6:00	0.00	10.89	11.61	0.89	226.3	0	0	980.6	6.5	86.1	12.161
2023-08-19 7:00	0.20	18.945	19.575	1.16	215	0	0	980.6	10.7	81.7	12.638
2023-08-19 8:00	0.00	26.955	27.675	1.89	237.3	0	0	980.5	15	68.8	13.479
2023-08-19 9:00	0.20	30.735	31.59	2.06	244.9	0	0	980.2	18.2	55.1	13.789
2023-08-19 10:00	0.30	29.925	30.69	2.12	252.7	0	0	979.8	20.4	46.5	13.648
2023-08-19 11:00	0.30	28.755	29.385	2.22	219.4	0	0	979.2	22.3	42.6	13.215
2023-08-19 12:00	0.50	28.395	29.34	2.62	223.5	0	0	978.8	23.3	41.6	13.219
2023-08-19 13:00	0.30	27.495	28.215	2.18	212.5	0	0	978.4	23	44.4	13.223
2023-08-19 14:00	0.20	27.45	28.26	1.82	185.2	0	0	978	22.3	50.3	13.229
2023-08-19 15:00	0.30	26.685	27.45	2.52	183.2	0	0	977.4	23	49.2	13.232
2023-08-19 16:00	0.20	24.615	25.65	2.39	185.9	0	0	976.6	24.3	48.6	13.235
2023-08-19 17:00	0.40	21.33	22.635	2.65	211.5	0	0	976.5	24.1	48.5	13.219
2023-08-19 18:00	0.20	19.395	20.655	2.11	208.2	0	0	976.5	23.1	54.3	12.951
2023-08-19 19:00	0.10	18.585	19.755	1.02	171.3	0	0	976.4	20.7	65.6	12.539
2023-08-19 20:00	0.10	17.73	18.765	1.34	180.6	0	0	976.4	19.7	69.8	12.481
2023-08-19 21:00	0.30	16.875	17.82	1.18	188.5	0	0	976.5	19.4	72.6	12.439
2023-08-19 22:00	0.30	16.11	17.1	1.24	205.8	0	0	976.8	19.4	73.4	12.407
2023-08-19 23:00	0.30	14.4	15.255	1.23	199.6	0	0	976.9	19.2	73.4	12.378
2023-08-20 0:00	0.20	12.87	13.725	1.21	195.5	0	0	977	19	71.6	12.352
2023-08-20 1:00	0.00	12.6	13.455	1.11	183.6	0	0	976.8	18.1	73.4	12.334
2023-08-20 2:00	0.30	12.915	13.77	1.08	177.9	0	0	976.8	17.6	75.6	12.31
2023-08-20 3:00	0.10	13.455	14.445	0.89	177.1	0	0	977.1	16.7	79.7	12.288
2023-08-20 4:00	0.20	13.5	14.355	1.23	215	0	0	977.4	16.9	79.3	12.266
2023-08-20 5:00	0.10	12.96	13.995	0.98	208.5	0	0	977.6	16.9	79.6	12.253
2023-08-20 6:00	0.10	12.915	14.085	1.39	241.4	0	0	978.2	17.4	79.7	12.316
2023-08-20 7:00	0.10	13.185	14.625	2.02	273.3	0	0	978.7	18.9	76.2	12.689
2023-08-20 8:00	0.10	13.455	15.12	2.36	292.8	0	0	979.2	20.2	73.2	13.191
2023-08-20 9:00	0.10	15.975	17.865	2.16	311.6	0	0	980.3	20	75.4	13.032
2023-08-20 10:00	0.30	23.715	25.47	2.02	323.1	0	0	981.3	18.9	81.3	12.665
2023-08-20 11:00	0.20	19.35	20.475	1.91	334.2	0	0	982.2	17.7	85.7	12.602

2023-08-20 12:00	0.10	9.09	9.585	2.19	327	0	0	983	17	84.4	12.89
2023-08-20 13:00	0.10	9.09	9.99	1.95	335.9	0	0	983.6	17.1	79.1	13.075
2023-08-20 14:00	0.30	4.905	5.715	1.94	325.7	0	0	984.5	17.5	72.8	13.169
2023-08-20 15:00	0.10	4.5	5.04	2.04	326.5	0	0	985.2	17.8	67.5	13.572
2023-08-20 16:00	0.10	5.895	6.525	1.79	334.7	0	0	986	18.2	63.6	13.584
2023-08-20 17:00	0.40	5.445	5.985	1.54	341.6	0	0	986.3	18	60.8	13.514
2023-08-20 18:00	0.10	5.22	5.805	1.43	327.3	0	0	987.2	16.8	64.2	12.752
2023-08-20 19:00	0.10	5.355	6.435	0.71	297.9	0	0	987.9	15.5	72	12.526
2023-08-20 20:00	0.20	6.84	9.54	0.45	209.3	0	0	988.5	11.8	84.3	12.414
2023-08-20 21:00	0.10	5.985	7.425	0.36	228.2	0	0	988.9	10.7	84.8	12.365
2023-08-20 22:00	0.20	5.895	7.47	0.36	221.6	0	0	989.2	9.8	85.6	12.328
2023-08-20 23:00	0.30	5.535	6.615	0.52	192.1	0	0	989.5	9.1	85.6	12.292
2023-08-21 0:00	0.10	5.49	6.75	0.38	210.5	0	0	989.9	8.2	85.9	12.253
2023-08-21 1:00	0.30	5.13	5.895	0.31	231.7	0	0	989.9	8.1	86.1	12.224
2023-08-21 2:00	0.20	5.22	6.255	0.42	238.5	0	0	990	8.4	86.3	12.188
2023-08-21 3:00	0.10	4.77	6.255	0.26	247.1	0	0	990.3	7.4	85	12.165
2023-08-21 4:00	0.10	4.5	5.535	0.57	234.2	0	0	990.6	7.6	86.1	12.128
2023-08-21 5:00	0.10	4.59	5.22	0.77	208	0	0	991.1	8.2	85.7	12.121
2023-08-21 6:00	0.20	4.5	5.085	0.66	197.3	0	0	991.4	8.6	86	12.273
2023-08-21 7:00	0.20	4.365	4.77	0.93	221.9	0	0	991.8	11.1	84.5	12.925
2023-08-21 8:00	0.10	4.365	4.995	1.55	250.2	0	0	991.9	14.6	71.5	13.5
2023-08-21 9:00	0.10	4.41	4.905	1.61	268.2	0	0	991.9	16.8	61.8	13.779
2023-08-21 10:00	0.30	4.365	5.085	1.59	271	0	0	991.8	18.5	56.9	13.692
2023-08-21 11:00	0.30	4.41	5.175	2.09	296	0	0	991.6	19.7	49.2	13.226
2023-08-21 12:00	0.60	4.725	5.58	2.57	288.6	0	0	991.4	20.6	45.1	13.229
2023-08-21 13:00	0.40	4.725	5.4	2.68	289.5	0	0	991.1	21	43.6	13.241
2023-08-21 14:00	0.40	5.13	5.94	3.08	289.4	0	0	990.5	21.6	41.9	13.246
2023-08-21 15:00	0.10	5.85	6.795	2.89	283.7	0	0	990.3	21.9	41.6	13.244
2023-08-21 16:00	0.40	6.435	7.335	2.68	276.2	0	0	990.2	22.2	41.1	13.238
2023-08-21 17:00	0.30	6.66	7.425	1.92	295.1	0	0	990.2	21.9	42.2	13.226
2023-08-21 18:00	0.40	6.705	7.56	1.45	282.1	0	0	990.1	20.9	46	12.979
2023-08-21 19:00	0.10	6.75	7.875	0.26	173.3	0	0	990.1	16.7	67.3	12.551
2023-08-21 20:00	0.30	6.975	7.83	0.22	262.3	0	0	990.4	13.3	76.8	12.482
2023-08-21 21:00	0.10	7.02	8.505	0.5	187.6	0	0	990.5	11.5	81.6	12.436
2023-08-21 22:00	0.00	7.38	8.64	0.42	233.8	0	0	990.5	11.1	81.2	12.401
2023-08-21 23:00	0.20	7.245	8.37	0.53	169.1	0	0	990.7	10.1	83.3	12.365
2023-08-22 0:00	0.20	7.335	8.595	0.62	205.8	0	0	990.9	9.5	85.2	12.33
2023-08-22 1:00	0.20	7.29	8.415	0.5	236.1	0	0	990.8	10.2	81.4	12.299
2023-08-22 2:00	0.20	7.2	8.19	0.67	222.7	0	0	990.8	9.6	82.8	12.252
2023-08-22 3:00	0.20	7.245	8.145	0.48	216.6	0	0	991.1	9.1	83.2	12.231
2023-08-22 4:00	0.00	7.695	8.325	0.67	224.7	0	0	991.4	9.7	82.8	12.199
2023-08-22 5:00	0.10	7.38	8.37	0.46	207.2	0	0	991.5	8.3	85.2	12.174
2023-08-22 6:00	0.10	8.145	8.91	0.66	232.5	0	0	991.6	10	84.4	12.238
2023-08-22 7:00	0.10	8.145	8.955	0.51	216.6	0	0	992	12.9	79.6	12.675
2023-08-22 8:00	0.20	8.28	9.135	1.17	278.2	0	0	991.9	16.1	69.3	13.41
2023-08-22 9:00	0.20	7.515	8.325	0.69	311.2	0	0	991.9	19.4	58.1	13.825
2023-08-22 10:00	0.40	7.56	8.415	1.14	218.6	0	0	991.7	21.3	51.4	13.781
2023-08-22 11:00	0.30	8.46	9.09	1.49	230.2	0	0	991	23	46.2	13.22
2023-08-22 12:00	0.10	10.17	10.89	1.68	270.9	0	0	990.4	23.9	40.4	13.221
2023-08-22 13:00	0.60	9.585	10.215	1.49	303.5	0	0	989.9	23.2	43.2	13.223
2023-08-22 14:00	0.30	9.585	10.485	1.99	242.7	0	0	989.3	23.5	40.8	13.227
2023-08-22 15:00	0.30	9	9.99	1.85	253.8	0	0	988.8	23.2	42.3	13.229
2023-08-22 16:00	0.50	7.92	9	1.75	262.9	0	0	988.6	22.7	44.8	13.229
2023-08-22 17:00	0.10	7.335	8.37	1.44	261.9	0	0	988.5	22	49	13.036
2023-08-22 18:00	0.20	7.29	8.28	0.7	270.3	0	0	988.2	20.5	54.5	12.634
2023-08-22 19:00	0.10	7.83	9.765	0.38	194.4	0	0	987.9	17.5	73.5	12.492
2023-08-22 20:00	0.10	7.74	9.585	0.37	178.4	0	0	988.1	15.2	80.4	12.445
2023-08-22 21:00	0.20	8.19	10.35	0.47	220.8	0	0	988.3	14.9	80.3	12.412
2023-08-22 22:00	0.10	8.145	10.08	0.48	211.8	0	0	988.3	14.8	79.6	12.387
2023-08-22 23:00	0.20	8.145	9.315	0.49	195.1	0	0	987.9	14.6	80	12.363
2023-08-23 0:00	0.30	8.28	9.765	0.34	198	0	0	987.5	12.8	86.2	12.335
2023-08-23 1:00	0.10	8.955	10.08	0.55	230	0	0	987.3	13.2	83.9	12.312
2023-08-23 2:00	0.10	8.91	9.81	0.63	213.9	0	0	987.4	12.5	85.9	12.286
2023-08-23 3:00	0.20	8.955	9.9	0.68	218.4	0	0	987.4	12.4	85.7	12.26
2023-08-23 4:00	0.10	9.045	9.9	0.67	214.5	0	0	987.4	12	86.7	12.231
2023-08-23 5:00	0.20	8.01	9.18	0.45	184.4	0	0	987.6	10.5	87.5	12.211
2023-08-23 6:00	0.10	8.1	9	0.58	210.7	0	0	987.8	11.5	88.2	12.301
2023-08-23 7:00	0.10	8.055	9.225	0.89	266.4	0	0	987.7	14.2	82	12.739
2023-08-23 8:00	0.10	7.2	7.875	0.94	308.6	0	0	987.2	17.1	68.6	13.451
2023-08-23 9:00	0.20	7.29	7.875	0.88	320.1	0	0	986.7	19	60.3	13.811
2023-08-23 10:00	0.40	8.775	9.72	0.98	271	0	0	986.3	20.4	56.3	13.679
2023-08-23 11:00	0.60	9.585	10.44	1.24	167.8	0	0	985.9	21.7	51.8	13.233
2023-08-23 12:00	0.20	9.315	10.08	1.26	148.7	0.1	0	985	22.7	47.5	13.229
2023-08-23 13:00	0.50	9.045	9.855	1.21	122.6	0	0	984.2	22.1	49.4	13.232
2023-08-23 14:00	0.40	8.685	9.45	1.08	79.7	0	0	983.6	22.3	50	13.234
2023-08-23 15:00	0.10	8.82	10.215	1.65	188	0	0	983.1	23.4	44.1	13.234
2023-08-23 16:00	0.40	8.595	13.905	1.91	173.7	0	0	982.9	23	43.7	13.241
2023-08-23 17:00	0.40	6.93	7.83	1.93	185.1	0	0	982.6	22.2	48	13.245
2023-08-23 18:00	0.10	6.93	7.92	0.76	152.9	0	0	982.3	19.8	57.4	12.686
2023-08-23 19:00	0.10	7.02	8.325	0.27	104.5	0	0	982.4	16.5	69.2	12.506
2023-08-23 20:00	0.20	7.29	9.135	0.22	111	0	0	982.6	13.5	82.4	12.436
2023-08-23 21:00	0.20	7.92	10.44	0.23	170.5	0	0	982.6	12.1	85	12.394
2023-08-23 22:00	0.20	7.56	9.9	0.17	15.8	0	0	982.5	11.1	86.1	12.359
2023-08-23 23:00	0.30	7.11	9.36	0.23	88.6	0	0	982.3	10.3	86.1	12.326
2023-08-24 0:00	0.30	6.84	8.19	0.25	75.4	0	0	981.9	10.7	87.8	12.309
2023-08-24 1:00	0.10	7.2	8.01	0.4	60.2	0	0	981.4	12	84.4	12.293
2023-08-24 2:00	0.20	7.29	8.1	0.4	74.5	0	0	981	12.6	84.7	12.272
2023-08-24 3:00	0.30	7.29	7.965	0.33	56.7	0	0	980.5	13.2	84.7	12.256
2023-08-24 4:00	0.20	7.335	8.055	0.45	69.9	0	0	980.2	13.2	84.2	12.23
2023-08-24 5:00	0.20	7.515	8.19	0.46	73.7	0	0	980.3	12.8	85.2	12.203

2023-08-24 6:00	0.20	8.1	8.73	0.43	63.4	0	0	980.6	13.1	85.3	12.231
2023-08-24 7:00	0.30	8.505	9.405	0.71	121.8	0	0	980.7	14.5	83.3	12.404
2023-08-24 8:00	0.10	8.73	9.9	1.1	130	0	0	980.4	16.3	78	12.902
2023-08-24 9:00	0.10	8.145	9.585	1.65	149.7	0	0	979.7	17.8	72.4	13.102
2023-08-24 10:00	0.20	7.11	8.595	0.8	147	0	0	979.7	18.5	70.9	13.064
2023-08-24 11:00	0.20	6.39	7.65	1.37	150.8	0	0	979.5	18.8	68.6	13.058
2023-08-24 12:00	0.30	6.66	8.01	1.77	152.7	0	0	979.2	17.9	75.1	13.036
2023-08-24 13:00	0.20	6.39	7.11	2.24	130.4	0	0	978.6	18	76.6	13.805
2023-08-24 14:00	0.10	5.895	6.345	1.88	110.6	0	0	978.5	18.3	71.8	13.536
2023-08-24 15:00	0.30	5.985	6.615	2.07	139.5	0	0	978.4	18.7	71.1	13.559
2023-08-24 16:00	0.20	5.895	6.48	1.63	135.2	0	0	978.4	19	69.3	13.218
2023-08-24 17:00	0.50	6.3	6.975	1.34	153.9	0	0	978.4	18.1	75.1	12.71
2023-08-24 18:00	0.50	6.3	7.11	1.01	165.1	0	0	978.6	17.4	79.1	12.529
2023-08-24 19:00	0.20	6.525	7.38	0.36	152.4	0	0	978.5	16.8	82.2	12.453
2023-08-24 20:00	0.10	6.795	7.83	0.35	128.8	0	0	978.6	16.3	84.8	12.417
2023-08-24 21:00	0.10	7.11	8.01	0.41	160.3	0	0	978.3	16	86.7	12.387
2023-08-24 22:00	0.10	6.885	7.65	0.3	167.8	0	0	978	15.7	87.8	12.362
2023-08-24 23:00	0.30	7.065	7.65	0.55	210	0	0	977.8	15.5	88.2	12.333
2023-08-25 0:00	0.20	7.11	7.92	0.42	151.5	0	0	977.9	15.2	89.3	12.302
2023-08-25 1:00	0.20	7.2	8.055	0.36	165.3	0	0	978.1	15.1	90.2	12.28
2023-08-25 2:00	0.20	6.93	7.965	0.31	73	0	0	978.1	14.7	90.7	12.244
2023-08-25 3:00	0.10	6.435	7.2	0.59	200.1	0	0	978.2	15	90.5	12.212
2023-08-25 4:00	0.10	5.895	6.48	0.45	214	0	0	978.1	15.1	91.3	12.192
2023-08-25 5:00	0.00	5.67	6.03	0.49	221.3	0	0	978	15.2	91.7	12.177
2023-08-25 6:00	0.10	5.715	6.255	0.74	250	0	0	978.1	15.7	92	12.209
2023-08-25 7:00	0.20	5.265	5.85	1.46	266.4	0	0	978.3	16.5	90	12.504
2023-08-25 8:00	0.20	3.96	4.455	1.7	284.7	0	0	978.2	17.2	87.4	12.777
2023-08-25 9:00	0.00	2.34	2.79	1.61	296.9	0	0	978.2	18.2	82.1	13.248
2023-08-25 10:00	0.30	1.665	2.25	1.91	292	0.1	0	978.4	18.6	80.5	13.293
2023-08-25 11:00	0.20	1.125	1.755	2.24	287.4	0.4	0	978.5	17.7	86.7	13.543
2023-08-25 12:00	0.20	0.585	1.08	2.21	314.8	0	0	978.8	17.7	82.8	13.707
2023-08-25 13:00	0.10	0.495	0.81	2.21	331.5	0	0	978.8	17.1	80.9	13.746
2023-08-25 14:00	0.10	0.675	1.125	2.23	332.1	0	0	979.1	16.9	78.6	13.258
2023-08-25 15:00	0.20	0.54	0.99	1.9	340.4	0	0	979.6	16.2	78.5	13.261
2023-08-25 16:00	0.20	0.63	0.945	1.62	341.3	0	0	980.1	15.1	81.3	13.186
2023-08-25 17:00	0.20	1.44	1.755	1.73	343.5	0	0	980.7	14	82.7	12.646
2023-08-25 18:00	0.20	3.6	3.96	1.62	345	0	0	981.3	13	84.2	12.485
2023-08-25 19:00	0.10	7.335	7.605	1.57	346.9	0	0	981.8	12.2	84.7	12.41
2023-08-25 20:00	0.10	9	9.405	1.87	347.6	0	0	982.8	11.5	83.7	12.36
2023-08-25 21:00	0.00	4.23	4.815	1.21	354.5	0	0	983.8	10.8	79.9	12.324
2023-08-25 22:00	0.00	3.375	3.915	1.37	353	0	0	984.2	9.9	80	12.29
2023-08-25 23:00	0.00	3.6	4.095	1.7	359.4	0	0	984.6	8.5	79.7	12.251
2023-08-26 0:00	0.30	3.555	3.96	1.36	0.4	0	0	985.1	7.6	80.2	12.234
2023-08-26 1:00	0.10	3.465	3.96	1.92	9.6	0	0	985.4	7.2	79.5	12.194
2023-08-26 2:00	0.10	3.33	3.78	1.72	5.6	0	0	985.8	7	80.5	12.162
2023-08-26 3:00	0.10	3.6	4.005	1.12	351.4	0	0	986.4	7.1	81.2	12.134
2023-08-26 4:00	0.10	3.555	3.825	1.19	342.4	0	0	986.8	7	82.2	12.1
2023-08-26 5:00	0.10	2.925	3.195	1.35	344.3	0	0	987.5	6.7	82.9	12.077
2023-08-26 6:00	0.10	2.565	2.79	1.35	3.1	0	0	988.5	6.6	82.9	12.101
2023-08-26 7:00	0.10	2.88	3.15	1.18	1.5	0	0	989.4	6.9	83.9	12.258
2023-08-26 8:00	0.10	2.475	2.7	1.7	350.5	0	0	989.8	7.4	80.6	12.835
2023-08-26 9:00	0.10	2.295	2.52	1.72	346.3	0	0	990.5	8.5	75.7	13.36
2023-08-26 10:00	0.10	1.98	2.295	1.79	327.3	0	0	990.7	9.9	69.4	13.714
2023-08-26 11:00	0.20	1.755	2.025	1.61	331	0	0	990.3	11.9	60.7	13.722
2023-08-26 12:00	0.40	1.665	1.89	1.76	336.1	0	0	989.8	13.7	52.2	13.229
2023-08-26 13:00	0.50	2.025	2.43	1.89	336.6	0	0	989.4	15.4	45.2	13.235
2023-08-26 14:00	0.50	2.7	3.06	1.72	357	0	0	988.9	16.7	39.8	13.238
2023-08-26 15:00	0.20	2.565	2.925	1.86	354.2	0	0	988.7	17.4	38.5	13.241
2023-08-26 16:00	0.20	2.295	2.745	1.69	0.4	0	0	988.5	17.8	38.4	13.237
2023-08-26 17:00	0.10	2.07	2.385	1.55	0.5	0	0	988.5	17.6	39.1	13.243
2023-08-26 18:00	0.70	1.935	2.25	0.84	360	0	0	988.6	16.3	45.6	12.974
2023-08-26 19:00	0.10	2.295	3.285	0.26	344.3	0	0	988.5	12.4	68.7	12.512
2023-08-26 20:00	0.10	2.565	3.78	0.23	298.6	0	0	988.9	8.9	80	12.44
2023-08-26 21:00	0.30	3.105	4.77	0.27	234.6	0	0	989	6.8	81.9	12.392
2023-08-26 22:00	0.30	2.925	4.5	0.36	173.7	0	0	989.2	5.3	83.9	12.348
2023-08-26 23:00	0.10	2.925	4.32	0.27	206.6	0	0	989.2	4.5	83.2	12.312
2023-08-27 0:00	0.20	2.7	3.825	0.22	193.5	0	0	989.2	3.5	83.4	12.271
2023-08-27 1:00	0.10	2.7	3.78	0.2	200.6	0	0	989.2	2.6	83.1	12.241
2023-08-27 2:00	0.20	2.52	3.735	0.23	160	0	0	989.2	1.7	83.6	12.204
2023-08-27 3:00	0.20	2.205	3.15	0.19	157.5	0	0	989.1	1	84.2	12.175
2023-08-27 4:00	0.10	2.565	4.005	0.28	234.8	0	0	989.3	0.7	83.8	12.135
2023-08-27 5:00	0.10	2.745	5.265	0.27	189.4	0	0	989.4	0.3	84.4	12.097
2023-08-27 6:00	0.20	2.16	3.645	0.25	76.8	0	0	989.6	2.3	86.5	12.125
2023-08-27 7:00	0.30	1.98	2.16	0.36	110.9	0	0	989.8	8.1	79	12.488
2023-08-27 8:00	0.10	2.16	2.475	0.99	138.6	0	0	989.7	12.5	68.6	13.441
2023-08-27 9:00	0.10	1.98	2.205	1.09	153.9	0	0	989.2	15.7	55.5	13.726
2023-08-27 10:00	0.70	1.89	2.07	1.16	100.6	0	0	988.7	16.7	48.3	13.578
2023-08-27 11:00	0.30	2.205	2.52	1.6	123.4	0	0	988.1	18	43.4	13.188
2023-08-27 12:00	0.20	2.25	2.43	1.37	144.2	0	0	987.4	18.7	41.2	13.186
2023-08-27 13:00	0.30	2.34	2.79	1.3	127.1	0	0	986.5	19.2	39.8	13.194
2023-08-27 14:00	0.10	2.385	2.61	1.52	240.1	0	0	985.7	20.2	37.7	13.201
2023-08-27 15:00	0.20	2.16	2.43	1.45	184.1	0	0	984.9	20.6	36.8	13.21
2023-08-27 16:00	0.00	2.07	2.43	1.61	189.3	0	0	984.5	20.8	36.1	13.214
2023-08-27 17:00	0.40	2.07	2.43	1.37	157.3	0	0	984.1	20.4	37.5	13.217
2023-08-27 18:00	0.60	2.115	2.61	1.44	173.8	0	0	983.6	19.1	42.6	12.941
2023-08-27 19:00	0.40	2.16	2.835	0.43	143.8	0	0	983.4	15	57.2	12.54
2023-08-27 20:00	0.10	2.295	3.33	0.29	187.4	0	0	983.4	11.9	66.8	12.475
2023-08-27 21:00	0.20	2.385	3.375	0.43	184.5	0	0	983.2	10.1	71.8	12.422
2023-08-27 22:00	0.00	2.475	3.375	0.42	161.3	0	0	983	8.1	79	12.38
2023-08-27 23:00	0.20	2.52	3.285	0.67	175.2	0	0	982.9	8.1	77.7	12.342

2023-08-28 0:00	0.10	2.7	3.465	0.7	197.3	0	0	982.8	8.1	76.1	12.306
2023-08-28 1:00	0.20	2.61	3.285	0.61	214.5	0	0	982.6	6.5	78.8	12.274
2023-08-28 2:00	0.00	2.61	3.375	0.64	187.9	0	0	982.4	5.2	84.4	12.244
2023-08-28 3:00	0.10	2.61	3.105	0.58	190.1	0	0	982.5	5.3	83.3	12.216
2023-08-28 4:00	0.10	2.7	3.105	0.81	187.3	0	0	982.4	5	85.4	12.171
2023-08-28 5:00	0.10	2.835	3.24	0.72	195.3	0	0	982.3	4.8	85.5	12.127
2023-08-28 6:00	0.20	2.88	3.285	0.91	188.2	0	0	982.3	4.8	86.1	12.119
2023-08-28 7:00	0.20	3.33	4.14	1.45	208.9	0	0	982.5	9	78.6	12.667
2023-08-28 8:00	0.10	3.105	4.23	2.04	217.1	0	0	982.1	13.1	61.1	13.419
2023-08-28 9:00	0.30	3.33	6.75	2.46	222.8	0	0	981.6	15.3	50.4	13.697
2023-08-28 10:00	0.70	2.7	3.285	2.98	213.5	0	0	981.3	17.5	40.1	13.697
2023-08-28 11:00	0.10	2.97	3.465	2.81	224.8	0	0	981	19.4	31.5	13.221
2023-08-28 12:00	0.20	5.76	7.065	2.97	222.4	0	0	980.6	20.6	28.8	13.221
2023-08-28 13:00	0.10	7.965	9.72	2.68	210.9	0	0	980	21.5	31	13.22
2023-08-28 14:00	0.30	9.18	11.43	2.62	211.6	0	0	979.5	22.2	33.5	13.22
2023-08-28 15:00	0.70	10.89	11.925	2.3	226.7	0	0	979.1	22.1	39.5	13.223
2023-08-28 16:00	0.50	11.475	13.32	2.37	213.5	0	0	978.9	21.6	43.5	13.228
2023-08-28 17:00	0.10	11.52	12.06	1.92	198	0	0	978.7	21.1	46.4	13.157
2023-08-28 18:00	0.20	12.285	12.87	1.53	201.1	0	0	978.5	19.8	51.8	12.593
2023-08-28 19:00	0.20	12.15	12.825	2.18	274.6	1.3	0	978.8	17.6	69.6	12.498
2023-08-28 20:00	0.10	13.23	13.77	0.93	270.6	0	0	979.3	15	89	12.455
2023-08-28 21:00	0.30	13.455	13.815	0.54	205.6	0	0	979.3	14.6	90.4	12.421
2023-08-28 22:00	0.20	13.14	13.41	0.52	185.2	0	0	979	14.5	90.3	12.395
2023-08-28 23:00	0.10	13.5	13.77	0.64	228	0	0	978.7	14.5	89.4	12.37
2023-08-29 0:00	0.20	14.085	14.445	0.68	229.9	0	0	978.5	14.4	89	12.34
2023-08-29 1:00	0.10	14.805	15.165	0.97	206.9	0.1	0	978.1	14.2	89.8	12.323
2023-08-29 2:00	0.10	14.49	14.895	0.84	209.4	0	0	977.8	14	90.4	12.302
2023-08-29 3:00	0.20	15.705	16.11	0.7	235.4	0	0	977.8	14	89.7	12.279
2023-08-29 4:00	0.10	15.075	15.48	0.41	211	0	0	977.6	13.9	89.9	12.261
2023-08-29 5:00	0.00	10.71	11.16	0.82	272.6	0	0	978	13.4	89.4	12.225
2023-08-29 6:00	0.10	0.855	1.26	1.29	352.1	0	0	978.3	11.1	87.8	12.206
2023-08-29 7:00	0.30	0.63	0.855	1.65	1.6	0	0	978.9	9.7	88	12.232
2023-08-29 8:00	0.10	0.63	0.99	1.71	4	0	0	979.2	9.1	87.6	12.379
2023-08-29 9:00	0.10	0.585	0.765	1.63	6.4	0	0	979.6	8.9	87.1	12.278
2023-08-29 10:00	0.20	0.63	0.81	1.99	12	0	0	979.7	8.9	86.9	12.466
2023-08-29 11:00	0.20	0.81	0.945	1.84	2.8	0	0	980	8.5	87.9	12.256
2023-08-29 12:00	0.10	1.215	1.395	2	3.8	0	0	980.1	8.3	88	12.206
2023-08-29 13:00	0.10	0.99	1.305	2.09	7.8	2.5	0	980.5	8.2	87.2	12.133
2023-08-29 14:00	0.10	1.215	1.62	2.32	4.8	4.1	0	980.6	8	87.6	12.219
2023-08-29 15:00	0.20	1.8	2.16	2.01	2.6	0.6	0	980.8	7.9	86.9	12.296
2023-08-29 16:00	0.10	2.115	2.385	2.02	3.9	0.2	0	981.2	8.2	86.3	12.478
2023-08-29 17:00	0.20	2.025	2.34	2.06	5.4	0	0	981.7	8.1	85.3	12.348
2023-08-29 18:00	0.20	2.025	2.25	1.47	357.7	0.2	0	982	7.7	85.9	12.035
2023-08-29 19:00	0.20	1.98	2.295	1.1	2.5	0	0	982.2	7.2	86.5	12.025
2023-08-29 20:00	0.10	2.025	2.385	1	0.4	0	0	982.6	7	86.2	12.026
2023-08-29 21:00	0.10	1.935	2.385	0.86	344.7	0	0	982.8	6.8	86.5	12.016
2023-08-29 22:00	0.20	1.8	2.205	1.07	348.7	0	0	983	5.9	85.3	11.983
2023-08-29 23:00	0.20	1.665	2.025	1.07	347.5	0	0	983.2	4.4	84.7	11.956
2023-08-30 0:00	0.20	1.62	1.98	1.13	338.7	0	0	983.4	3.4	85.9	11.928
2023-08-30 1:00	0.20	1.62	2.025	0.77	340.8	0	0	983.3	2.7	86.2	11.929
2023-08-30 2:00	0.10	1.665	2.16	1.05	332.3	0	0	983.2	2	87	11.895
2023-08-30 3:00	0.10	1.665	2.16	0.97	328.7	0	0	983	1.5	87	11.877
2023-08-30 4:00	0.10	1.665	2.07	1.06	317.3	0	0	983.2	1	86.9	11.852
2023-08-30 5:00	0.20	1.755	2.115	1.05	316.4	0	0	983.6	0.7	87	11.838
2023-08-30 6:00	0.20	1.845	2.16	1.14	297	0	0	983.9	0.9	86.5	11.867
2023-08-30 7:00	0.10	1.89	2.025	1.24	333.7	0	0	984.4	3.5	85.6	12.215
2023-08-30 8:00	0.10	1.845	1.98	1.28	342.2	0	0	984.6	6.4	79.4	13.326
2023-08-30 9:00	0.10	1.35	1.575	1.65	310.2	0	0	984.6	8.9	66.5	13.727
2023-08-30 10:00	0.10	0.9	1.035	1.77	303	0	0	984.5	10.4	55.8	13.793
2023-08-30 11:00	0.10	0.945	1.125	1.94	280.7	0	0	983.9	11.7	50.4	13.136
2023-08-30 12:00	0.20	1.125	1.26	1.98	296.8	0	0	983.5	13.5	45.3	13.131
2023-08-30 13:00	0.50	1.17	1.35	2.1	285.4	0	0	982.9	14.5	40.2	13.118
2023-08-30 14:00	0.10	1.35	1.89	1.71	303	0	0	982.4	15	43.1	13.11
2023-08-30 15:00	0.60	1.35	1.665	1.31	319	0	0	982.1	14.5	49.2	13.04
2023-08-30 16:00	0.10	1.44	1.71	0.77	307.3	0	0	981.8	15.1	49.2	13.094
2023-08-30 17:00	0.10	1.485	1.755	0.68	220.4	0	0	981.4	15.6	48.7	13.074
2023-08-30 18:00	0.20	1.71	2.34	0.65	153.6	0	0	981.2	14.4	62.4	12.72
2023-08-30 19:00	0.30	1.755	2.385	0.6	139.2	0	0	981.3	11.9	69.8	12.474
2023-08-30 20:00	0.80	2.025	2.79	1.17	173	0	0	981.4	10.7	72.7	12.404
2023-08-30 21:00	0.20	1.935	2.43	1	169.8	0	0	981.3	10.5	74.8	12.369
2023-08-30 22:00	0.00	2.115	2.655	0.96	185.9	0	0	981.3	9.9	76.1	12.327
2023-08-30 23:00	0.10	2.475	3.015	1.19	223	0	0	981.5	10.7	75.2	12.296
2023-08-31 0:00	0.20	2.835	3.375	1.21	244.9	0	0	981.7	10.4	78.6	12.261
2023-08-31 1:00	0.10	3.105	3.645	1.38	273.5	0	0	982	10.3	81.2	12.238
2023-08-31 2:00	0.20	3.195	3.78	1.09	286.7	0	0	982.5	9.5	83.4	12.215
2023-08-31 3:00	0.30	3.24	3.69	0.75	259.8	0	0	983	8.8	84.4	12.192
2023-08-31 4:00	0.10	4.005	7.11	0.43	222.9	0	0	983.7	7.4	85.7	12.171
2023-08-31 5:00	0.10	3.465	15.165	0.35	209.7	0	0	984.1	5.3	86	12.147
2023-08-31 6:00	0.20	4.545	15.975	0.56	225.5	0	0	984.6	6.6	88.2	12.171
2023-08-31 7:00	0.10	3.375	3.78	1.06	247.7	0	0	985.1	10	84.9	12.432
2023-08-31 8:00	0.20	3.735	4.14	1.33	287.1	0	0	985.6	14	75.8	13.207
2023-08-31 9:00	0.00	3.69	4.77	1.76	278.7	0	0	986.1	16.6	63.6	13.687
2023-08-31 10:00	0.30	3.645	4.14	2.73	282.5	0	0	986.3	18.1	54.1	13.716
2023-08-31 11:00	0.40	3.78	4.455	2.34	304.8	0	0	986.5	19.3	48.5	13.351
2023-08-31 12:00	0.20	3.69	4.14	1.99	292.4	0	0	986.5	20.3	45.6	13.206
2023-08-31 13:00	0.30	3.51	4.05	1.97	288	0	0	986.3	21.2	43	13.211
2023-08-31 14:00	0.20	3.42	4.005	1.65	289.8	0	0	985.9	21.9	39.5	13.212
2023-08-31 15:00	0.00	3.285	4.05	1.47	306.7	0	0	985.6	22.4	38.7	13.215
2023-08-31 16:00	0.10	3.105	3.51	1.48	296.6	0	0	985.7	22.4	38.7	13.217
2023-08-31 17:00	0.30	3.195	3.78	1.65	283.5	0	0	986.1	21.7	39.1	13.198

2023-08-31 18:00	0.40	4.05	5.535	0.25	329.6	0	0	986.1	19.3	59.6	12.686
2023-08-31 19:00	0.10	4.14	5.58	0.31	100.5	0	0	986.1	14.1	76.8	12.495
2023-08-31 20:00	0.10	4.455	5.94	0.34	149.9	0	0	986.5	11.6	82.9	12.432
2023-08-31 21:00	0.10	4.32	5.67	0.34	185.6	0	0	986.6	10.3	83.6	12.391
2023-08-31 22:00	0.10	4.185	5.49	0.3	227.7	0	0	986.8	9.4	83.4	12.354
2023-08-31 23:00	0.20	4.05	5.13	0.39	217.3	0	0	987.2	9.6	81.8	12.323
2023-09-01 00:00	0.33	3.87	4.635	0.61	177.2	0	0	987.5	9.9	81.7	12.292
2023-09-01 01:00	0.27	3.825	4.545	0.89	173.7	0	0	987.5	9.9	82.4	12.264
2023-09-01 02:00	0.12	3.825	4.41	1.04	182.7	0	0	987.5	9.8	83	12.243
2023-09-01 03:00	0.21	3.735	4.365	0.89	175.7	0	0	987.5	9.3	84.5	12.224
2023-09-01 04:00	0.16	3.78	4.41	1.02	177.2	0	0	987.7	8.9	85.7	12.198
2023-09-01 05:00	0.15	3.96	4.545	1.33	173.5	0	0	987.9	9	86.3	12.174
2023-09-01 06:00	0.11	4.005	4.5	1.63	175.6	0	0	988	9.7	85.7	12.242
2023-09-01 07:00	0.16	3.87	4.455	1.62	182.6	0	0	988	12.3	83.1	12.666
2023-09-01 08:00	0.05	3.285	3.87	2.39	197.2	0	0	987.7	16.3	69	13.303
2023-09-01 09:00	0.20	2.7	3.42	2.93	202.8	0	0	987	19.3	57	13.805
2023-09-01 10:00	0.45	2.7	4.32	3.52	204.9	0	0	986.4	21.2	51.7	13.858
2023-09-01 11:00	0.37	2.52	3.78	3.87	213.7	0	0	986	22.1	47.3	13.238
2023-09-01 12:00	0.44	2.34	3.96	4.07	206	0	0	985.4	23.2	43.6	13.241
2023-09-01 13:00	0.30	2.16	3.78	3.82	206.3	0	0	984.7	23.9	41	13.246
2023-09-01 14:00	0.12	2.52	5.76	3.88	192.3	0	0	984.1	23.5	41.4	13.249
2023-09-01 15:00	0.20	2.07	3.735	3.84	190.1	0	0	983.2	23.8	40.4	13.251
2023-09-01 16:00	0.12	2.115	4.095	3.8	193	0	0	982.3	24.1	39.2	13.25
2023-09-01 17:00	0.40	2.025	3.69	3.19	196.7	0	0	981.8	22.9	41.6	13.149
2023-09-01 18:00	0.23	2.025	3.195	2.12	188.4	0	0	981.3	21.1	47.8	12.61
2023-09-01 19:00	0.13	2.07	3.15	2.4	180.7	0	0	980.9	19.7	53.5	12.5
2023-09-01 20:00	0.20	2.205	3.51	2.54	171	0	0	980.1	18.8	56.6	12.452
2023-09-01 21:00	0.17	2.52	3.915	3.57	180.6	0	0	979.5	18.7	57	12.422
2023-09-01 22:00	0.05	2.97	4.23	3.33	183.5	0	0	978.9	18	59.3	12.397
2023-09-01 23:00	0.16	3.42	4.545	2.82	182	0	0	978.4	17.2	62.8	12.373
2023-09-02 00:00	0.16	3.6	4.455	2.57	172.1	0	0	977.4	16	68	12.346
2023-09-02 01:00	0.23	3.645	4.725	2.58	178.3	0	0	976.4	15.7	70.2	12.323
2023-09-02 02:00	0.25	3.51	4.59	2.98	196.3	0	0	975.7	16.7	66.5	12.302
2023-09-02 03:00	0.01	3.465	4.86	3.19	201.8	0.1	0	975	17.1	66.2	12.279
2023-09-02 04:00	0.12	3.375	4.635	3.04	205.4	0	0	974.3	16.7	70.9	12.265
2023-09-02 05:00	0.26	3.375	4.77	2.81	212.1	0	0	974.5	16.8	69.8	12.241
2023-09-02 06:00	0.16	3.42	4.725	2.11	213.8	0	0	974.8	16.7	71.6	12.273
2023-09-02 07:00	0.42	3.87	5.895	2.79	225.9	0	0	975	17.9	70	12.621
2023-09-02 08:00	0.15	5.04	7.29	3.38	236.2	0	0	974.9	19.8	66.6	13.265
2023-09-02 09:00	0.21	5.94	8.055	3.43	245	0	0	974.8	21.2	63.9	13.737
2023-09-02 10:00	0.38	5.715	7.65	3.22	240.9	0	0	974.7	22.9	57	13.899
2023-09-02 11:00	0.26	5.76	7.83	3.74	245.4	0	0	974.5	23.8	52.3	13.421
2023-09-02 12:00	0.22	6.615	8.865	3.76	250.4	0	0	974.3	24.7	48.7	13.262
2023-09-02 13:00	0.23	6.3	8.1	3.89	251.3	0	0	974.1	25.5	46.1	13.262
2023-09-02 14:00	0.26	7.2	9.09	4.16	257.5	0	0	974	25.8	45.8	13.26
2023-09-02 15:00	0.33	8.82	10.98	3.82	256.7	0	0	973.9	25.9	46.9	13.261
2023-09-02 16:00	0.31	12.465	14.625	3.55	260.9	0	0	973.8	25.7	47.3	13.264
2023-09-02 17:00	0.27	14.04	15.93	2.33	251.9	0	0	973.7	25.8	48.6	13.262
2023-09-02 18:00	0.09	16.47	17.955	0.98	234.6	0	0	973.7	24.7	53.7	12.783
2023-09-02 19:00	0.30	16.785	18.675	0.66	159.6	0	0	973.9	20.7	69.1	12.532
2023-09-02 20:00	0.11	15.93	17.64	1.18	198.4	0	0	974.2	20.4	69.8	12.481
2023-09-02 21:00	0.08	14.4	16.29	1.27	201.9	0	0	974.4	20.2	71.4	12.443
2023-09-02 22:00	0.17	14.175	15.885	1.59	218.3	0	0	974.6	20	69.6	12.411
2023-09-02 23:00	0.16	14.04	15.75	1.48	206.1	0	0	974.7	19	71.8	12.386
2023-09-03 00:00	0.15	14.4	15.93	1.7	206	0	0	974.8	18.4	75.3	12.358
2023-09-03 01:00	0.06	14.67	16.38	1.4	194.3	0	0	974.5	17.7	77.3	12.339
2023-09-03 02:00	0.19	15.075	16.785	1.23	189.9	0	0	974.4	16.8	80.3	12.318
2023-09-03 03:00	0.36	15.345	17.235	1.31	182	0	0	974.3	16	83.9	12.299
2023-09-03 04:00	0.10	15.075	16.695	1.44	181.6	0	0	974	15.5	86.5	12.274
2023-09-03 05:00	0.15	14.175	15.795	1.56	183.5	0	0	973.9	15.6	88.3	12.262
2023-09-03 06:00	0.11	12.87	14.4	1.73	186.1	0	0	973.8	16.4	88.6	12.283
2023-09-03 07:00	0.18	11.07	12.69	2.07	182.4	0	0	973.4	18.8	82.8	12.562
2023-09-03 08:00	0.03	10.44	12.6	2.85	181.3	0	0	973.3	21.2	74.9	13.318
2023-09-03 09:00	0.08	10.17	12.6	2.72	193.6	0	0	973.3	23.7	67.1	13.798
2023-09-03 10:00	0.31	9.585	13.86	3.36	199.8	0	0	972.7	25.6	60.5	13.909
2023-09-03 11:00	0.68	9.9	16.335	3.45	205.2	0	0	971.9	27.4	56.1	13.28
2023-09-03 12:00	0.41	10.35	14.985	3.42	230.8	0	0	972	28.1	54.7	13.235
2023-09-03 13:00	0.31	11.115	15.84	3.12	238.1	0	0	972.1	28.2	55	13.238
2023-09-03 14:00	0.15	11.79	16.335	3.19	227.3	0	0	971.4	29.8	50.8	13.238
2023-09-03 15:00	0.38	12.24	17.46	3.66	218.3	0	0	971.2	30.4	49.6	13.239
2023-09-03 16:00	0.58	11.88	16.155	3.42	231.7	0	0	971.8	29.4	52.8	13.24
2023-09-03 17:00	0.22	11.295	14.895	2.1	221.6	0	0	972.2	29	55.4	13.184
2023-09-03 18:00	0.22	11.115	14.355	0.71	204.7	0	0	972.5	27.5	63.1	12.647
2023-09-03 19:00	0.18	11.34	13.68	0.41	195.7	0	0	973.1	24.1	77.8	12.513
2023-09-03 20:00	0.09	11.79	14.535	0.46	220	0	0	973.8	22.6	83.2	12.466
2023-09-03 21:00	0.10	13.365	15.795	0.82	283.9	0	0	974.2	22.1	82.5	12.431
2023-09-03 22:00	0.09	22.23	23.76	0.48	328.6	0	0	975	21.7	80.1	12.402
2023-09-03 23:00	0.02	40.59	41.85	0.72	338.4	0	0	975.6	20.5	80.2	12.376
2023-09-04 00:00	0.13	51.345	52.65	0.44	335.5	0	0	976	19.1	82.7	12.349
2023-09-04 01:00	0.18	60.48	62.01	0.46	304.3	0	0	976.2	17.2	86.7	12.332
2023-09-04 02:00	0.15	80.505	81.81	0.72	353.8	0	0	976.7	17.1	86.5	12.308
2023-09-04 03:00	0.04	76.59	78.12	0.3	261.2	0	0	977.1	15.6	88.2	12.286
2023-09-04 04:00	0.34	82.035	83.07	0.4	37.5	0	0	977.5	15	90.8	12.264
2023-09-04 05:00	0.26	80.91	81.765	0.28	54.6	0	0	977.9	14.3	89.5	12.245
2023-09-04 06:00	0.23	80.235	81.27	0.31	45	0	0	978.5	14.2	90.2	12.297
2023-09-04 07:00	0.07	85.05	86.085	0.53	87.8	0	0	978.9	15.7	87.2	12.672
2023-09-04 08:00	0.10	115.83	116.865	1.15	68.6	0	0	979.1	18.8	75.2	13.283
2023-09-04 09:00	0.34	130.77	132.435	1.39	89.1	0	0	979.2	21.7	61.7	13.74
2023-09-04 10:00	0.42	121.5	123.075	1.36	74.5	0	0	979	23.9	56.5	13.875
2023-09-04 11:00	0.55	103.68	105.615	1.47	123.6	0	0	978.7	25.8	53.5	13.317

2023-09-04 12:00	0.32	84.87	86.85	1.57	131.1	0	0	978.3	27.7	48.4	13.229
2023-09-04 13:00	0.13	54.405	57.24	1.61	139.6	0	0	977.8	28.9	47.5	13.222
2023-09-04 14:00	0.18	41.625	45.225	1.61	150.4	0	0	977.3	29.6	48.6	13.224
2023-09-04 15:00	0.27	38.025	41.4	1.35	148.6	0	0	977	30	49.7	13.226
2023-09-04 16:00	0.11	32.76	36.45	1.61	132.9	0	0	976.6	30.4	50	13.23
2023-09-04 17:00	0.57	31.185	34.65	1.43	110.6	0	0	976.5	29.7	53.3	13.205
2023-09-04 18:00	0.27	29.25	31.95	0.61	98.8	0	0	976.6	27.9	61.7	12.692
2023-09-04 19:00	0.27	53.685	55.665	1.47	96.8	0	0	976.9	25.8	66.4	12.527
2023-09-04 20:00	0.04	68.58	70.2	1.21	104.6	0	0	977	24	69.5	12.475
2023-09-04 21:00	0.38	64.935	66.42	0.78	114.9	0	0	977	22.6	75.6	12.44
2023-09-04 22:00	0.16	56.835	58.635	0.91	124.5	0	0	976.8	21.9	79.7	12.411
2023-09-04 23:00	0.41	38.07	40.5	1.59	175.2	0	0	976.8	22.6	79.7	12.381
2023-09-05 00:00	0.17	28.71	30.645	1.09	163.5	0	0	976.7	21.6	83.9	12.358
2023-09-05 01:00	0.08	16.29	18.765	1.44	175.9	0	0	976.9	21.3	83.4	12.333
2023-09-05 02:00	0.08	12.825	14.445	1.24	175.7	0	0	977	20.3	84.3	12.308
2023-09-05 03:00	0.14	10.755	12.42	1.26	179.7	0	0	977.4	19.8	83.1	12.287
2023-09-05 04:00	0.18	10.125	11.655	1.33	166.3	0	0	977.6	19.2	83.9	12.268
2023-09-05 05:00	0.09	9.63	10.98	0.94	165.5	0	0	977.8	18.3	85.7	12.252
2023-09-05 06:00	0.12	9.135	10.575	1.31	165.3	0	0	978.1	18.3	84.9	12.276
2023-09-05 07:00	0.05	8.955	12.915	2.32	186	0	0	978.1	21	74.7	12.521
2023-09-05 08:00	0.24	8.685	12.915	2.87	193.9	0	0	977.9	24.1	63.7	13.223
2023-09-05 09:00	0.24	8.505	13.545	3.11	195.4	0	0	977.8	26.5	57.3	13.755
2023-09-05 10:00	0.43	7.56	10.035	3.55	179.4	0	0	977.6	28.4	51.7	13.894
2023-09-05 11:00	0.32	7.2	9.945	3.21	197.8	0	0	977.4	30.5	45	13.339
2023-09-05 12:00	0.00	7.29	9.99	3.44	215.6	0	0	977.2	31.4	41.1	13.238
2023-09-05 13:00	0.16	7.065	9.81	3.36	214.3	0	0	977.1	31.9	37.9	13.239
2023-09-05 14:00	0.00	7.965	15.075	3.38	198.4	0	0	976.7	32.1	34.8	13.238
2023-09-05 15:00	0.03	6.12	8.55	3.51	195.6	0	0	976.2	32.2	34.3	13.24
2023-09-05 16:00	0.09	8.28	15.525	3.31	194.6	0	0	976.1	31.9	36.2	13.241
2023-09-05 17:00	0.19	6.885	8.415	2.79	181.2	0	0	976	31	39.7	13.244
2023-09-05 18:00	0.89	6.975	8.55	2.28	180.6	0	0	975.7	29.1	46.1	12.74
2023-09-05 19:00	0.73	7.11	8.37	1.54	173.7	0	0	975.9	26.7	54.4	12.523
2023-09-05 20:00	0.02	7.56	8.775	0.86	166.7	0	0	976	24.3	64	12.471
2023-09-05 21:00	0.10	8.55	10.215	1.14	166.3	0	0	976	23.5	70.4	12.432
2023-09-05 22:00	0.12	9.18	10.125	1.2	167.6	0	0	976.2	23.2	74	12.401
2023-09-05 23:00	0.06	9.45	10.44	1.48	168.5	0	0	976	23	76.6	12.376
2023-09-06 00:00	0.04	9.45	10.485	1.55	168.4	0	0	975.9	22.4	79	12.349
2023-09-06 01:00	0.14	9.315	10.305	1.88	173.8	0	0	975.9	22.1	81	12.327
2023-09-06 02:00	0.13	9.45	10.305	1.29	166.9	0	0	975.6	21.7	83.9	12.303
2023-09-06 03:00	0.10	9.045	9.855	1.2	169.1	0	0	975.6	21.7	84.4	12.282
2023-09-06 04:00	0.30	9.225	9.99	0.87	180.7	0	0	975.6	21	87	12.264
2023-09-06 05:00	0.20	9.045	9.63	0.71	169.7	0	0	975.5	20.6	88.4	12.249
2023-09-06 06:00	0.15	8.46	9.225	1.31	168.5	0	0	975.4	20.7	88	12.29
2023-09-06 07:00	0.01	8.325	10.305	1.45	205.7	0	0	975.5	22.5	81.7	12.667
2023-09-06 08:00	0.12	7.56	8.235	1.57	263.1	0	0	975.6	23.1	78.3	12.949
2023-09-06 09:00	0.30	4.95	6.255	1.16	314.9	0	0	975.4	23.8	73.8	13.3
2023-09-06 10:00	0.22	3.555	4.095	1.36	325.5	0	0	975.4	24	71.1	13.3
2023-09-06 11:00	0.40	80.46	81.27	2.26	345.1	0	0	975.6	20.9	76.6	13.156
2023-09-06 12:00	0.22	49.68	50.895	2.09	338.6	3.3	0	976.3	15.7	85	12.598
2023-09-06 13:00	0.32	17.055	17.595	2.08	355.2	0	0	976.1	13.9	88.6	13.42
2023-09-06 14:00	0.10	4.005	4.32	2.41	0.5	0	0	976.1	13.7	86.1	13.714
2023-09-06 15:00	0.08	2.025	2.34	2.75	8.5	0	0	976.3	12.9	85.6	13.126
2023-09-06 16:00	0.38	2.79	3.24	2.22	10.6	3.9	0	976.7	11.7	87.1	12.431
2023-09-06 17:00	0.02	2.655	3.015	1.64	354.2	0.3	0	977.2	11.2	87.1	12.368
2023-09-06 18:00	0.13	3.33	3.645	1.59	353.2	0	0	977.9	10.4	86.9	12.312
2023-09-06 19:00	0.16	3.015	3.24	1.94	351.6	0	0	978.2	9.5	86.6	12.255
2023-09-06 20:00	0.13	2.835	3.015	2.23	356.1	0.8	0	978.1	8.3	87.6	12.182
2023-09-06 21:00	0.13	2.16	2.34	2.27	355.4	3.3	0	978	7.7	87.8	12.135
2023-09-06 22:00	0.21	1.8	2.07	2.13	354.7	0.4	0	978	7.3	87.4	12.085
2023-09-06 23:00	0.13	1.17	1.305	1.78	350.5	0.2	0	978.5	7.1	87.2	12.069
2023-09-07 00:00	0.09	0.99	1.17	1.79	339	5.5	0	978.5	6.7	87.9	12.055
2023-09-07 01:00	0.14	0.99	1.08	2.03	342.2	3.1	0	978.3	6.5	88.1	12.045
2023-09-07 02:00	0.03	0.99	1.125	1.94	342.1	3	0	978.4	6.4	88	12.027
2023-09-07 03:00	0.13	1.08	1.215	1.97	340	2.1	0	978.5	6.5	88.2	12.01
2023-09-07 04:00	0.23	1.26	1.395	2.41	341.6	0.5	0	978.7	6.7	88	11.991
2023-09-07 05:00	0.21	1.395	1.53	2.43	338.4	0.5	0	979.1	6.7	88	11.977
2023-09-07 06:00	0.04	1.71	1.8	2.38	336.7	0	0	979.7	6.8	87.9	11.971
2023-09-07 07:00	0.13	2.16	2.205	2.53	338.2	0	0	980.4	6.6	88.2	11.983
2023-09-07 08:00	0.18	2.25	2.385	2.22	340.8	0	0	980.9	6.8	88.1	12.115
2023-09-07 09:00	0.04	2.385	2.475	2.33	343.2	0	0	981.2	6.9	88	12.208
2023-09-07 10:00	0.18	2.205	2.205	1.86	340.2	0	0	981.5	7.3	86.9	12.444
2023-09-07 11:00	0.18	2.07	2.16	2.29	337.4	0	0	981.7	7.4	87	12.418
2023-09-07 12:00	0.05	1.98	2.07	2.37	337.6	0.1	0	981.9	7.6	86.2	12.723
2023-09-07 13:00	0.14	2.43	2.52	2.39	332.5	0.2	0	982.3	7.5	87	12.602
2023-09-07 14:00	0.06	3.555	3.735	2.51	332.7	0	0	982.4	7.3	87.4	12.351
2023-09-07 15:00	0.09	6.705	6.975	2.56	336.7	0	0	982.5	7.3	86.3	12.316
2023-09-07 16:00	0.16	8.37	8.775	1.89	336.2	0	0	982.7	7.9	84.1	12.2
2023-09-07 17:00	0.09	7.47	7.785	1.21	334	0	0	983	8.4	83.3	12.085
2023-09-07 18:00	0.20	6.03	6.39	0.77	345.5	0	0	983.1	8.6	83.3	12.059
2023-09-07 19:00	0.12	5.175	5.535	0.64	336.5	0	0	983.3	8.5	84.6	12.012
2023-09-07 20:00	0.22	5.31	5.715	1.19	13.6	0	0	983.6	7.5	84.7	11.979
2023-09-07 21:00	0.16	5.49	5.85	1.14	10.7	0	0	983.8	6.4	84.2	11.956
2023-09-07 22:00	0.17	4.905	5.4	0.76	337.5	0	0	983.8	5.9	85.1	11.95
2023-09-07 23:00	0.08	4.14	4.5	1.03	335.3	0	0	983.8	5.8	84.3	11.925
2023-09-08 00:00	0.09	3.915	4.32	1.13	322.3	0	0	983.9	5	85.4	11.9
2023-09-08 01:00	0.30	3.87	4.32	1.28	317	0	0	983.7	4.1	86.1	11.87
2023-09-08 02:00	0.25	3.87	4.32	1.31	323.2	0	0	983.9	3.4	86.6	11.834
2023-09-08 03:00	0.20	4.5	8.145	1.48	330	0	0	984.1	2.9	88	11.812
2023-09-08 04:00	0.15	6.75	27.765	1.29	337.9	0	0	984.5	2.7	89.5	11.805
2023-09-08 05:00	0.08	4.14	16.92	1.36	327.1	0	0	985.2	2.8	89.4	11.786

2023-09-08 06:00	0.19	3.375	12.645	1.34	326.4	0	0	985.5	2.8	89.2	11.821
2023-09-08 07:00	0.03	3.195	12.69	1.7	309	0	0	985.7	2.8	89	12.158
2023-09-08 08:00	0.06	1.62	2.07	1.59	318.5	0	0	986	4	88.1	12.911
2023-09-08 09:00	0.10	1.62	1.89	1.81	313.8	0	0	986.5	5.8	84.4	13.322
2023-09-08 10:00	0.10	1.485	1.89	1.84	321	0	0	986.5	8.5	75.8	13.677
2023-09-08 11:00	0.10	1.53	1.89	1.8	332.4	0	0	986.3	11.4	65.9	13.781
2023-09-08 12:00	0.19	1.53	2.025	1.88	336.5	0	0	985.9	13.1	58.5	13.199
2023-09-08 13:00	0.25	1.8	2.295	1.92	313.4	0	0	985.5	14.5	54.4	13.18
2023-09-08 14:00	0.30	2.25	2.655	1.97	312	0	0	985.3	15.5	49.8	13.183
2023-09-08 15:00	0.56	2.025	2.34	1.93	321.7	0	0	985.2	16.1	45.1	13.187
2023-09-08 16:00	0.23	1.62	1.98	1.74	323.1	0	0	985.4	16.3	45.3	13.199
2023-09-08 17:00	0.19	1.575	1.89	1.26	319.8	0	0	985.7	16.1	48	13.187
2023-09-08 18:00	0.13	1.845	2.295	0.59	309.4	0	0	985.8	14.3	58.8	12.684
2023-09-08 19:00	0.13	2.16	2.79	0.44	294	0	0	986.1	10.4	72.6	12.445
2023-09-08 20:00	0.14	2.25	2.835	0.32	271.4	0	0	986.5	8.3	75.9	12.39
2023-09-08 21:00	0.24	2.43	3.24	0.32	184	0	0	986.6	5.2	82.7	12.334
2023-09-08 22:00	0.13	2.475	3.375	0.29	244.7	0	0	986.9	3.8	82.7	12.286
2023-09-08 23:00	0.25	2.295	3.15	0.33	183.7	0	0	987.2	2.2	83.6	12.246
2023-09-09 00:00	0.12	3.015	7.155	0.3	232.4	0	0	987.5	1.3	83.8	12.207
2023-09-09 01:00	0.13	2.79	3.645	0.25	242.3	0	0	987.8	0.9	83.2	12.181
2023-09-09 02:00	0.20	2.745	3.6	0.24	237.4	0	0	987.6	0.6	82.9	12.154
2023-09-09 03:00	0.09	2.295	2.925	0.24	209.7	0	0	987.7	0	83.4	12.122
2023-09-09 04:00	0.10	2.925	3.6	0.25	247.9	0	0	988.2	0	81.9	12.088
2023-09-09 05:00	0.05	3.24	3.915	0.24	218.8	0	0	988.6	-0.4	82.8	12.062
2023-09-09 06:00	0.10	3.015	3.51	0.34	228.9	0	0	989	0.7	84.3	12.07
2023-09-09 07:00	0.08	2.475	2.655	0.98	189.4	0	0	989.4	4.1	84.5	12.337
2023-09-09 08:00	0.03	2.115	2.34	1.16	233.3	0	0	989.7	8.6	72.2	13.23
2023-09-09 09:00	0.08	1.89	2.07	1.28	260.2	0	0	989.8	13	55.3	13.74
2023-09-09 10:00	0.62	2.025	2.205	1.44	271.2	0	0	989.6	15.7	45.4	13.805
2023-09-09 11:00	0.57	2.16	2.34	1.15	247.2	0	0	989.3	17.3	37.9	13.202
2023-09-09 12:00	0.01	2.295	2.565	1.47	235.9	0	0	989.1	18.3	34.8	13.205
2023-09-09 13:00	0.23	2.43	2.655	1.4	244.6	0	0	988.9	19.5	34.2	13.207
2023-09-09 14:00	0.01	2.52	2.7	1.2	231.9	0	0	988.6	20.2	32.7	13.205
2023-09-09 15:00	0.13	2.7	2.925	1.13	203.3	0	0	988.4	20.6	32.7	13.21
2023-09-09 16:00	0.12	2.88	3.015	0.84	284.2	0	0	988.3	20.8	33	13.21
2023-09-09 17:00	2.14	3.15	3.375	0.53	285.4	0	0	988.2	20.5	38.2	13.094
2023-09-09 18:00	0.34	3.15	3.51	0.25	43.1	0	0	988.3	15.4	63.7	12.531
2023-09-09 19:00	0.06	3.285	3.78	0.4	72	0	0	988.4	12.4	76.1	12.433
2023-09-09 20:00	0.32	3.51	4.095	0.32	124.4	0	0	988.6	10	82.6	12.377
2023-09-09 21:00	0.16	3.33	3.735	0.26	84.8	0	0	988.5	8.4	84.1	12.335
2023-09-09 22:00	0.29	3.285	3.915	0.45	102	0	0	988.5	7.4	84.4	12.294
2023-09-09 23:00	0.10	3.285	3.87	0.59	129.3	0	0	988.3	7.7	78.5	12.261
2023-09-10 00:00	0.18	3.015	3.69	0.24	176.5	0	0	988.3	6	83.5	12.232
2023-09-10 01:00	0.14	3.15	3.915	0.29	254.5	0	0	988.3	5.7	82.9	12.208
2023-09-10 02:00	0.17	2.835	3.6	0.27	109.5	0	0	988.1	5	85.2	12.188
2023-09-10 03:00	0.20	3.285	3.87	0.3	331.2	0	0	988	5.2	85	12.161
2023-09-10 04:00	0.38	3.51	4.005	0.31	122.8	0	0	988.3	5.9	86.4	12.138
2023-09-10 05:00	0.24	3.69	4.23	0.39	238.9	0	0	988.4	6.5	84.8	12.115
2023-09-10 06:00	0.34	3.915	4.32	0.42	184.9	0	0	988.6	6.9	85.5	12.183
2023-09-10 07:00	0.17	3.825	4.185	0.51	212	0	0	988.7	9.3	82.2	12.577
2023-09-10 08:00	0.10	3.825	4.365	0.45	206.2	0	0	988.9	11.5	78.8	12.865
2023-09-10 09:00	0.02	4.23	4.545	0.55	11.7	0	0	989.1	12.9	73.4	12.984
2023-09-10 10:00	0.09	5.22	5.58	1.07	11.9	0	0	989.3	15.5	62.5	13.613
2023-09-10 11:00	0.29	5.265	5.805	1.44	19.8	0	0	989.1	18.3	50.8	13.805
2023-09-10 12:00	0.76	4.275	4.635	1.32	25.4	0	0	988.8	19.7	44.2	13.436
2023-09-10 13:00	0.20	4.41	4.77	1.22	14.2	0	0	988.5	20.4	42.6	13.215
2023-09-10 14:00	0.40	6.03	6.57	1.9	340.3	0	0	988.4	19.7	51.8	13.216
2023-09-10 15:00	0.24	7.515	8.1	1.73	341.8	0	0	988.4	18.7	55.9	13.216
2023-09-10 16:00	0.22	8.1	8.505	1.25	358.7	0	0	988.5	18.4	59	13.169
2023-09-10 17:00	0.10	8.37	8.775	0.75	355.6	0	0	988.8	17.4	63.4	12.649
2023-09-10 18:00	0.04	9.135	9.495	0.65	352.2	0	0	988.9	16.5	69.8	12.498
2023-09-10 19:00	0.10	9.405	9.72	0.68	5.9	0	0	989.2	15.3	73.2	12.438
2023-09-10 20:00	0.06	9.54	9.945	0.56	357.6	0	0	989.5	14.3	77.7	12.403
2023-09-10 21:00	0.25	9.72	10.125	0.76	340.9	0	0	989.7	13.6	81.8	12.372
2023-09-10 22:00	0.22	10.17	10.665	0.49	354.9	0	0	989.7	13.1	83.1	12.344
2023-09-10 23:00	0.20	10.62	11.025	0.45	22	0	0	989.7	12.5	83.7	12.316
2023-09-11 00:00	0.18	10.755	11.34	0.36	35.6	0	0	989.6	11.3	84.5	12.289
2023-09-11 01:00	0.12	10.98	11.97	0.5	313.1	0	0	989.5	9.5	85.8	12.254
2023-09-11 02:00	0.14	12.015	12.465	0.76	334.9	0	0	989.3	9.3	85.9	12.221
2023-09-11 03:00	0.16	12.285	12.78	0.87	351.2	0	0	989.3	8.2	87.1	12.178
2023-09-11 04:00	0.29	12.06	12.51	0.71	350.1	0	0	989.3	7.5	87.5	12.15
2023-09-11 05:00	0.33	10.755	16.11	0.88	338.8	0	0	989.6	7	88	12.118
2023-09-11 06:00	0.21	8.82	11.43	0.78	343.1	0	0	989.8	6.6	88.5	12.142
2023-09-11 07:00	0.21	9.765	10.53	0.78	349.7	0	0	990.1	7.7	88.2	12.391
2023-09-11 08:00	0.19	12.15	12.375	1.12	15.4	0	0	990.2	9.9	86.9	12.866
2023-09-11 09:00	0.11	11.7	11.97	1.64	29.5	0	0	990.4	11.6	80.7	13.116
2023-09-11 10:00	0.12	11.295	11.745	1.42	25.1	0	0	990.3	13	74.8	13.375
2023-09-11 11:00	0.09	11.565	12.06	1.97	20.4	0	0	989.9	14.9	66.8	13.727
2023-09-11 12:00	0.13	11.475	11.925	1.75	28.6	0	0	989.8	16.9	59.5	13.721
2023-09-11 13:00	0.23	11.07	11.475	1.94	20.6	0	0	989.4	17.3	58.8	13.194
2023-09-11 14:00	0.51	10.8	11.385	1.92	16.7	0	0	988.9	17.7	56.8	13.193
2023-09-11 15:00	0.29	9.675	10.035	1.55	22.7	0	0	988.4	17.3	57.8	13.172
2023-09-11 16:00	0.14	6.3	6.84	1.54	354.1	0	0	988.2	16.4	64.1	12.835
2023-09-11 17:00	0.23	5.13	5.58	1.53	356.9	0	0	988.3	14.7	72.3	12.599
2023-09-11 18:00	0.16	4.86	5.31	1.44	352.9	0	0	988.2	13.5	75.7	12.432
2023-09-11 19:00	0.19	4.545	4.995	1.73	2.5	0	0	988.4	12.3	76.1	12.384
2023-09-11 20:00	0.20	4.545	4.995	1.9	9	0	0	988.3	11.3	75.8	12.344
2023-09-11 21:00	0.24	4.23	4.68	1.97	11.8	0	0	988.3	10.7	76.5	12.311
2023-09-11 22:00	0.16	3.825	4.23	2.18	16.8	0.2	0	988.3	9.6	78	12.253
2023-09-11 23:00	0.25	3.42	3.87	1.69	13.5	0.9	0	988.3	8	83.7	12.19

2023-09-12 00:00	0.14	3.195	3.465	1.47	13.7	0.3	0	988.2	7	85.1	12.158
2023-09-12 01:00	0.19	2.835	3.015	1.53	7.7	0.2	0	987.9	6.4	85.4	12.117
2023-09-12 02:00	0.11	2.565	2.745	1.87	10	0	0	987.3	6	86.1	12.088
2023-09-12 03:00	0.11	2.475	2.7	1.55	4.5	0.8	0	986.8	5.7	86.5	12.035
2023-09-12 04:00	0.12	2.655	2.835	1.5	358.9	0.2	0	986.4	5.7	86.5	12.023
2023-09-12 05:00	0.12	3.015	3.24	1.42	1.3	1.2	0	986.2	5.7	86.7	11.997
2023-09-12 06:00	0.07	2.925	3.105	1.51	2.4	2.3	0	986.2	5.7	87.5	11.972
2023-09-12 07:00	0.15	2.88	3.105	1.63	4.7	3.6	0	985.8	6	87.9	11.969
2023-09-12 08:00	0.18	2.835	3.06	1.98	2.2	3.6	0	985.4	6.2	88	11.995
2023-09-12 09:00	0.17	3.42	3.69	2.06	1.8	4.1	0	985.2	6.8	87.8	12.017
2023-09-12 10:00	0.14	4.23	4.41	2.14	358.7	2.5	0	985.1	7.4	87.9	12.088
2023-09-12 11:00	0.06	4.32	4.455	2.08	359.4	2.2	0	984.8	7.9	87.9	12.072
2023-09-12 12:00	0.03	4.5	4.725	1.94	359.9	1.1	0	984.3	8.4	87.6	12.053
2023-09-12 13:00	0.06	4.725	4.905	2.14	3.3	1.4	0	984	9.2	86.7	12.186
2023-09-12 14:00	0.13	4.185	4.41	2.43	350.8	1.4	0	983.4	9.7	86.8	12.566
2023-09-12 15:00	0.04	3.465	3.6	2.16	353	1.2	0	983.2	9.3	86.8	12.309
2023-09-12 16:00	0.12	3.285	3.465	2.15	350.9	1.9	0	983.1	8.5	87.3	11.941
2023-09-12 17:00	0.05	3.06	3.24	2.44	341.8	0.6	0	983	8.2	87.2	11.893
2023-09-12 18:00	0.18	3.015	3.195	2.33	344.1	0.6	0	982.9	8.1	87.2	11.875
2023-09-12 19:00	0.07	2.565	2.7	2.29	347.4	0	0	982.9	8.2	87.6	11.851
2023-09-12 20:00	0.26	2.34	2.43	2.36	337	0	0	983	8.1	87.8	11.835
2023-09-12 21:00	0.17	2.7	2.835	2.22	334.1	0.1	0	982.8	8	87.8	11.813
2023-09-12 22:00	0.13	2.925	3.015	2.02	336.5	0	0	982.7	7.9	87.7	11.796
2023-09-12 23:00	0.05	2.61	2.745	2.11	333.4	0	0	982.5	7.5	87.6	11.779
2023-09-13 00:00	0.11	2.565	2.79	2.08	332	0	0	982.4	7.1	87.7	11.755
2023-09-13 01:00	0.12	2.7	2.835	2.18	328.4	0	0	982.1	6.9	87.6	11.742
2023-09-13 02:00	0.07	3.105	3.285	2.54	321.8	0	0	981.9	6.5	87.7	11.72
2023-09-13 03:00	0.15	3.51	3.69	2.55	323.6	0	0	981.8	6.2	87.6	11.708
2023-09-13 04:00	0.13	3.825	4.05	2.42	319.8	0	0	981.7	6.1	87.7	11.689
2023-09-13 05:00	0.07	3.78	4.005	2.43	318.3	0	0	981.8	6.3	87.8	11.677
2023-09-13 06:00	0.12	3.465	3.6	2.6	318.6	0	0	982	6.6	87.9	11.668
2023-09-13 07:00	0.20	3.42	3.51	2.7	322.1	0.3	0	982.3	6.8	87.4	11.681
2023-09-13 08:00	0.16	3.645	3.78	2.41	327.7	1.6	0	982.6	6.9	87	11.729
2023-09-13 09:00	0.34	4.365	4.41	2.52	330.8	0.4	0	982.9	7.3	84.9	11.837
2023-09-13 10:00	0.14	4.185	4.32	2.26	327.1	0	0	983.1	7.7	84.4	11.992
2023-09-13 11:00	0.08	4.005	4.23	2.08	322	0.1	0	983.2	8.2	83.9	12.467
2023-09-13 12:00	0.17	3.915	4.095	2.15	322.5	0.4	0	983.3	8.9	83.9	12.559
2023-09-13 13:00	0.20	4.14	4.41	2.16	305.4	0.4	0	983.3	9.2	84.5	12.601
2023-09-13 14:00	0.08	4.455	4.815	1.93	308.3	0	0	983	11.3	81	12.783
2023-09-13 15:00	0.09	3.825	4.185	1.63	324.6	0	0	983	12.1	78.4	12.754
2023-09-13 16:00	0.18	3.24	3.6	1.38	331.6	0	0	983.1	12.3	71.9	12.943
2023-09-13 17:00	0.22	3.555	3.915	1	334.4	0	0	983.4	11.6	72.2	12.256
2023-09-13 18:00	0.24	3.78	4.275	0.57	287.8	0	0	983.4	10.7	76.7	12.127
2023-09-13 19:00	0.07	4.275	5.22	0.47	229.5	0	0	983.5	9.7	83.6	12.068
2023-09-13 20:00	0.20	3.96	4.59	0.49	219.9	0	0	983.7	9.6	81.7	12.03
2023-09-13 21:00	0.05	4.455	5.085	0.57	218.4	0	0	983.7	9.3	81.1	11.982
2023-09-13 22:00	0.16	5.535	6.12	0.7	221.3	0	0	983.6	9	80.1	11.934
2023-09-13 23:00	0.06	5.85	6.345	0.7	238.8	0	0	983.6	8.7	78.7	11.894
2023-09-14 00:00	0.05	5.895	6.615	1.04	269.5	0	0	983.5	8.4	78.2	11.843
2023-09-14 01:00	0.07	5.625	6.075	1.29	295	0	0	983.6	8.1	77.2	11.806
2023-09-14 02:00	0.10	5.31	5.805	1.61	282.2	0	0	983.8	7.8	76.3	11.766
2023-09-14 03:00	0.12	5.175	5.715	1.38	275.5	0	0	984.1	7.4	76.5	11.741
2023-09-14 04:00	0.23	4.95	5.445	1.21	271.4	0	0	984.5	6.4	78.3	11.703
2023-09-14 05:00	0.03	4.86	5.535	0.86	247.6	0	0	985	5.1	79.8	11.693
2023-09-14 06:00	0.31	4.725	5.49	0.65	225.2	0	0	985.6	4.1	82.3	11.711
2023-09-14 07:00	0.31	4.635	5.265	1.6	257.2	0	0	986	6.3	77.2	11.997
2023-09-14 08:00	0.06	4.005	4.59	1.84	264.2	0	0	986.3	9	68.7	12.824
2023-09-14 09:00	0.03	3.375	3.78	1.68	262.3	0	0	986.6	11.8	62.1	13.412
2023-09-14 10:00	0.07	2.97	3.51	1.91	265.2	0	0	986.6	14.5	53.3	13.701
2023-09-14 11:00	0.28	2.88	3.465	2.27	267	0	0	986.4	16.1	45.4	13.592
2023-09-14 12:00	0.28	2.925	3.735	2.72	271.9	0	0	986.3	16.7	41.6	13.217
2023-09-14 13:00	0.11	2.79	3.645	2.69	270.2	0	0	985.9	17.3	42.3	13.223
2023-09-14 14:00	0.22	2.385	3.015	2.69	254.7	0	0	985.5	17.9	41.4	13.235
2023-09-14 15:00	0.35	2.295	2.835	2.23	263.5	0	0	985.3	17.5	43.5	13.207
2023-09-14 16:00	0.11	2.295	2.835	2.47	235.2	0	0	985.1	17.9	42.4	13.247
2023-09-14 17:00	0.09	2.385	2.79	1.97	217.3	0	0	985	17.2	45.4	13.187
2023-09-14 18:00	0.16	2.565	2.925	0.87	211.6	0	0	985	14.9	55	12.514
2023-09-14 19:00	0.25	2.7	3.15	0.63	192.4	0	0	985.4	11.8	66	12.361
2023-09-14 20:00	0.13	2.88	3.51	0.57	203.6	0	0	985.7	10.2	70.7	12.315
2023-09-14 21:00	0.18	3.015	3.555	0.88	187.5	0	0	986	8.8	75.5	12.266
2023-09-14 22:00	0.10	3.105	3.87	0.79	157.5	0	0	985.9	7	82.6	12.223
2023-09-14 23:00	0.14	3.06	3.51	0.87	180.5	0	0	985.7	6.7	83	12.18
2023-09-15 00:00	0.06	3.06	3.555	1.06	185.8	0	0	986.1	5.9	84.7	12.141
2023-09-15 01:00	0.05	3.015	3.555	0.99	171.8	0	0	986.3	5	86.3	12.112
2023-09-15 02:00	0.17	3.195	3.69	1.13	175.9	0	0	986.2	5.3	86.5	12.075
2023-09-15 03:00	0.13	3.24	3.6	1.35	177.8	0	0	986	5.2	86.6	12.042
2023-09-15 04:00	0.21	3.285	3.69	1.96	176.4	0	0	985.9	5.4	86.9	11.996
2023-09-15 05:00	0.29	3.375	3.69	1.87	177.6	0	0	986	5.5	87.1	11.974
2023-09-15 06:00	0.20	3.33	3.735	2.05	175.3	0	0	986.2	5.2	87.8	11.953
2023-09-15 07:00	0.09	3.6	3.915	2.33	175.7	0	0	986.1	6.8	86.6	12.178
2023-09-15 08:00	0.29	3.33	3.645	2.56	184.1	0	0	986.1	11	79	13.025
2023-09-15 09:00	0.09	2.97	3.465	3	178.4	0	0	985.8	14.3	70.3	13.589
2023-09-15 10:00	0.04	2.79	3.78	3.35	181.6	0	0	985.5	17	59.6	13.822
2023-09-15 11:00	0.13	2.835	3.915	3.16	181.3	0	0	985	18.8	54.4	13.504
2023-09-15 12:00	0.28	3.24	4.905	3.31	176.9	0	0	984.6	20.2	50	13.212
2023-09-15 13:00	0.37	3.24	5.04	3.38	172.4	0	0	984.1	20.8	46.3	13.219
2023-09-15 14:00	0.32	3.33	4.995	3.29	172.4	0	0	983.8	20.7	46.6	13.22
2023-09-15 15:00	0.17	3.465	4.725	3.24	177.9	0	0	983.5	20.9	47.4	13.222
2023-09-15 16:00	0.23	3.42	5.04	3.31	173.2	0	0	983.3	20.8	46.4	13.24
2023-09-15 17:00	0.22	2.835	3.78	2.76	165.1	0	0	983	19.7	48.4	13.028

2023-09-15 18:00	0.21	2.61	3.375	1.47	159.8	0	0	982.8	17	54.9	12.485
2023-09-15 19:00	0.13	2.88	4.185	1.83	159.3	0	0	982.7	15.5	60	12.416
2023-09-15 20:00	0.12	2.88	3.735	2.27	167.6	0	0	982.8	14.7	61.6	12.374
2023-09-15 21:00	0.13	2.97	3.645	2.27	174.4	0	0	982.9	13.6	64.7	12.334
2023-09-15 22:00	0.13	3.105	3.96	1.87	171.6	0	0	983.1	12.6	69.6	12.294
2023-09-15 23:00	0.19	3.195	3.915	1.6	173.1	0	0	983.2	11.7	72.8	12.255
2023-09-16 00:00	0.12	3.33	4.095	1.39	169.2	0	0	983	10.8	76.4	12.222
2023-09-16 01:00	0.07	3.465	4.095	1.56	173	0	0	982.7	10.8	78.4	12.203
2023-09-16 02:00	0.12	3.6	4.185	1.28	167.8	0	0	982.3	11	80.3	12.158
2023-09-16 03:00	0.14	3.645	4.095	1.26	164.8	0	0	982	11.3	81.4	12.138
2023-09-16 04:00	0.13	3.69	4.23	0.99	167.3	0.1	0	981.9	11.4	82.1	12.112
2023-09-16 05:00	0.15	3.96	4.365	1.23	169.1	0	0	981.7	11.7	83.7	12.098
2023-09-16 06:00	0.16	3.915	4.365	1.22	168.1	0	0	981.8	11.8	84.6	12.113
2023-09-16 07:00	0.24	4.005	4.32	1.44	166.5	0	0	982	12.5	84.3	12.167
2023-09-16 08:00	0.22	4.005	4.59	2.05	179.1	0	0	982	14	80.4	12.806
2023-09-16 09:00	0.27	3.87	4.455	2.14	192	0	0	982	16.8	70.6	13.548
2023-09-16 10:00	0.09	3.69	4.275	2.29	200.5	0	0	981.9	17.5	68.7	13.464
2023-09-16 11:00	0.28	4.59	5.31	2.29	210.2	0	0	981.8	18	66	13.813
2023-09-16 12:00	0.43	5.895	6.795	1.77	232.3	0	0	981.5	18.9	60.2	13.557
2023-09-16 13:00	0.31	6.12	7.335	1.97	247.4	0	0	980.7	21	49.1	13.254
2023-09-16 14:00	0.20	6.12	6.975	1.65	272.7	0	0	980.2	20.7	49	13.103
2023-09-16 15:00	0.30	8.91	9.675	2.01	303.9	0	0	980.3	18.9	59.8	12.856
2023-09-16 16:00	0.23	10.395	11.115	0.66	340.6	0	0	980.4	18.4	67.4	13.011
2023-09-16 17:00	0.10	10.485	11.16	0.3	70.9	0	0	980.4	17.5	76.2	12.513
2023-09-16 18:00	0.06	10.755	11.79	0.37	294.1	0	0	980.2	15.9	84.6	12.435
2023-09-16 19:00	0.13	10.935	12.195	0.33	247.2	0	0	980.3	14.2	87.8	12.386
2023-09-16 20:00	0.36	10.98	11.88	0.68	275	0.5	0	980.6	13.6	84.4	12.35
2023-09-16 21:00	0.11	10.575	11.745	0.37	178.3	0	0	980.4	11.8	87.9	12.312
2023-09-16 22:00	0.05	10.44	11.88	0.4	249.9	0	0	980.2	10.8	87.8	12.28
2023-09-16 23:00	0.03	12.645	20.52	0.37	216.2	0	0	980	9.6	87	12.247
2023-09-17 00:00	0.09	9.63	12.285	0.39	219.2	0	0	979.8	8.3	87.1	12.215
2023-09-17 01:00	0.08	7.875	10.935	0.53	255.8	0	0	979.7	8.4	86.6	12.186
2023-09-17 02:00	0.26	6.705	7.74	0.71	263.9	0	0	979.7	7.8	87.7	12.163
2023-09-17 03:00	0.35	8.325	8.955	1.14	304.2	0	0	980	8.8	87.4	12.132
2023-09-17 04:00	0.24	8.505	14.4	1.33	310.2	0	0	980.3	9.2	88.2	12.113
2023-09-17 05:00	0.22	8.325	16.29	1.42	310.3	0	0	980.9	9.9	89.1	12.099
2023-09-17 06:00	0.26	8.55	10.845	1.19	321.6	0	0	981.1	10.3	88.9	12.106
2023-09-17 07:00	0.13	7.11	7.74	1.13	323.7	0	0	981.4	10.6	88.6	12.131
2023-09-17 08:00	0.23	5.58	6.075	0.87	331.2	0	0	981.7	11.2	88.2	12.501
2023-09-17 09:00	0.12	4.68	4.995	1.01	334.5	0	0	981.8	12.1	83.1	12.917
2023-09-17 10:00	0.14	4.455	4.905	1.04	337.9	0	0	981.8	13.3	76.5	13.054
2023-09-17 11:00	0.16	4.005	4.32	1.48	348	0	0	981.9	13.2	76.6	13.155
2023-09-17 12:00	0.11	3.285	3.6	1.41	337.9	0	0	981.8	14.1	71.3	13.181
2023-09-17 13:00	0.09	1.35	1.62	1.78	335.9	0	0	981.9	13.7	76	13.487
2023-09-17 14:00	0.12	1.305	1.53	1.84	346	0	0	981.9	13.9	74.8	13.794
2023-09-17 15:00	0.19	1.26	1.575	2.17	339.5	0	0	982	13.6	73.3	13.364
2023-09-17 16:00	0.14	1.035	1.35	2.48	335.3	0	0	982.3	12.2	76.7	12.987
2023-09-17 17:00	0.11	1.665	1.845	1.96	339.8	0	0	982.8	10.6	81.3	12.487
2023-09-17 18:00	0.21	3.15	3.42	1.3	338.5	0	0	983.2	10.2	80.2	12.396
2023-09-17 19:00	0.07	3.825	4.185	0.92	324.2	0	0	983.4	10	80.6	12.356
2023-09-17 20:00	0.08	4.185	4.545	1.01	319.2	0	0	983.5	9.8	80.5	12.317
2023-09-17 21:00	0.22	4.635	5.04	1.04	308.9	0	0	983.5	8.9	81	12.278
2023-09-17 22:00	0.13	4.68	5.265	0.64	291.8	0	0	983.5	7.4	82.6	12.246
2023-09-17 23:00	0.16	4.455	4.86	0.82	305.2	0	0	983.4	6.2	83.4	12.201
2023-09-18 00:00	0.17	4.455	4.95	1.09	328	0	0	983.3	5.3	84.4	12.152
2023-09-18 01:00	0.06	4.32	4.86	0.84	338.7	0	0	983.3	4.2	85.8	12.127
2023-09-18 02:00	0.14	4.14	5.265	0.61	340.8	0	0	983.4	3.4	86.6	12.102
2023-09-18 03:00	0.09	5.31	28.485	0.81	345.6	0	0	983.7	3.2	88.8	12.062
2023-09-18 04:00	0.19	2.61	14.085	0.72	335.6	0	0	983.9	2	88.4	12.033
2023-09-18 05:00	0.10	2.25	9.09	0.49	340.3	0	0	984.2	1.1	87.5	12.021
2023-09-18 06:00	0.32	1.98	8.325	0.55	350.8	0	0	984.6	0.3	88.3	12.012
2023-09-18 07:00	0.46	2.61	9.72	0.59	2	0	0	985	1.4	88.9	12.166
2023-09-18 08:00	0.13	3.285	3.42	0.91	350	0	0	985.2	3.7	87.4	12.699
2023-09-18 09:00	0.05	3.33	3.42	1.3	352.6	0	0	985.4	5.1	83.2	13.097
2023-09-18 10:00	0.07	2.925	3.105	1.59	330	0	0	985.4	6.7	75.6	13.545
2023-09-18 11:00	0.02	2.25	2.475	1.81	348.2	0	0	985	8.8	67.1	13.875
2023-09-18 12:00	0.36	2.025	2.25	1.82	3.3	0	0	984.6	10.1	63.9	13.669
2023-09-18 13:00	0.12	1.755	1.98	1.95	11.2	0	0	984.3	11	61	13.262
2023-09-18 14:00	0.15	1.485	1.71	1.96	4.1	0	0	984.1	11.1	59.9	13.262
2023-09-18 15:00	0.37	1.485	1.71	1.93	13.7	0	0	984	11.4	58.7	13.271
2023-09-18 16:00	0.11	1.755	1.98	1.95	15.2	0	0	984	11.1	58.2	13.276
2023-09-18 17:00	0.30	1.935	2.115	1.28	31.7	0	0	984.2	10.8	59.4	13.204
2023-09-18 18:00	0.27	1.89	2.25	0.25	40.2	0	0	984.3	8.5	71.5	12.545
2023-09-18 19:00	0.20	1.98	2.565	0.18	137	0	0	984.3	4.8	81.9	12.422
2023-09-18 20:00	0.13	2.295	2.97	0.27	177.2	0	0	984.4	2.7	82.8	12.364
2023-09-18 21:00	0.28	2.43	3.015	0.24	300.5	0	0	984.3	1.7	82.3	12.32
2023-09-18 22:00	0.22	2.34	3.015	0.3	191.8	0	0	984.4	0.6	84.4	12.275
2023-09-18 23:00	0.09	2.25	2.835	0.33	206.2	0	0	984.4	0.2	83.2	12.233
2023-09-19 00:00	0.06	1.98	2.43	0.3	189	0	0	984.4	-0.6	82.9	12.192
2023-09-19 01:00	0.15	2.295	2.88	0.39	176.1	0	0	984.3	-0.3	85.2	12.164
2023-09-19 02:00	0.22	1.98	2.385	0.41	237.1	0	0	984.4	0.4	84.5	12.129
2023-09-19 03:00	0.15	1.89	2.205	0.28	118.6	0	0	984.6	0.5	85.8	12.101
2023-09-19 04:00	0.06	1.89	2.295	0.62	261.4	0	0	984.8	0.4	85.4	12.04
2023-09-19 05:00	0.13	1.8	2.115	0.31	121.6	0	0	985	-0.8	84.7	12.023
2023-09-19 06:00	0.13	2.43	3.78	0.31	257.8	0	0	985.4	-0.8	83.9	12.016
2023-09-19 07:00	0.11	2.7	3.015	0.59	287.5	0	0	985.6	2.2	83.8	12.287
2023-09-19 08:00	0.25	2.745	2.97	0.85	338.3	0	0	985.9	6.6	74.1	13.29
2023-09-19 09:00	0.22	2.295	2.565	1.08	334.4	0	0	985.8	10.2	60.5	13.84
2023-09-19 10:00	0.21	2.295	2.88	1.32	323.8	0	0	985.7	11.9	50.6	13.896
2023-09-19 11:00	0.56	2.16	2.385	1.66	266.2	0	0	985.6	12.9	48.5	13.276

2023-09-19 12:00	0.22	2.16	2.7	1.31	319.6	0	0	985.1	14	45.7	13.251
2023-09-19 13:00	0.13	2.25	3.375	1.1	0.4	0	0	984.7	15.1	42.7	13.257
2023-09-19 14:00	0.23	2.025	2.25	1.41	272.1	0	0	984.3	15.8	41.2	13.259
2023-09-19 15:00	0.11	1.98	2.16	1.14	311.4	0	0	984.1	16.3	38.3	13.26
2023-09-19 16:00	0.01	1.935	2.115	0.8	339.8	0	0	984	16.6	36.6	13.26
2023-09-19 17:00	0.51	1.98	2.16	0.6	9.7	0	0	984.2	15.6	42.5	13.169
2023-09-19 18:00	0.28	1.98	2.34	0.18	39.2	0	0	984.3	11.3	66	12.54
2023-09-19 19:00	0.17	2.34	2.835	0.32	135.6	0	0	984.4	7.1	77.2	12.423
2023-09-19 20:00	0.24	2.61	3.51	0.31	93.3	0	0	984.8	4.9	83	12.37
2023-09-19 21:00	0.35	2.565	3.015	0.4	164.5	0	0	985.1	3.5	83.7	12.314
2023-09-19 22:00	0.10	2.52	2.79	0.2	246	0	0	985.4	3.5	82.1	12.285
2023-09-19 23:00	0.24	2.52	2.925	0.23	222.7	0	0	985.7	2.4	81.4	12.246
2023-09-20 00:00	0.11	2.385	2.88	0.21	215.2	0	0	985.9	1	81.9	12.21
2023-09-20 01:00	0.19	2.565	3.06	0.28	209.9	0	0	985.9	0.6	82.6	12.172
2023-09-20 02:00	0.12	2.565	2.97	0.26	217.6	0	0	986.1	0.1	83.6	12.141
2023-09-20 03:00	0.31	2.79	3.33	0.31	183.5	0	0	986.4	0.4	84.7	12.106
2023-09-20 04:00	0.06	2.655	3.15	0.23	185.4	0	0	986.6	0.1	83.1	12.074
2023-09-20 05:00	0.18	2.34	2.7	0.3	103.3	0	0	986.7	-0.8	84.6	12.041
2023-09-20 06:00	0.10	2.52	2.925	0.26	218.2	0	0	987.3	-0.5	82.6	12.033
2023-09-20 07:00	0.18	4.095	5.265	0.96	172.9	0	0	987.8	2.5	85.6	12.288
2023-09-20 08:00	0.18	3.6	4.23	0.96	170.5	0	0	988	7.8	75	13.309
2023-09-20 09:00	0.07	2.925	3.915	1.01	140.1	0	0	988.3	12.3	61.1	13.817
2023-09-20 10:00	0.38	2.745	5.13	1.68	154.6	0	0	988.4	15.8	45.9	13.888
2023-09-20 11:00	0.23	2.16	2.655	1.66	150.4	0	0	988.2	17.3	39.5	13.248
2023-09-20 12:00	0.08	2.205	2.7	1.76	151.3	0	0	988	18.4	36.2	13.247
2023-09-20 13:00	0.08	3.285	8.055	1.77	180.5	0	0	987.7	19.5	32.6	13.238
2023-09-20 14:00	0.08	2.16	2.61	1.66	217.6	0	0	987.3	20.1	31.1	13.239
2023-09-20 15:00	0.32	2.115	2.61	1.7	197.5	0	0	986.9	20.5	28.3	13.241
2023-09-20 16:00	0.12	2.115	2.43	1.46	199.8	0	0	986.9	20.5	28.8	13.239
2023-09-20 17:00	1.69	2.205	2.655	1.03	182.7	0	0	987.1	19.4	34.7	13.132
2023-09-20 18:00	0.60	2.43	2.97	0.46	109.9	0	0	987.3	14.2	59.5	12.533
2023-09-20 19:00	0.04	2.7	3.375	0.55	115.3	0	0	987.8	10.7	70.3	12.432
2023-09-20 20:00	0.16	2.925	3.825	0.62	108.4	0	0	988.1	9.7	68.5	12.378
2023-09-20 21:00	0.17	3.015	3.825	0.3	133.7	0	0	988.1	6.5	79.6	12.334
2023-09-20 22:00	0.25	3.105	3.825	0.16	223.8	0	0	988.5	5.5	81.5	12.298
2023-09-20 23:00	0.10	2.97	3.735	0.17	156.4	0	0	988.8	4.6	81.6	12.264
2023-09-21 00:00	0.30	2.88	3.6	0.2	25.3	0	0	988.9	4	83	12.229
2023-09-21 01:00	0.25	3.06	3.51	0.23	115.6	0	0	989.1	3.7	83.9	12.201
2023-09-21 02:00	0.28	3.6	4.275	0.25	254.9	0	0	989.4	4.6	81.5	12.17
2023-09-21 03:00	0.50	4.05	4.365	0.35	180.1	0	0	989.6	5.6	80.2	12.146
2023-09-21 04:00	0.32	3.6	4.095	0.28	90.2	0	0	990	4.4	83.6	12.118
2023-09-21 05:00	0.20	3.6	4.05	0.28	107.8	0	0	990.4	3.1	85.4	12.088
2023-09-21 06:00	0.41	3.96	4.365	0.34	105.5	0	0	990.8	3.4	86.9	12.084
2023-09-21 07:00	0.53	5.67	6.165	1.2	150.7	0	0	991	8.4	85.6	12.37
2023-09-21 08:00	0.06	5.085	6.21	2.08	171.9	0	0	991.1	12.1	75.3	13.16
2023-09-21 09:00	0.12	4.725	7.65	2.68	172	0	0	991.2	15.5	63.4	13.693
2023-09-21 10:00	0.34	4.095	5.085	3.01	169.3	0	0	991	17.9	56.2	13.894
2023-09-21 11:00	0.35	4.5	6.795	2.69	174	0	0	990.8	19.9	55	13.47
2023-09-21 12:00	0.51	6.57	12.69	2.82	181.6	0	0	990.5	21.5	52.8	13.237
2023-09-21 13:00	0.25	12.375	35.685	2.71	184.7	0	0	990.1	22.8	50.2	13.233
2023-09-21 14:00	0.37	9.495	20.25	2.51	186.1	0	0	989.4	23.6	49.2	13.234
2023-09-21 15:00	0.29	7.83	9.765	2.45	186.8	0	0	989.1	23.9	49.5	13.231
2023-09-21 16:00	0.14	7.695	9.36	1.81	179.1	0.1	0	989.2	22.9	55	12.919
2023-09-21 17:00	0.09	7.92	9.18	0.72	133.1	0	0	989.1	20.8	71.2	12.734
2023-09-21 18:00	0.35	7.65	8.82	1.01	142.3	0	0	989.1	19.9	72.2	12.477
2023-09-21 19:00	0.86	7.695	9.045	0.93	148.4	0	0	989.3	18.9	72.1	12.429
2023-09-21 20:00	0.21	7.38	8.73	0.84	171.8	0	0	989.8	18.3	73.9	12.391
2023-09-21 21:00	0.07	7.47	8.55	0.63	154.2	0	0	989.8	17	78.6	12.361
2023-09-21 22:00	0.27	7.74	8.865	1.11	179.1	0	0	989.7	16	81.7	12.337
2023-09-21 23:00	0.31	7.83	8.505	0.82	178.5	0	0	989.7	15.1	84.5	12.311
2023-09-22 00:00	0.18	7.785	8.595	0.68	185.5	0	0	989.8	14.3	87.6	12.285
2023-09-22 01:00	0.18	7.65	8.28	0.48	196.9	0	0	990.1	13.7	88.6	12.264
2023-09-22 02:00	0.05	7.65	8.37	0.42	189.2	0	0	990.2	12.7	90.1	12.242
2023-09-22 03:00	0.08	9.54	13.41	0.54	221.5	0	0	990.6	12.5	89.8	12.216
2023-09-22 04:00	0.29	11.97	58.23	0.72	231.3	0	0	991.1	11.7	89.5	12.189
2023-09-22 05:00	0.15	7.425	47.115	0.51	250.5	0	0	991.6	11.7	89.8	12.155
2023-09-22 06:00	0.10	7.11	18.63	0.59	345.9	0	0	991.9	11.8	90.6	12.17
2023-09-22 07:00	0.25	11.475	14.76	1.06	342.4	0	0	992.4	13.4	91.8	12.468
2023-09-22 08:00	0.34	10.665	11.475	1.27	12.1	0	0	992.7	14.5	91.1	12.698
2023-09-22 09:00	0.06	6.615	7.245	1.09	15.7	0	0	992.9	15.3	88.2	12.778
2023-09-22 10:00	0.11	8.19	8.46	0.85	349.9	0	0	992.9	15.6	87.7	12.774
2023-09-22 11:00	0.02	10.215	10.71	0.75	3.9	0	0	992.9	16.3	85.6	12.897
2023-09-22 12:00	0.06	10.665	11.43	0.67	334.2	0	0	992.9	17	84.4	12.724
2023-09-22 13:00	0.22	12.285	13.455	0.82	358.6	0	0	992.6	17.1	85.7	12.618
2023-09-22 14:00	0.31	14.895	16.155	0.78	13	0	0	992.4	16.9	88.8	12.538
2023-09-22 15:00	0.16	13.995	14.85	1.39	9.5	0	0	992.3	16.4	89.5	12.463
2023-09-22 16:00	0.22	17.145	18.225	1.92	22.9	0	0	992.2	16.5	87.1	12.432
2023-09-22 17:00	0.10	18.09	19.71	1.31	57.7	0	0	992.2	16.4	85.4	12.32
2023-09-22 18:00	0.14	17.865	19.035	0.71	19.2	0	0	992.2	15.5	87	12.231
2023-09-22 19:00	0.30	17.37	18.315	0.51	36.4	0	0	992.2	15	89.4	12.182
2023-09-22 20:00	0.17	16.875	17.685	0.48	40.8	0	0	992.3	15.1	89.1	12.159
2023-09-22 21:00	0.19	15.885	16.56	0.48	23.1	0	0	992.4	15.1	87.8	12.142
2023-09-22 22:00	0.12	14.355	15.03	0.91	46.9	0	0	992.5	15	84.2	12.132
2023-09-22 23:00	0.35	12.96	13.635	1.61	11.6	0.9	0	992.9	13.7	86.5	12.117
2023-09-23 00:00	0.33	11.025	11.655	1.58	31.7	2.1	0	993	12.6	85.5	12.081
2023-09-23 01:00	0.17	11.025	11.52	1.76	29.4	1.4	0	993.3	11.6	86.3	12.061
2023-09-23 02:00	0.18	10.53	10.935	2.29	39.8	0.8	0	992.5	11	87.3	12.048
2023-09-23 03:00	0.15	9.675	10.035	1.36	90	0	0	992.5	11	87.3	12.059
2023-09-23 04:00	0.22	9.225	9.63	0.45	289.4	0	0	993.4	11	87.7	12.058
2023-09-23 05:00	0.02	8.91	9.315	0.51	30.2	0	0	993.5	10.9	88.7	12.052

2023-09-23 06:00	0.13	9.135	9.81	0.71	1.2	0	0	993.8	10.9	88.8	12.045
2023-09-23 07:00	0.19	9.45	10.215	0.96	19.7	0	0	994	11.3	89.1	12.075
2023-09-23 08:00	0.16	10.125	10.845	1.18	42.6	0	0	993.8	11.9	89.4	12.197
2023-09-23 09:00	0.08	9.315	9.765	1.61	60.9	0	0	994.1	12.9	88.5	12.669
2023-09-23 10:00	0.07	8.775	9.18	1.32	70.3	0	0	994.1	13.7	87	12.788
2023-09-23 11:00	0.18	9	9.45	1.61	70	0	0	994.2	14.2	85.7	12.927
2023-09-23 12:00	0.18	7.425	7.965	1.6	74.7	0	0	993.9	15	83.9	13.041
2023-09-23 13:00	0.18	6.705	7.155	1.61	100.1	0	0	993.3	16	80.8	13.276
2023-09-23 14:00	0.13	6.39	6.84	1.74	101.9	0	0	993	16.7	78.9	13.284
2023-09-23 15:00	0.20	6.66	7.155	1.24	93.7	0	0	992.7	16.6	79.1	12.916
2023-09-23 16:00	0.07	6.75	7.065	1.02	91.4	0	0	992.6	16.3	79.8	12.585
2023-09-23 17:00	0.10	6.66	7.11	0.64	119.3	0	0	992.5	15.6	82.3	12.479
2023-09-23 18:00	0.05	7.2	8.01	0.31	63.6	0	0	992.4	13.9	87.4	12.347
2023-09-23 19:00	0.07	8.01	10.665	0.24	67.9	0	0	992.7	11.9	88.8	12.293
2023-09-23 20:00	0.10	8.415	16.38	0.36	87.8	0	0	992.6	10.2	88.8	12.247
2023-09-23 21:00	0.19	4.77	12.375	0.33	71	0	0	992.5	9.6	88.8	12.212
2023-09-23 22:00	0.18	5.67	8.73	0.32	125.1	0	0	992.4	8.7	88.4	12.18
2023-09-23 23:00	0.06	4.185	5.805	0.33	56.8	0	0	992.1	7.9	88.3	12.149
2023-09-24 00:00	0.42	3.195	5.58	0.41	83.4	0	0	992	7.8	89	12.115
2023-09-24 01:00	0.28	2.205	2.835	0.41	99.5	0	0	991.9	7.4	89	12.085
2023-09-24 02:00	0.13	2.655	3.555	0.25	270	0	0	991.8	7.1	88.1	12.06
2023-09-24 03:00	0.07	2.25	3.51	0.64	38.2	0	0	992	6.6	88.9	12.021
2023-09-24 04:00	0.30	2.205	3.555	0.43	220.4	0	0	992.2	6.6	89.2	12.005
2023-09-24 05:00	0.15	2.205	3.825	0.45	59.5	0	0	992.3	6.2	89.4	11.986
2023-09-24 06:00	0.18	2.16	4.275	0.58	72.8	0	0	992.5	5.9	89.2	11.988
2023-09-24 07:00	0.10	2.205	3.96	0.33	242.8	0	0	992.7	7	88.9	12.298
2023-09-24 08:00	0.17	3.825	4.095	0.65	117.2	0	0	992.6	10.4	86.7	13.072
2023-09-24 09:00	0.06	4.68	4.995	1.09	66.7	0	0	992.7	14.2	76.8	13.729
2023-09-24 10:00	0.22	5.535	5.985	1.6	51.2	0	0	992.5	17.6	62.9	13.846
2023-09-24 11:00	0.58	6.66	7.29	2.25	55.1	0	0	992.3	19.2	52.2	13.404
2023-09-24 12:00	0.49	6.435	6.885	1.64	58.3	0	0	991.9	20.1	50.6	13.205
2023-09-24 13:00	0.35	6.255	6.795	1.2	52.9	0	0	991.6	21.1	47.8	13.196
2023-09-24 14:00	0.24	5.94	6.39	1.28	21.4	0	0	991.4	21.6	45.8	13.194
2023-09-24 15:00	0.14	5.58	6.03	1.4	41.3	0	0	991	21.8	44.3	13.197
2023-09-24 16:00	0.13	5.4	5.895	1.48	31.1	0	0	990.7	21.7	44.1	13.195
2023-09-24 17:00	0.44	5.4	5.805	0.96	17.1	0	0	990.8	20.5	48.3	12.979
2023-09-24 18:00	0.24	5.67	6.255	0.51	5.5	0	0	991.1	16.8	65.6	12.473
2023-09-24 19:00	0.07	5.805	6.39	0.49	19	0	0	991.4	13.9	73.5	12.418
2023-09-24 20:00	0.14	5.625	6.255	1.37	44.7	0	0	991.9	13.7	66.3	12.379
2023-09-24 21:00	0.16	5.85	6.57	1.06	60.3	0	0	992.1	12.7	64.3	12.343
2023-09-24 22:00	0.08	6.03	6.615	0.7	68.8	0	0	992.3	11.2	68.4	12.303
2023-09-24 23:00	0.19	6.165	6.795	0.5	74.3	0	0	992.3	9	75.6	12.266
2023-09-25 00:00	0.28	6.165	6.705	0.29	82.8	0	0	992.5	7.3	80.2	12.239
2023-09-25 01:00	0.12	6.165	6.84	0.18	40.3	0	0	992.7	5.6	83.5	12.213
2023-09-25 02:00	0.07	6.03	6.975	0.24	94.8	0	0	992.7	4	84	12.183
2023-09-25 03:00	0.30	5.76	6.57	0.4	72.5	0	0	992.8	2.8	86	12.154
2023-09-25 04:00	0.25	6.705	7.2	0.82	39.6	0	0	993.1	4.4	85.5	12.117
2023-09-25 05:00	0.16	5.85	6.615	0.35	101.6	0	0	993.4	2.6	85	12.092
2023-09-25 06:00	0.21	5.49	6.12	0.25	93.3	0	0	993.9	1.7	85.3	12.085
2023-09-25 07:00	0.33	6.39	7.605	0.29	138.7	0	0	994.3	3.4	86.9	12.382
2023-09-25 08:00	0.13	10.215	10.575	0.78	71.1	0	0	994.8	7.6	82.7	13.149
2023-09-25 09:00	0.20	12.24	12.69	0.94	84.3	0	0	995	12.2	72.8	13.779
2023-09-25 10:00	0.25	12.465	12.915	1.27	123.6	0	0	995	16.4	56.3	13.883
2023-09-25 11:00	0.50	13.05	13.455	1.52	99.8	0	0	994.8	18.3	48.1	13.376
2023-09-25 12:00	0.37	13.815	14.49	1.72	97	0	0	994.7	19	46.7	13.184
2023-09-25 13:00	0.32	14.985	15.705	1.89	39.9	0	0	994.5	19.1	48.3	13.166
2023-09-25 14:00	0.11	17.685	18.405	1.7	60	0	0	994.4	19.3	45.6	13.16
2023-09-25 15:00	0.35	16.92	17.55	1.77	65.4	0	0	994.2	19.3	44.4	13.148
2023-09-25 16:00	0.48	16.2	16.65	1.37	86.3	0	0	994.2	19.2	45	13.146
2023-09-25 17:00	0.21	17.1	17.55	0.66	85	0	0	994.4	17.8	50.8	12.887
2023-09-25 18:00	0.14	17.325	17.82	0.27	34.1	0	0	994.7	13.5	68.5	12.467
2023-09-25 19:00	0.23	16.335	16.875	0.33	70.1	0	0	995	10.3	77.5	12.396
2023-09-25 20:00	0.15	15.93	16.47	0.38	81.2	0	0	995.3	9.4	78.3	12.354
2023-09-25 21:00	0.20	15.39	16.065	0.46	66.8	0	0	995.5	10.1	75.6	12.315
2023-09-25 22:00	0.17	14.985	15.57	0.54	66	0	0	995.7	10.1	76	12.279
2023-09-25 23:00	0.31	14.4	15.03	0.5	60.8	0	0	995.7	8.8	80.1	12.245
2023-09-26 00:00	0.21	13.77	14.4	0.62	64.8	0	0	996	7.4	84.2	12.207
2023-09-26 01:00	0.11	13.185	13.725	0.52	63.6	0	0	996.2	6.3	85.9	12.179
2023-09-26 02:00	0.10	12.915	13.41	0.57	66.4	0	0	996.2	5.8	86.7	12.147
2023-09-26 03:00	0.14	12.555	13.185	0.44	91.5	0	0	996.4	5.4	86.8	12.123
2023-09-26 04:00	0.24	11.835	12.33	0.49	73.1	0	0	996.7	4.7	87.2	12.09
2023-09-26 05:00	0.09	12.195	12.69	0.4	88.2	0	0	997.3	4.4	87.1	12.066
2023-09-26 06:00	0.12	11.475	11.97	0.46	65.2	0	0	997.9	3.3	86.7	12.064
2023-09-26 07:00	0.27	12.78	13.23	0.95	56.9	0	0	998.4	5.7	86.4	12.371
2023-09-26 08:00	0.30	12.69	13.23	1.2	88.8	0	0	998.7	9.6	78.4	13.248
2023-09-26 09:00	0.15	12.6	13.41	1.64	123.5	0	0	998.9	13.7	65.7	13.833
2023-09-26 10:00	0.23	12.6	13.635	2.04	128.5	0	0	998.8	16.1	55.6	13.895
2023-09-26 11:00	0.69	12.51	13.455	2.15	116.6	0	0	998.6	17.8	45.5	13.276
2023-09-26 12:00	0.15	11.565	12.78	2.39	111.1	0	0	998.2	18.5	39	13.237
2023-09-26 13:00	0.00	10.485	11.43	2.52	131.2	0	0	997.7	18.9	35.9	13.235
2023-09-26 14:00	0.02	8.19	9.135	2.47	129.3	0	0	997.2	19.3	32.1	13.24
2023-09-26 15:00	0.00	7.695	8.55	2.17	124.6	0	0	996.8	19.3	32.8	13.242
2023-09-26 16:00	0.12	7.83	8.505	1.52	104.8	0	0	996.6	18.7	34.9	13.243
2023-09-26 17:00	0.57	7.695	8.325	0.77	117.5	0	0	996.8	16.5	43	12.798
2023-09-26 18:00	0.14	8.01	9.225	0.34	88	0	0	996.9	11.7	63.2	12.472
2023-09-26 19:00	0.12	8.055	9	0.34	76.7	0	0	997	8.4	74.9	12.402
2023-09-26 20:00	0.32	8.595	9.45	0.59	86.2	0	0	997.1	7.6	75	12.335
2023-09-26 21:00	0.12	8.685	9.45	0.58	89.6	0	0	997.2	6.7	75.9	12.295
2023-09-26 22:00	0.21	8.82	9.405	0.57	85	0	0	997.4	6	77.9	12.258
2023-09-26 23:00	0.08	8.775	9.27	0.42	83.3	0	0	997.4	5.2	80.7	12.229

2023-09-27 00:00	0.24	7.695	8.775	0.26	201.4	0	0	997.2	2.9	81.9	12.187
2023-09-27 01:00	0.11	7.335	7.875	0.34	67.7	0	0	997.1	1.4	84.9	12.156
2023-09-27 02:00	0.03	7.29	7.83	0.27	57.3	0	0	997	0.8	83.9	12.121
2023-09-27 03:00	0.14	6.75	7.38	0.25	84	0	0	997	0.5	83.5	12.087
2023-09-27 04:00	0.39	6.615	7.155	0.24	93.1	0	0	997.1	-0.1	84.8	12.052
2023-09-27 05:00	0.05	6.975	7.65	0.24	133.9	0	0	997.3	-0.1	83.6	12.021
2023-09-27 06:00	0.36	10.53	15.03	0.31	72.2	0	0	997.8	-0.4	85.2	12.011
2023-09-27 07:00	0.16	9.27	13.32	0.31	109.3	0	0	997.9	1.2	87.4	12.315
2023-09-27 08:00	0.32	8.64	9.045	0.7	69.9	0	0	998.1	5.4	83.5	13.171
2023-09-27 09:00	0.23	7.695	8.145	0.75	101.7	0	0	998	10.2	72.9	13.802
2023-09-27 10:00	0.21	7.38	7.92	1.12	77.4	0	0	997.7	14.6	59.2	13.873
2023-09-27 11:00	0.68	7.56	8.145	1.99	118.3	0	0	997.1	17.2	47.4	13.376
2023-09-27 12:00	0.59	6.885	7.515	2.05	101.7	0	0	996.3	18.1	41.6	13.223
2023-09-27 13:00	0.12	7.065	8.505	2.39	113	0	0	995.6	18.4	40	13.227
2023-09-27 14:00	0.10	6.39	7.155	2.23	118.4	0	0	994.8	18.8	39	13.233
2023-09-27 15:00	0.04	6.21	7.245	1.6	118.8	0	0	994	19.3	37.7	13.244
2023-09-27 16:00	0.20	6.12	7.245	1.54	108.3	0	0	993.7	18.8	38.9	13.249
2023-09-27 17:00	0.37	5.805	6.795	0.68	99.8	0	0	993.6	17.4	46.1	13.05
2023-09-27 18:00	0.21	5.85	6.705	0.42	69.3	0	0	993.5	12.9	64.8	12.497
2023-09-27 19:00	0.08	5.895	6.795	0.37	76	0	0	993.7	11.1	67.3	12.432
2023-09-27 20:00	0.40	6.345	7.335	0.54	77.4	0	0	993.9	10.1	68.9	12.377
2023-09-27 21:00	0.36	6.57	7.83	0.69	68.5	0	0	994	9.2	68	12.331
2023-09-27 22:00	0.13	6.66	8.145	0.7	72.5	0	0	994	7.3	73.9	12.282
2023-09-27 23:00	0.29	6.615	7.83	0.48	81.8	0	0	993.9	5.6	78.6	12.25
2023-09-28 00:00	0.42	6.39	7.695	0.34	144.1	0	0	993.9	3.8	82.2	12.209
2023-09-28 01:00	0.08	5.85	6.75	0.19	40.7	0	0	993.7	2.1	82.6	12.187
2023-09-28 02:00	0.13	5.175	6.075	0.26	50.2	0	0	993.5	1.4	82.5	12.157
2023-09-28 03:00	0.25	5.22	5.895	0.31	45.8	0	0	993.5	0.4	83.1	12.112
2023-09-28 04:00	0.19	4.95	5.67	0.25	116.2	0	0	993.5	-0.3	82.5	12.072
2023-09-28 05:00	0.11	5.22	5.85	0.24	46.2	0	0	993.5	-1.1	83	12.037
2023-09-28 06:00	0.13	6.93	8.64	0.21	86.2	0	0	993.6	-1.3	84.1	12.02
2023-09-28 07:00	0.29	6.21	6.615	0.55	76.4	0	0	993.8	0.7	87.2	12.289
2023-09-28 08:00	0.45	6.705	7.29	0.86	93.4	0	0	993.7	5.9	80.9	13.219
2023-09-28 09:00	0.19	5.58	6.165	1.25	88.5	0	0	993.4	12.3	64	13.804
2023-09-28 10:00	0.17	4.77	5.355	1.62	88.9	0	0	992.9	16.5	48.2	13.868
2023-09-28 11:00	0.54	12.96	13.59	2.25	116.4	0	0	992.3	18.6	40.5	13.331
2023-09-28 12:00	0.31	18.945	20.25	2.79	130.3	0	0	991.6	19.2	37.3	13.218
2023-09-28 13:00	0.03	8.595	10.215	2.76	127.1	0	0	990.9	19.5	34.7	13.225
2023-09-28 14:00	0.01	6.84	11.34	2.44	145.2	0	0	990.1	20.2	31.9	13.233
2023-09-28 15:00	0.05	7.92	17.46	2.35	141	0	0	989.4	20.5	30	13.238
2023-09-28 16:00	0.05	5.13	6.525	1.81	132.7	0	0	989.1	20.1	31	13.239
2023-09-28 17:00	0.51	5.31	6.795	1.11	108.9	0	0	988.9	18.4	36.7	12.967
2023-09-28 18:00	0.48	5.4	6.165	0.5	92.9	0	0	988.8	14.8	48.7	12.486
2023-09-28 19:00	0.19	5.67	6.3	0.57	79.7	0	0	989	12.5	56.2	12.414
2023-09-28 20:00	0.06	5.985	6.615	0.3	27.2	0	0	989.1	9.4	67.8	12.361
2023-09-28 21:00	0.26	7.065	8.055	0.54	97.6	0	0	989	8.4	72.5	12.318
2023-09-28 22:00	0.43	8.235	9.36	0.81	105.8	0	0	988.9	9.5	68.7	12.278
2023-09-28 23:00	0.41	7.695	8.595	0.4	349.3	0	0	988.6	7.5	72.8	12.249
2023-09-29 00:00	0.58	6.75	7.56	0.25	339.8	0	0	988.5	5	79.9	12.218
2023-09-29 01:00	0.32	6.885	7.65	0.25	5.6	0	0	988.5	4.2	81.7	12.191
2023-09-29 02:00	0.43	7.335	8.01	0.26	253.5	0	0	988.6	4.1	82.5	12.159
2023-09-29 03:00	0.64	7.65	8.145	0.47	181.2	0	0	988.6	5.6	81	12.129
2023-09-29 04:00	0.13	8.01	8.505	0.87	192.3	0	0	988.6	5.8	81	12.081
2023-09-29 05:00	0.13	7.695	8.235	0.93	185.7	0	0	989	5	83.6	12.044
2023-09-29 06:00	0.24	7.47	7.965	0.73	171.5	0	0	989.3	4.6	84.9	12.035
2023-09-29 07:00	0.53	7.47	9.36	1.43	175.6	0	0	989.6	6.5	80.8	12.241
2023-09-29 08:00	0.14	6.525	7.2	1.33	165.3	0	0	989.7	10.6	69.2	13.104
2023-09-29 09:00	0.10	5.895	6.885	1.59	183.1	0	0	989.5	15.4	54.4	13.78
2023-09-29 10:00	0.47	6.57	8.235	2.35	178.2	0	0	989.1	18	47.7	13.896
2023-09-29 11:00	0.31	6.12	7.155	2.81	155.9	0	0	988.4	19.5	43.7	13.411
2023-09-29 12:00	0.23	6.93	10.575	2.93	157	0	0	987.8	20.6	40.1	13.252
2023-09-29 13:00	0.00	8.685	19.26	2.88	168.6	0	0	987.2	21.3	37.9	13.254
2023-09-29 14:00	0.01	6.12	7.38	3.08	175.1	0	0	987	21.9	35.6	13.258
2023-09-29 15:00	0.02	5.94	6.975	2.54	180.9	0	0	987.3	22.3	35	13.26
2023-09-29 16:00	0.03	5.85	8.82	2.42	185.2	0	0	987.3	22.1	34.9	13.248
2023-09-29 17:00	0.71	5.445	6.39	1.37	168	0	0	987.2	20.3	40.3	12.943
2023-09-29 18:00	0.44	5.31	6.12	0.54	130.3	0	0	987	17.2	52	12.504
2023-09-29 19:00	0.63	6.03	7.425	0.76	126.7	0	0	986.9	15.4	59.4	12.442
2023-09-29 20:00	0.68	6.48	7.875	0.42	145.2	0	0	986.7	14.3	62.7	12.398
2023-09-29 21:00	0.63	7.2	9.18	0.92	173.7	0	0	986.5	13.3	65.6	12.352
2023-09-29 22:00	0.36	6.39	7.47	1.4	169.9	0	0	985.8	13.9	63.2	12.309
2023-09-29 23:00	0.20	6.21	7.065	1.37	195.5	0	0	986	12.5	67.7	12.269
2023-09-30 00:00	0.23	6.3	7.11	1.13	184.9	0	0	986.8	10.8	73.3	12.237
2023-09-30 01:00	0.04	6.345	7.065	0.96	169.6	0	0	987.4	10	77	12.217
2023-09-30 02:00	0.12	6.615	7.425	1.32	170.5	0	0	987.2	10.5	78.6	12.192
2023-09-30 03:00	0.20	6.705	7.335	0.88	173.2	0	0	987.2	10.2	80.9	12.172
2023-09-30 04:00	0.19	7.02	7.47	1.33	175.1	0	0	987.4	10.3	83.5	12.139
2023-09-30 05:00	0.17	6.975	7.38	1.69	177.1	0	0	987.7	10.3	84	12.107
2023-09-30 06:00	0.06	7.155	7.56	1.52	172.7	0	0	988.3	9.9	85	12.108
2023-09-30 07:00	0.11	6.93	7.245	1.67	181	0	0	988.9	11.9	83.1	12.284
2023-09-30 08:00	0.08	6.57	6.93	1.84	185.1	0	0	989.2	13.8	81.1	12.572
2023-09-30 09:00	0.24	6.255	6.66	1.94	186.4	0	0	989.3	15.3	77.7	12.803
2023-09-30 10:00	0.15	5.94	6.435	1.82	217.5	0	0	989.5	16.2	75.6	12.696
2023-09-30 11:00	0.16	6.39	7.155	1.26	228.7	3.7	0	989.7	16.1	80.3	12.564
2023-09-30 12:00	0.24	6.48	6.975	0.91	236.6	0	0	989.9	15.9	87.1	12.727
2023-09-30 13:00	0.09	6.3	6.84	1.35	222.7	0.1	0	989.9	16.4	83.8	12.727
2023-09-30 14:00	0.19	6.3	6.75	1.38	216.6	0	0	990.2	16.3	84.8	12.546
2023-09-30 15:00	0.03	6.885	7.425	1.29	224	0.1	0	990.4	16.3	84.8	12.376
2023-09-30 16:00	0.09	7.47	8.055	0.86	207.6	0	0	990.4	16	88.1	12.3
2023-09-30 17:00	0.12	7.155	7.425	0.77	230.2	0	0	990.6	15.8	89.4	12.213

2023-09-30 18:00	0.21	6.615	6.975	0.35	287.6	0.2	0	990.8	15.5	90.4	12.154
2023-09-30 19:00	0.22	5.94	6.255	0.49	156	0.1	0	991	15.2	91.4	12.131
2023-09-30 20:00	0.32	6.255	6.57	0.5	204	0	0	991.2	15.1	91.8	12.124
2023-09-30 21:00	0.08	5.94	6.345	0.39	234.6	0	0	991.6	15	91.9	12.109
2023-09-30 22:00	0.11	6.255	9.945	0.56	239.3	0	0	992.1	14.9	91.9	12.097
2023-09-30 23:00	0.18	11.34	74.61	0.73	275.7	0	0	992.4	14.6	91.8	12.092
2023-10-01 00:00	0.14	5.31	33.75	0.89	300.3	0	0	992.7	13.9	91.6	12.08
2023-10-01 01:00	0.07	10.485	65.16	0.77	323.7	0	0	993.1	13.6	91.4	12.065
2023-10-01 02:00	0.11	8.19	48.69	0.52	332.2	0	0	993.2	13	91	12.058
2023-10-01 03:00	0.25	4.635	34.02	0.57	27.3	0	0	993.5	12.6	90.8	12.05
2023-10-01 04:00	0.29	2.745	13.815	0.34	66.3	0	0	993.8	12	90.5	12.037
2023-10-01 05:00	0.06	4.32	26.37	0.48	56.5	0	0	994.1	11.8	90.4	12.024
2023-10-01 06:00	0.10	3.78	23.535	0.74	87.1	0	0	994.5	11.7	90.7	12.021
2023-10-01 07:00	0.13	5.49	30.015	1	71.3	0	0	994.8	11.9	90.9	12.091
2023-10-01 08:00	0.24	3.645	14.985	1.3	113.7	0	0	995.1	12.3	91.5	12.369
2023-10-01 09:00	0.18	1.8	2.115	1.63	132.3	0	0	995.3	13	91.6	12.781
2023-10-01 10:00	0.05	2.25	2.52	1.97	141.8	0	0	995.1	14	89.1	12.952
2023-10-01 11:00	0.10	3.15	3.555	2.08	145.1	0	0	994.7	15.5	82.9	13.439
2023-10-01 12:00	0.28	2.475	2.925	1.98	144.8	0	0	994.2	17.6	73.5	13.791
2023-10-01 13:00	0.18	2.205	2.655	2.08	159.9	0	0	993.8	19.6	63.5	13.679
2023-10-01 14:00	0.51	2.25	2.835	1.43	183.5	0	0	993.4	20.9	58.1	13.219
2023-10-01 15:00	0.56	2.43	3.15	1.43	204.1	0	0	992.7	21.8	54.9	13.221
2023-10-01 16:00	0.36	2.385	3.015	1.51	162.7	0	0	992.1	21.6	53.7	13.192
2023-10-01 17:00	0.12	1.395	1.755	2.05	181.9	0	0	991.3	19.8	66.1	12.87
2023-10-01 18:00	0.12	1.53	1.98	0.58	146	0	0	991.2	17	76.9	12.462
2023-10-01 19:00	0.16	2.25	2.835	0.54	126.2	0	0	991	14.5	86.1	12.407
2023-10-01 20:00	0.37	2.79	3.465	0.74	158.9	0	0	990.9	14.6	86.6	12.373
2023-10-01 21:00	0.21	3.96	4.59	1.73	166.5	0	0	990.2	15.4	85.6	12.34
2023-10-01 22:00	0.18	5.49	5.985	1.97	171.6	0	0	989.9	16.7	82.3	12.31
2023-10-01 23:00	0.16	5.805	6.3	1.66	170.4	0	0	989.5	16.8	82.9	12.288
2023-10-02 00:00	0.08	6.3	7.11	1.92	170.3	0.3	0	988.8	17.1	82.8	12.266
2023-10-02 01:00	0.05	7.29	8.01	2.29	155.1	0.4	0	987.4	16.5	88.8	12.252
2023-10-02 02:00	0.03	7.92	8.415	2.72	168.8	0	0	986.1	16.7	88.8	12.232
2023-10-02 03:00	0.07	7.47	8.01	1.79	169.7	0	0	985.8	16.4	89.4	12.217
2023-10-02 04:00	0.12	7.2	7.785	2.18	179.7	0	0	985.5	16.3	89.5	12.197
2023-10-02 05:00	0.26	6.93	7.425	1.94	189	0	0	985.5	16.3	89.8	12.18
2023-10-02 06:00	0.26	6.39	6.885	1.76	191.5	0	0	985.2	16.4	89.2	12.169
2023-10-02 07:00	0.09	5.67	6.165	1.86	171.1	0	0	984.7	16.6	88.2	12.164
2023-10-02 08:00	0.16	4.86	5.31	2.08	183.7	0	0	984.7	17.2	86.4	12.281
2023-10-02 09:00	0.36	4.275	5.04	2.79	191.4	0	0	984.3	19.5	79.1	13.482
2023-10-02 10:00	0.15	4.5	6.21	4.13	228.6	0	0	984	23.2	64	13.867
2023-10-02 11:00	0.37	4.905	6.795	4.42	231.5	0	0	983.6	23.6	61.7	13.449
2023-10-02 12:00	0.48	5.04	6.705	3.58	220.9	0	0	983.2	23	65.2	13.376
2023-10-02 13:00	0.32	5.22	7.92	4	227.8	0	0	982.6	24.7	58.8	13.28
2023-10-02 14:00	0.42	5.4	8.46	3.75	227.3	0	0	982.3	26.2	55.4	13.279
2023-10-02 15:00	0.23	5.67	9.09	3.76	217.4	0	0	981.6	27.1	52.5	13.272
2023-10-02 16:00	0.16	5.85	9.315	3.03	218.1	0	0	981.4	26.9	52.3	13.243
2023-10-02 17:00	0.34	5.805	9.09	1.97	205.6	0	0	981.4	25.4	56.7	12.717
2023-10-02 18:00	0.43	5.895	9.9	2.72	220.8	0	0	982	24.4	53.6	12.285
2023-10-02 19:00	0.23	5.94	9.54	2.19	224.9	0	0	982.3	22.8	57.2	12.286
2023-10-02 20:00	0.09	6.255	9.45	2.33	228.5	0	0	982.5	21.6	61.7	12.263
2023-10-02 21:00	0.17	6.39	9.495	2.21	227.6	0	0	982.8	20.9	64	12.238
2023-10-02 22:00	0.10	6.39	9	1.96	207.4	0	0	982.8	19.9	67.8	12.217
2023-10-02 23:00	0.32	6.48	8.865	1.6	204	0	0	983	19	71.3	12.189
2023-10-03 00:00	0.05	6.48	8.46	0.64	297.1	0	0	983.6	17.1	78.7	12.16
2023-10-03 01:00	0.24	6.84	8.46	0.72	181	0	0	983.9	14.7	86.3	12.137
2023-10-03 02:00	0.15	6.75	8.28	0.87	196.5	0	0	984	14.8	85.8	12.116
2023-10-03 03:00	0.14	6.75	8.145	0.86	157.6	0	0	984	14.1	87.1	12.076
2023-10-03 04:00	0.11	6.525	7.83	1.34	169.7	0	0	983.8	14	86.7	12.057
2023-10-03 05:00	0.28	6.165	7.425	1.42	171.8	0	0	984.1	13.7	86.6	12.032
2023-10-03 06:00	0.09	6.345	7.47	1.52	169.3	0	0	984	13.3	87.3	12.026
2023-10-03 07:00	0.22	6.21	7.47	1.77	179	0	0	983.9	14.2	85.1	12.285
2023-10-03 08:00	0.03	5.895	7.785	2.25	193.1	0	0	983.8	17.5	74.7	13.537
2023-10-03 09:00	0.25	5.49	7.47	2.37	206.8	0	0	983.7	20.9	63.1	13.846
2023-10-03 10:00	0.30	5.625	8.415	2.81	207.3	0	0	983.4	23.7	56	13.502
2023-10-03 11:00	0.37	5.895	9.18	2.66	200.4	0	0	983.4	25.8	50.7	13.241
2023-10-03 12:00	0.16	6.075	9.495	3.33	201.1	0	0	982.9	27.3	47.1	13.24
2023-10-03 13:00	0.05	6.075	9.99	3.59	223.5	0	0	982.5	28.4	42.7	13.24
2023-10-03 14:00	0.05	5.76	9.135	3.44	220.7	0	0	982.1	29	39.6	13.24
2023-10-03 15:00	0.00	5.535	8.37	3.34	197.9	0	0	982	28.9	39.1	13.238
2023-10-03 16:00	0.00	4.815	7.155	3.1	190.4	0	0	982	28.1	38.7	13.234
2023-10-03 17:00	0.48	4.86	6.93	2.05	181.1	0	0	982	26.3	42.9	12.725
2023-10-03 18:00	0.34	5.175	7.02	1.47	167.6	0	0	982.1	23.3	51.6	12.223
2023-10-03 19:00	0.21	5.265	7.245	1.76	180.2	0	0	982.4	21.9	54.4	12.187
2023-10-03 20:00	0.10	5.22	7.47	1.38	175.7	0	0	982.5	20	59	12.146
2023-10-03 21:00	0.08	5.175	7.155	1.46	174.8	0	0	982.5	18.8	61.9	12.106
2023-10-03 22:00	0.36	5.175	7.02	1.18	172.4	0	0	982.5	17.4	66.8	12.071
2023-10-03 23:00	0.20	5.355	7.245	1.35	170.5	0	0	982.4	16.5	70.6	12.043
2023-10-04 00:00	0.12	5.49	7.695	1.8	169.1	0	0	982.2	16.7	71.9	12.019
2023-10-04 01:00	0.19	5.715	7.92	1.98	170.5	0	0	982	16.6	74.1	12.011
2023-10-04 02:00	0.21	6.3	8.19	2.46	170.7	0	0	981.8	16.1	77.1	11.994
2023-10-04 03:00	0.12	6.525	8.415	2.34	172	0	0	981.8	15.6	79.9	11.976
2023-10-04 04:00	0.22	6.615	8.055	2.06	171.1	0	0	981.7	14.8	83.7	11.966
2023-10-04 05:00	0.14	6.66	7.965	2.03	170.1	0	0	981.8	14.8	85	11.954
2023-10-04 06:00	0.15	6.57	7.92	2.23	171.6	0	0	981.7	14.8	85.6	11.957
2023-10-04 07:00	0.25	6.255	7.605	2.58	172.5	0	0	981.6	15.8	82.1	12.169
2023-10-04 08:00	0.12	5.76	7.785	3.24	171.5	0	0	981.5	18.1	73.6	13.535
2023-10-04 09:00	0.23	5.31	7.83	3.39	169.6	0	0	980.9	21.2	63	13.796
2023-10-04 10:00	0.48	5.04	9.675	4.33	172.6	0	0	980.1	24.7	50.7	13.569
2023-10-04 11:00	0.49	4.77	9.855	5.09	178.2	0	0	979.2	26.9	42.6	13.212

2023-10-04 12:00	0.01	4.815	11.43	5.67	184.2	0	0	978.5	28	38.4	13.202
2023-10-04 13:00	0.00	4.32	10.215	6.3	190	0	0	977.9	27.9	36.6	13.211
2023-10-04 14:00	0.38	4.095	8.55	5.85	190.9	0	0	977.6	27.3	38.5	13.216
2023-10-04 15:00	0.34	5.175	10.035	6.23	181.9	0	0	977.1	26.8	40.6	13.205
2023-10-04 16:00	0.43	5.31	9.36	5.38	181.5	0	0	977	26	42.5	12.861
2023-10-04 17:00	0.45	5.22	8.55	4.49	177.6	0	0	977	24.8	46	12.176
2023-10-04 18:00	0.33	4.995	8.19	3.99	175.2	0	0	977.1	24.1	49.5	12.133
2023-10-04 19:00	0.17	4.95	7.425	4	172.8	0	0	977	23.7	50	12.122
2023-10-04 20:00	0.44	5.04	7.515	3.8	175.6	0	0	977.1	23.3	51.2	12.111
2023-10-04 21:00	0.23	5.625	7.56	4.13	177.5	0.1	0	976.9	21.9	58.9	12.093
2023-10-04 22:00	0.33	5.895	7.56	4.51	174.2	0.1	0	976.4	21.2	63.5	12.067
2023-10-04 23:00	0.15	5.58	6.39	2.94	186	0.5	0	976.5	19.2	76.1	12.055
2023-10-05 00:00	0.20	6.75	7.245	3.2	179.6	0	0	976.1	18.1	84.3	12.034
2023-10-05 01:00	0.04	8.055	8.64	2.72	176.8	0	0	975.9	18.1	83.6	12.021
2023-10-05 02:00	0.15	9.45	9.855	2.45	177.1	0	0	975.8	18	83.1	12.005
2023-10-05 03:00	0.14	9.27	9.855	2.19	168	0	0	975.7	17.8	84	11.99
2023-10-05 04:00	0.24	8.64	9.54	1.94	170.5	0	0	975.5	17.5	85.9	11.975
2023-10-05 05:00	0.28	8.55	9.315	1.66	174.4	0	0	975.6	17.3	86.8	11.959
2023-10-05 06:00	0.08	9.81	10.755	1.72	178	0	0	975.5	17.1	86.7	11.95
2023-10-05 07:00	0.16	10.8	11.835	1.44	186.6	0	0	975.6	17.3	85.8	11.942
2023-10-05 08:00	0.16	10.305	11.43	2.25	212.1	18.3	0	975.8	16.2	87.4	11.94
2023-10-05 09:00	0.28	10.17	11.115	1.13	171.7	0.1	0	975.9	16	90.6	12.092
2023-10-05 10:00	0.11	10.44	11.295	1.32	196.3	0	0	975.7	16.9	88.9	13.393
2023-10-05 11:00	0.13	7.2	8.145	1.84	218.4	0	0	975.4	17.7	79.4	13.797
2023-10-05 12:00	0.16	5.355	6.435	2.32	210.8	0	0	975	18.7	72.3	13.784
2023-10-05 13:00	0.22	3.51	4.635	2.63	222	0	0	974.5	19.3	64	13.248
2023-10-05 14:00	0.23	2.52	3.69	2.25	217.1	0	0	974.3	19.2	60.8	13.246
2023-10-05 15:00	0.40	2.205	3.51	2.24	192.5	0	0	974	20.4	54.9	13.247
2023-10-05 16:00	0.47	2.07	3.33	2.23	181.3	0	0	973.9	19.5	54.5	12.988
2023-10-05 17:00	0.20	4.005	5.4	1.79	145	0	0	973.8	17.5	73	11.924
2023-10-05 18:00	0.52	8.505	9.585	2.12	155	0	0	974	16.4	84.2	11.429
2023-10-05 19:00	0.12	9.765	10.755	2.41	161	0	0	973.8	15.8	85.8	11.395
2023-10-05 20:00	0.14	7.785	8.64	2.3	173.3	0	0	973.6	15.3	85.8	11.261
2023-10-05 21:00	0.05	6.93	7.92	1.52	169.2	0	0	973.2	14.4	87.2	10.677
2023-10-05 22:00	0.15	6.165	7.2	1.51	175.2	0	0	972.9	13.7	88	10.725
2023-10-05 23:00	0.34	4.95	5.94	1.54	174.3	0	0	972.5	13.1	86.3	10.685
2023-10-06 00:00	0.20	4.095	5.085	1.17	169.8	0	0	972.1	12.3	85.6	10.659
2023-10-06 01:00	0.17	3.645	4.905	0.74	215.2	0	0	971.9	11.5	85.8	10.558
2023-10-06 02:00	0.12	3.42	4.545	0.57	171.9	0	0	971.4	10.6	84.5	10.497
2023-10-06 03:00	0.15	3.78	5.265	0.78	135.2	0	0	970.8	9.5	86.8	10.485
2023-10-06 04:00	0.25	3.825	5.22	0.67	154.7	0	0	970.3	9.3	87	10.476
2023-10-06 05:00	0.29	3.6	4.905	0.47	180	0	0	970.4	8.9	86.7	10.504
2023-10-06 06:00	0.40	3.555	4.59	0.54	210.3	0	0	970.7	8.9	87	10.473
2023-10-06 07:00	0.24	3.555	4.68	0.94	159.1	0	0	971.1	9.1	88	10.808
2023-10-06 08:00	0.12	3.105	3.915	2.27	185.6	0	0	971.2	11.4	81.8	13.068
2023-10-06 09:00	0.10	2.205	2.97	2.71	198.4	0	0	971	13.7	69	13.814
2023-10-06 10:00	0.26	1.755	2.52	3.19	193.9	0	0	970.8	15.3	58.2	13.645
2023-10-06 11:00	0.28	1.575	2.745	3.68	212.3	0	0	970.8	15.6	52.2	13.232
2023-10-06 12:00	0.56	1.395	2.835	3.93	205.6	0	0	970.7	16.6	45.5	13.246
2023-10-06 13:00	0.42	1.305	2.79	4.17	202.8	0	0	970.9	17	43.7	13.258
2023-10-06 14:00	0.59	1.08	1.8	3.52	205.5	0	0	971.1	16.5	44.7	13.261
2023-10-06 15:00	0.18	0.9	1.53	3.31	204.6	0	0	971.1	17	41.1	13.247
2023-10-06 16:00	0.31	0.81	1.44	2.84	207.5	0	0	971.8	16.1	41.4	12.984
2023-10-06 17:00	0.23	0.855	1.35	2.06	194.8	0	0	972.6	14.5	46.4	11.419
2023-10-06 18:00	0.06	0.99	1.485	1.15	195.1	0	0	973.2	12.8	52.6	10.578
2023-10-06 19:00	0.09	1.08	1.53	1.26	199.7	0	0	973.6	12	56.3	10.497
2023-10-06 20:00	0.09	1.26	1.665	0.84	217.6	0	0	973.9	11.2	60.7	10.414
2023-10-06 21:00	0.05	1.755	2.34	0.57	143.8	0	0	974	9.1	71.2	10.375
2023-10-06 22:00	0.21	1.89	2.43	1.13	161.9	0	0	974.4	7.5	75.8	10.245
2023-10-06 23:00	0.19	2.205	2.655	0.94	180	0	0	974.7	6.2	79.2	10.199
2023-10-07 00:00	0.11	2.385	2.835	0.81	189.6	0	0	974.9	6.3	80.6	10.153
2023-10-07 01:00	0.07	2.565	3.375	0.46	155.9	0	0	974.8	4.2	84.1	10.134
2023-10-07 02:00	0.13	2.7	3.24	0.66	182.5	0	0	975	3.6	85.5	10.066
2023-10-07 03:00	0.11	2.655	3.375	0.48	182	0	0	975.2	2.4	85.3	10.047
2023-10-07 04:00	0.15	2.61	3.33	0.48	257.1	0	0	975.6	1.6	83.6	9.988
2023-10-07 05:00	0.24	2.88	3.42	0.39	261	0	0	976	2.2	86.8	9.977
2023-10-07 06:00	0.13	2.745	3.24	0.48	76.5	0	0	976.5	3.4	87.1	9.947
2023-10-07 07:00	0.18	2.61	3.42	0.76	293.8	0	0	976.9	4.9	87.2	9.952
2023-10-07 08:00	0.09	2.295	2.88	1.87	322.3	0	0	977.3	5.8	88.7	10.02
2023-10-07 09:00	0.03	1.98	2.115	2.36	316	0	0	977.3	6	87.8	10.627
2023-10-07 10:00	0.14	1.755	1.845	2.51	322.9	0	0	977.3	6.1	87.3	11.643
2023-10-07 11:00	0.24	1.71	1.755	3.06	331.1	0	0	977.2	6.4	85.8	12.887
2023-10-07 12:00	0.04	1.665	1.71	3.08	336.4	0	0	977.2	6.6	83.2	12.771
2023-10-07 13:00	0.11	1.71	1.8	3.32	331.5	0	0	977.2	6.1	85	12.384
2023-10-07 14:00	0.19	1.71	1.71	3.6	334	0	0	977.2	5.7	85.5	11.922
2023-10-07 15:00	0.24	1.755	1.755	3.42	331.3	0.4	0	977.5	5.4	86.8	11.639
2023-10-07 16:00	0.05	1.8	1.845	3.47	329.9	0.3	0	977.6	5.1	87.7	11.553
2023-10-07 17:00	0.28	1.8	1.89	3.35	330.8	0.6	0	978	4.6	88	10.423
2023-10-07 18:00	0.20	1.935	2.07	3.6	333.3	1.3	0	978.4	4.5	87.7	9.524
2023-10-07 19:00	0.09	2.025	2.115	3.24	335.3	1	0	978.3	4.3	87.6	9.456
2023-10-07 20:00	0.04	2.43	2.52	3.49	344.4	0.7	0	978.2	4.1	85.9	9.387
2023-10-07 21:00	0.03	2.25	2.34	3.62	348.9	1.5	0	977.7	3.7	86	9.342
2023-10-07 22:00	0.22	2.205	2.34	4.18	336.9	0.2	0	976.9	3.5	84.8	9.255
2023-10-07 23:00	0.08	2.61	2.655	4.46	334.1	0.1	0	976.2	3.2	85.2	9.102
2023-10-08 00:00	0.19	2.655	2.745	4.42	332.6	0	0	975.7	3	85.1	8.107
2023-10-09 07:00	0.00	4.05	4.095	2.43	328.8	0	0	958.8	3	88.9	9.461
2023-10-09 08:00	0.04	2.565	2.655	1.96	326.9	0	0	959	3.3	88.3	11.261
2023-10-09 09:00	0.06	1.305	1.44	2.1	318.2	0	0	959.3	4.1	84.5	12.781
2023-10-09 10:00	0.05	0.99	1.17	2.39	311.8	0	0	959.4	5	80.2	13.112
2023-10-09 11:00	0.15	0.99	1.08	2.47	294.6	0	0	959.4	5.7	80.2	12.828

2023-10-09 12:00	0.10	1.17	1.305	2.26	305.9	1	0	959.6	5.8	85.4	12.281
2023-10-09 13:00	0.11	1.26	1.305	2.37	303.5	1	0	959.5	6.2	86.3	11.339
2023-10-09 14:00	0.12	1.125	1.215	2.69	360	4.2	0	960	4.5	85.8	10.552
2023-10-09 15:00	0.16	1.08	1.215	1.83	350.6	0.1	0	961	3.4	85.3	10.126
2023-10-09 16:00	0.17	1.17	1.26	1.68	328.3	0	0	961.6	3.5	86.2	9.522
2023-10-09 17:00	0.09	1.215	1.26	1.65	295.9	0	0	962.1	3.6	85.5	9.548
2023-10-09 18:00	0.00	1.215	1.395	2.14	294.8	0	0	962.5	3	85.7	8.368
2023-10-10 09:00	0.01	1.8	1.845	1.61	297.3	0.4	0	966	3	84.8	10.332
2023-10-10 10:00	0.15	1.08	1.125	1.93	280.7	0.2	0	966.2	3	83	11.67
2023-10-10 11:00	0.17	0.9	0.9	1.68	308.5	0.3	0	966.5	3.5	81.8	12.538
2023-10-10 12:00	0.08	0.765	0.855	1.8	299.3	0	0	966.7	4.3	79.3	13.285
2023-10-10 13:00	0.11	0.675	0.765	1.85	292.8	0.2	0	966.8	5	77.8	13.269
2023-10-10 14:00	0.13	0.765	0.855	1.34	337	0.3	0	967.2	4.5	81.3	12.402
2023-10-10 15:00	0.11	0.81	0.9	0.84	323.2	0	0	967.5	5	79.2	12.057
2023-10-10 16:00	0.16	0.855	0.945	1.17	309.3	0	0	968	5	79	10.901
2023-10-10 17:00	0.13	1.035	1.17	0.55	350.2	0	0	968.6	4.1	82.9	10.164
2023-10-10 18:00	0.10	1.17	1.395	0.51	272	0	0	969.1	4.1	82.4	9.906
2023-10-10 19:00	0.22	1.35	1.71	0.39	265.3	0	0	969.4	3	84.3	9.935
2023-10-10 20:00	0.14	1.26	1.44	0.66	291.4	0	0	969.5	3.3	83.8	9.835
2023-10-10 21:00	0.24	1.35	1.575	0.47	278.9	0	0	969.7	3.3	83.4	9.767
2023-10-10 22:00	0.14	1.35	1.71	0.63	287.1	0	0	969.8	3	84.5	9.073
2023-10-10 23:00	0.08	1.755	5.355	0.61	292.5	0.1	0	969.8	2.9	84.2	8.172
2023-10-11 08:00	0.13	2.925	3.51	0.91	9.3	0	0	972.5	3.2	86.5	11.597
2023-10-11 09:00	0.21	1.395	1.44	1.36	27.7	0	0	972.8	4.2	79	12.969
2023-10-11 10:00	0.08	1.035	1.08	1.16	354	0	0	973.2	4.6	75.8	12.5
2023-10-11 11:00	0.17	1.08	1.125	1.36	349.4	0.1	0	973.7	4.7	79.1	13.006
2023-10-11 12:00	0.08	1.08	1.125	1.25	332.9	0.6	0	973.8	5.6	77.5	13.442
2023-10-11 13:00	0.13	1.035	1.17	1.3	341.9	0	0	973.9	6.1	76.6	13.623
2023-10-11 14:00	0.34	1.125	1.215	2.02	312.5	0	0	974.2	6.4	76.9	13.379
2023-10-11 15:00	0.08	1.215	1.305	2.1	327.6	0	0	974.4	6.6	76.4	12.981
2023-10-11 16:00	0.13	1.44	1.485	2.02	303.2	0	0	974.9	5.8	83	10.887
2023-10-11 17:00	0.16	1.665	1.8	1.54	308.3	0.1	0	975.4	5.5	85.4	10.156
2023-10-11 18:00	0.11	1.845	1.935	1.09	326	0.5	0	975.8	5.6	85.2	10.167
2023-10-11 19:00	0.15	1.755	1.935	0.99	301.8	0	0	976.4	5.4	85.2	10.155
2023-10-11 20:00	0.07	1.8	1.98	1.47	302.8	0	0	976.9	5.1	86.9	10.031
2023-10-11 21:00	0.11	1.935	2.16	1.56	298.9	0	0	977.2	4.8	87.1	9.926
2023-10-11 22:00	0.25	1.98	2.25	1.54	300.1	0.2	0	977.7	4.8	86.7	9.852
2023-10-11 23:00	0.10	1.935	2.16	1.7	309.9	0.2	0	978.1	4.6	87.1	9.733
2023-10-12 00:00	0.23	1.98	2.16	2.12	299.2	0	0	978.1	4.5	87.1	9.574
2023-10-12 01:00	0.26	1.89	2.115	1.96	312.1	0	0	978.3	4.6	86.3	8.853
2023-10-12 02:00	0.20	1.98	2.205	1.62	316	0	0	978.7	4.6	85.6	8.082
2023-10-12 09:00	0.15	2.565	2.7	2.31	310.7	0	0	982.4	4.5	85.9	11.996
2023-10-12 10:00	0.23	2.07	2.25	2.29	308.7	0.4	0	983	5.6	85.4	11.71
2023-10-12 11:00	0.10	1.98	2.16	2.53	310.1	0	0	983.3	6.4	82.9	12.247
2023-10-12 12:00	0.20	1.98	2.16	2.71	302.9	0	0	983.2	7.2	79.9	13.113
2023-10-12 13:00	0.04	2.025	2.25	2.83	319.5	0	0	983	9	75.5	13.303
2023-10-12 14:00	0.06	1.935	2.16	2.79	319	0	0	983.3	8.9	75.6	12.895
2023-10-12 15:00	0.05	2.025	2.16	2.11	318.9	0.1	0	983.5	8.2	81.5	10.511
2023-10-12 16:00	0.33	1.935	2.07	2.03	312.9	0	0	983.9	7.5	84.1	10.029
2023-10-12 17:00	0.18	2.025	2.16	2.54	317.9	0	0	984.3	7.2	84.5	9.916
2023-10-12 18:00	0.34	2.25	2.475	1.63	314.9	0	0	985	7.1	84.3	9.906
2023-10-12 19:00	0.05	2.25	2.43	0.74	327.1	0	0	985.3	6.9	84.8	9.88
2023-10-12 20:00	0.11	2.295	2.52	0.82	310.9	0	0	985.7	6.9	84.8	9.731
2023-10-12 21:00	0.13	2.385	2.7	0.89	317.1	0	0	986	7	85.2	9.035
2023-10-12 22:00	0.14	2.61	2.97	0.75	301.8	0	0	986	6.9	85.6	8.441
2023-10-13 09:00	0.00	2.475	2.52	2.11	307.5	0	0	988.2	7.4	86.3	10.778
2023-10-13 10:00	0.05	1.395	1.53	2.02	314.1	0	0	988	8.1	82.9	12.054
2023-10-13 11:00	0.22	1.035	1.125	2.04	317.4	0	0	988	8.8	80.6	12.707
2023-10-13 12:00	0.05	0.9	0.99	1.91	320.5	0	0	987.6	9.1	79.5	13.317
2023-10-13 13:00	0.16	0.765	0.9	2.03	312.2	0	0	987.1	10.2	73.8	13.658
2023-10-13 14:00	0.11	0.72	0.855	1.95	322	0	0	986.8	10	73.5	13.227
2023-10-13 15:00	0.30	0.765	0.855	2.19	327.3	0	0	986.5	10.3	71.9	12.885
2023-10-13 16:00	0.17	0.9	0.99	1.7	340.6	0	0	986.4	8.9	79	11.257
2023-10-13 17:00	0.21	1.035	1.17	2.04	332.7	0	0	986.5	8.1	81.9	10.177
2023-10-13 18:00	0.08	1.305	1.485	3.09	335.2	0	0	986.8	6.6	83.1	10.056
2023-10-13 19:00	0.15	1.62	1.89	1.98	335	0	0	987	6	82	10.046
2023-10-13 20:00	0.18	1.71	1.935	1.95	350.1	0	0	986.9	5.6	82.9	10.002
2023-10-13 21:00	0.15	1.53	1.71	1.08	338.5	0	0	987	4.9	83.3	9.999
2023-10-13 22:00	0.20	1.665	1.89	1.19	315.6	0	0	987.1	4.4	85	9.982
2023-10-13 23:00	0.10	1.89	2.25	1.49	332.9	0	0	986.9	4.5	86.6	9.886
2023-10-14 00:00	0.12	1.935	2.295	1.14	338.4	0	0	987	4.7	87.1	9.819
2023-10-14 01:00	0.08	1.71	1.98	1.14	336	0	0	986.9	4.9	86.3	9.261
2023-10-14 02:00	0.09	2.025	2.7	1.42	339.9	0	0	986.8	4.7	88.3	8.399
2023-10-14 03:00	0.04	1.8	2.655	1.7	341.5	0	0	986.6	4.5	88.7	7.995
2023-10-14 08:00	0.27	3.285	3.465	2.05	342.1	0	0	986.7	5.2	89.1	9.199
2023-10-14 09:00	0.17	2.115	2.205	2.41	345.3	0	0	986.6	5.8	87.9	11.609
2023-10-14 10:00	0.27	1.17	1.215	2.55	341.1	0	0	986.4	6.8	86	12.905
2023-10-14 11:00	0.04	0.855	0.9	2.91	349.4	0	0	986	8	79.5	13.27
2023-10-14 12:00	0.06	0.72	0.81	2.77	349.4	0	0	985.6	8.5	74.4	13.146
2023-10-14 13:00	0.27	0.72	0.855	3.16	337.5	0	0	985.2	8.8	72.6	13.215
2023-10-14 14:00	0.25	0.855	0.99	3.3	334.8	0	0	985.1	8	74.7	12.307
2023-10-14 15:00	0.18	0.9	1.035	3.11	333.7	0	0	984.9	7.7	74.7	10.646
2023-10-14 16:00	0.09	0.765	0.855	3.01	338.9	0	0	984.7	7.4	74.5	10.13
2023-10-14 17:00	0.19	0.9	0.99	2.86	335.9	0	0	984.8	6.5	78.2	9.817
2023-10-14 18:00	0.07	1.125	1.215	2.89	332.8	0	0	984.7	5.6	83.3	9.644
2023-10-14 19:00	0.29	1.08	1.215	2.26	330.9	0	0	984.5	5	84.3	9.607
2023-10-14 20:00	0.38	1.125	1.215	2.85	333.6	0	0	984.5	4.7	84.7	9.305
2023-10-14 21:00	0.12	1.26	1.35	3.26	333.1	0	0	984.1	5.2	80.9	8.275
2023-10-14 22:00	0.04	1.215	1.44	2.8	335.4	0	0	983.9	5.2	81.7	7.941
2023-10-15 09:00	0.08	3.555	3.555	3.96	329.4	0	0	981.8	2.8	86.2	9.064

2023-10-15 10:00	0.01	2.52	2.565	3.71	330.3	0	0	981.8	3.3	85.2	10.553
2023-10-15 11:00	0.20	1.935	2.025	3.84	332.5	0	0	981.9	4.3	79.7	11.812
2023-10-15 12:00	0.12	2.205	2.295	4.33	331.9	0	0	981.7	4.8	76.2	11.834
2023-10-15 13:00	0.10	1.98	2.115	4.7	333.1	0	0	981.3	5.4	73.9	12.051
2023-10-15 14:00	0.22	1.44	1.575	4.69	333.2	0	0	981.3	6.7	70.9	12.938
2023-10-15 15:00	0.40	1.035	1.215	4.78	336.5	0	0	981.5	6.9	70.8	12.221
2023-10-15 16:00	0.28	0.945	1.125	4.23	338	0	0	981.7	6.9	72	10.089
2023-10-15 17:00	0.28	1.08	1.26	4.46	340.9	0	0	982.1	6.7	73.9	9.68
2023-10-15 18:00	0.13	1.44	1.53	4.29	344.1	0	0	982.7	6.2	75.3	9.311
2023-10-15 19:00	0.12	2.25	2.385	3.88	341.9	0	0	983.2	5.7	76	8.094
2023-10-16 09:00	0.15	3.015	3.105	2.56	330.8	0	0	985.2	3.7	78.5	9.247
2023-10-16 10:00	0.04	1.8	1.845	2.66	330.9	0	0	985.2	4.1	77.5	11.477
2023-10-16 11:00	0.09	0.99	1.08	2.91	327.4	0	0	984.9	4.5	76	12.714
2023-10-16 12:00	0.14	0.9	1.035	2.87	327.8	0	0	984.5	5.2	73	13.127
2023-10-16 13:00	0.20	0.99	1.17	2.85	339.8	0	0	984	6.1	68.4	13.427
2023-10-16 14:00	0.05	1.08	1.215	3.07	337	0	0	983.6	7	64.9	13.586
2023-10-16 15:00	0.16	1.305	1.485	3.06	339.8	0	0	983.3	7.3	63.6	13.544
2023-10-16 16:00	0.25	1.395	1.485	2.45	341.3	0	0	983.2	7.1	64.4	13.3
2023-10-16 17:00	0.28	1.71	1.845	1.95	351.9	0	0	983.3	5.2	71.6	10.794
2023-10-16 18:00	0.22	2.295	2.43	1.6	343.5	0	0	983.3	4.6	75.1	10.188
2023-10-16 19:00	0.10	2.88	2.97	1.25	317.5	0	0	983.2	3.8	77.4	10.16
2023-10-16 20:00	0.12	2.745	2.97	0.83	290.9	0	0	983.2	2.2	80.9	10.099
2023-10-16 21:00	0.09	2.61	2.835	0.81	300.5	0	0	983.1	1.4	82.5	10.03
2023-10-16 22:00	0.26	2.295	2.7	0.47	243.7	0	0	983	-0.2	81.6	9.982
2023-10-16 23:00	0.17	2.16	2.475	0.37	268.1	0	0	982.9	-1	82.4	9.919
2023-10-17 00:00	0.12	1.935	2.34	0.42	224.2	0	0	982.9	-1.9	82.5	9.823
2023-10-17 01:00	0.22	3.24	6.93	0.3	249.5	0	0	982.9	-1.8	81.1	9.735
2023-10-17 02:00	0.22	3.06	12.96	0.83	304.4	0	0	982.9	-1.8	86.3	9.054
2023-10-17 03:00	0.18	1.17	1.935	0.73	335.6	0	0	982.8	-1.8	87.2	8.085
2023-10-17 07:00	0.32	4.59	6.165	0.73	188	0	0	983.3	-2.8	87.5	9.52
2023-10-17 08:00	0.11	4.095	8.415	0.82	222.1	0	0	983.3	-2	86.3	11.559
2023-10-17 09:00	0.16	7.245	26.685	1.08	169.3	0	0	983.1	-0.4	88.2	13.105
2023-10-17 10:00	0.07	2.475	7.02	0.77	289.5	0	0	983	2.2	84.7	13.703
2023-10-17 11:00	0.08	1.485	1.665	1.04	221.2	0	0	982.6	6.6	70.5	13.844
2023-10-17 12:00	0.25	1.395	1.665	1.23	182.4	0	0	982.1	9.7	56	13.359
2023-10-17 13:00	0.56	1.305	1.44	1.35	187	0	0	981.8	11.5	50.7	13.246
2023-10-17 14:00	0.35	1.395	1.755	1.53	178.1	0	0	981.4	12.5	47.3	13.247
2023-10-17 15:00	0.46	1.665	2.115	1.86	175.2	0	0	980.9	12.8	45.9	13.25
2023-10-17 16:00	0.20	1.845	2.295	1.77	157	0	0	980.9	12.2	48.1	13.244
2023-10-17 17:00	0.30	1.935	2.34	0.68	121.3	0	0	980.8	9.9	57.9	11.26
2023-10-17 18:00	0.33	2.025	2.43	0.93	127	0	0	980.8	6.9	68.7	10.435
2023-10-17 19:00	0.25	1.98	2.25	0.47	108.2	0	0	980.6	5.1	73.9	10.488
2023-10-17 20:00	0.30	1.935	2.205	0.3	142.8	0	0	980.6	2.1	82.1	10.401
2023-10-17 21:00	0.36	1.98	2.205	0.28	99.8	0	0	980.6	0.7	84	10.29
2023-10-17 22:00	0.26	1.98	2.25	0.31	127.4	0	0	980.5	-0.5	85.3	10.205
2023-10-17 23:00	0.19	1.98	2.25	0.19	197	0	0	978.6	-0.5	81.7	10.17
2023-10-18 00:00	0.25	2.565	2.79	0.69	208.3	0	0	980.6	-0.4	84.3	10.057
2023-10-18 01:00	0.10	2.835	3.06	1.09	187.9	0	0	981.1	0.8	84.9	9.893
2023-10-18 02:00	0.09	2.52	2.745	0.69	193.6	0	0	981.1	0.6	84.3	9.863
2023-10-18 03:00	0.25	2.34	2.565	0.88	160.7	0	0	981.2	-0.5	86.3	9.759
2023-10-18 04:00	0.23	2.52	2.79	1.23	171.6	0	0	981.3	-0.1	87	9.546
2023-10-18 05:00	0.08	2.385	2.61	1.08	168	0	0	981.4	0.2	87	8.622
2023-10-18 06:00	0.94	2.295	2.565	0.66	127	0	0	981.2	0.8	86.7	8.128
2023-10-18 07:00	0.51	2.295	2.475	1.05	159.8	0	0	981.4	1	86.3	8.007
2023-10-18 09:00	0.56	3.915	4.095	2.38	175.8	0	0	980.9	4.5	83	10.424
2023-10-18 10:00	0.15	2.97	3.15	2.39	173.8	0	0	980.8	5.6	79.6	11.405
2023-10-18 11:00	0.09	2.565	2.745	2.55	179.8	0	0	980.4	7.7	73.4	12.288
2023-10-18 12:00	0.06	2.565	3.24	3.07	204.7	0	0	979.8	9.6	63.6	12.932
2023-10-18 13:00	0.24	2.565	3.105	3.49	197.4	0	0	979.2	10.6	58.4	13.198
2023-10-18 14:00	0.28	2.43	2.745	3.34	204	0	0	979	11.7	55	13.248
2023-10-18 15:00	0.27	2.295	2.745	2.93	214	0	0	978.9	12.1	53.2	12.79
2023-10-18 16:00	0.17	2.295	2.61	2.37	206.9	0	0	978.8	11.8	54.6	11.853
2023-10-18 17:00	0.09	2.295	2.565	1.37	173.6	0	0	978.6	10.4	59.5	10.388
2023-10-18 18:00	0.11	2.43	2.835	0.79	146	0	0	978.3	8.7	67	10.334
2023-10-18 19:00	0.21	2.475	2.7	0.87	152.5	0	0	978.1	8.5	68	10.268
2023-10-18 20:00	0.23	2.52	2.79	1.53	173.8	0	0	978.2	8.1	69.7	10.134
2023-10-18 21:00	0.21	2.79	3.195	1.9	175.2	0	0	978.2	8	69.8	10.032
2023-10-18 22:00	0.27	2.97	3.33	1.43	167.6	0	0	978	7.5	72.7	9.981
2023-10-18 23:00	0.23	3.105	3.51	1.77	173.6	0	0	977.7	7.5	74.6	9.691
2023-10-19 00:00	0.11	3.375	3.78	1.9	178	0	0	977.6	7.8	75.6	8.664
2023-10-19 01:00	0.36	3.51	3.87	1.53	169.9	0	0	977.4	7.8	77	8.313
2023-10-19 10:00		10.08	10.08	1	104	0.1	0	974.5	8.5	88.2	7.77
2023-10-20 10:00	0.02	2.565	2.655	2.93	357.9	0.5	0	969.7	3.3	87	9.478
2023-10-20 11:00	0.18	1.755	1.845	3.3	356.8	0.2	0	969.7	3.3	86.2	10.105
2023-10-20 12:00	0.30	1.44	1.53	3.27	357.8	0	0	969.8	3.3	85.4	9.213
2023-10-21 08:00	0.00	3.015	3.06	2.15	350	0	0	972.2	1.5	86.2	9.926
2023-10-21 09:00	0.12	1.755	1.755	3.03	352	0	0	972.1	1.7	82.6	12.169
2023-10-21 10:00	0.10	0.9	0.9	3.22	3.9	0	0	972.1	2.7	78.9	12.866
2023-10-21 11:00	0.25	0.675	0.72	3.32	6.1	0	0	971.9	4.1	72	13.083
2023-10-21 12:00	0.19	0.675	0.765	3.28	349.9	0	0	971.9	4.2	72.9	12.717
2023-10-21 13:00	0.09	0.585	0.63	3.25	349.2	0.1	0	971.8	5.5	68.3	13.457
2023-10-21 14:00	0.19	0.81	0.9	3.33	345.7	0.1	0	971.9	5	75.6	13.056
2023-10-21 15:00	0.13	1.08	1.17	3.56	339.5	0	0	972.5	4.6	72.4	12.672
2023-10-21 16:00	0.23	1.125	1.26	3.44	341.9	0	0	973.1	4.2	71	11.601
2023-10-21 17:00	0.17	1.08	1.17	2.2	331	0	0	973.7	3.4	71	9.912
2023-10-21 18:00	0.14	1.125	1.215	2.62	324.6	0	0	974.3	2.8	74.1	9.874
2023-10-21 19:00	0.09	1.305	1.44	3.25	331.1	0	0	974.9	2.7	77.9	9.783
2023-10-21 20:00	0.08	1.53	1.62	3.57	334.9	0	0	975.5	2.4	78.1	9.675
2023-10-21 21:00	0.17	1.44	1.53	3.37	343.6	0.1	0	976	1.8	78.8	9.51
2023-10-21 22:00	0.29	1.395	1.485	2.41	330.2	0	0	976.3	0.7	83.4	8.333

2023-10-22 09:00	0.19	2.565	2.7	2.65	335.4	0	0	982.3	0.3	73.2	11.051
2023-10-22 10:00	0.13	1.755	1.845	3.11	334.8	0	0	982.7	0.9	72.3	12.696
2023-10-22 11:00	0.22	1.395	1.44	3.25	331.7	0	0	982.7	1.7	64.8	13.222
2023-10-22 12:00	0.16	1.305	1.395	3.01	316.9	0	0	982.8	2.5	62	13.358
2023-10-22 13:00	0.14	1.395	1.485	2.87	319	0	0	982.7	2.6	61.4	13.494
2023-10-22 14:00	0.10	1.665	1.71	2.71	322.4	0	0	982.5	3.3	56.4	13.611
2023-10-22 15:00	0.17	1.575	1.665	2.36	314.8	0	0	982.5	3.9	54.2	13.181
2023-10-22 16:00	0.17	1.08	1.125	1.59	310.6	0	0	982.8	3.4	57.5	12.449
2023-10-22 17:00	0.13	0.855	0.99	1.22	308.2	0	0	983.3	2.3	64.4	10.252
2023-10-22 18:00	0.17	0.765	0.81	1.16	292	0	0	984	1.6	69.1	10.113
2023-10-22 19:00	0.15	0.81	0.855	0.93	292.1	0	0	984.5	2	67.5	10.15
2023-10-22 20:00	0.12	0.9	1.035	0.5	193	0	0	984.4	0.1	74.9	10.1
2023-10-22 21:00	0.33	1.125	1.35	0.28	134.4	0	0	984.6	-1.6	80.3	10.062
2023-10-22 22:00	0.13	1.305	1.53	0.29	131	0	0	984.6	-2.7	82.8	9.968
2023-10-22 23:00	0.17	1.08	1.305	0.3	240.2	0	0	984.8	-2.6	80.2	9.832
2023-10-23 00:00	0.11	1.17	1.305	0.63	210.2	0	0	985	-2.9	81	9.48
2023-10-23 01:00	0.08	1.305	1.44	0.48	175.2	0	0	985.2	-3.4	82.3	8.415
2023-10-23 02:00	0.00	1.44	1.62	0.59	192.7	0	0	985.5	-3.7	83.4	7.899
2023-10-23 08:00	0.17	4.635	4.815	1.56	179.7	0	0	986.8	-1.4	83.2	11.642
2023-10-23 09:00	0.16	2.025	2.16	2.11	182	0	0	986.6	1.5	76.8	13.659
2023-10-23 10:00	0.06	1.395	1.53	2.44	184.8	0	0	986.6	5.2	64.5	13.794
2023-10-23 11:00	0.07	1.035	1.17	3.13	185	0	0	986.4	7.7	55.1	13.543
2023-10-23 12:00	0.17	0.855	0.945	3.45	199	0	0	985.9	9.4	48.2	13.238
2023-10-23 13:00	0.49	0.81	0.9	3.42	179.2	0	0	985.1	10.5	46.4	13.233
2023-10-23 14:00	0.21	0.855	1.035	3.09	190.2	0	0	984.9	10.2	47	12.767
2023-10-23 15:00	0.24	0.81	0.9	2.71	188.6	0	0	984.5	9.5	46.8	11.438
2023-10-23 16:00	0.17	0.81	0.9	2.11	185.2	0	0	984.1	8.6	49.4	10.506
2023-10-23 17:00	0.28	0.9	0.99	1.64	165.2	0	0	983.9	7.6	52.5	10.377
2023-10-23 18:00	0.14	1.17	1.35	1.97	162.9	0	0	983.7	7.1	56.2	10.263
2023-10-23 19:00	0.22	1.53	1.89	2.15	169.1	0	0	983.6	6.7	58.6	10.152
2023-10-23 20:00	0.14	1.44	1.755	2.23	170.8	0	0	983.2	6.4	61.7	10.086
2023-10-23 21:00	0.11	1.305	1.485	2.6	172.2	0	0	982.9	6.4	62.4	9.967
2023-10-23 22:00	0.15	1.395	1.485	2.72	174.3	0	0	982.7	6.5	63.5	9.874
2023-10-23 23:00	0.17	1.485	1.575	2.6	175.3	0	0	982.5	6.6	64.8	9.73
2023-10-24 00:00	0.34	1.485	1.62	2.51	175.8	0	0	982.5	6.5	66.3	8.762
2023-10-24 01:00	0.07	1.485	1.62	2.57	173.9	0	0	982.3	6.5	67.6	8.134
2023-10-24 10:00	0.28	4.365	4.725	2.5	170.5	0	0	980.9	8.5	74	10.583
2023-10-24 14:00	0.57	4.59	5.085	0.97	42.3	0	0	979.8	9.8	78.1	10.581
2023-10-25 10:00	0.13	3.735	4.005	1.88	342.9	0	0	981.9	5.4	88.6	9.734
2023-10-25 11:00	0.20	1.89	2.25	1.96	329	0	0	982.3	4.9	88.4	12.334
2023-10-25 12:00	0.09	1.485	1.665	2.02	318.4	0	0	982.9	5.1	87.1	12.186
2023-10-25 13:00	0.17	1.62	1.845	1.77	333.6	0	0	982.4	5.2	87.2	12.287
2023-10-25 14:00	0.19	1.71	1.845	1.69	312.7	0	0	983.3	5.5	85.8	11.281
2023-10-25 15:00	0.06	1.845	2.025	1.9	313	0	0	984	5.1	87	9.268
2023-10-26 09:00	0.00	4.725	4.77	2.59	63.9	0	0	988.3	3	87.7	8.72
2023-10-27 09:00	0.12	2.835	2.88	1.12	101.7	0	0	977.2	2.5	87.8	10.208
2023-10-27 10:00	0.26	1.665	1.755	1.46	108.2	0	0	976.5	2.8	88	9.908
2023-10-27 11:00	0.24	1.485	1.62	0.87	124	0	0	975.4	3.8	86.1	9.521
2023-10-27 12:00	0.21	1.53	1.845	1.03	167.1	0.2	0	974.7	3.8	87.1	9.204
2023-10-27 13:00	0.13	2.025	2.295	0.79	125.3	0	0	973.5	4.2	87.3	10.335
2023-10-28 09:00	0.31	1.485	1.575	3.84	302	0	0	986.7	-2.7	71.3	9.714
2023-10-28 10:00	0.12	1.035	1.08	3.5	281.5	0	0	987.3	-2.5	70.6	12.343
2023-10-28 11:00	0.14	0.945	0.99	3.25	281.8	0	0	988	-2.3	67.8	12.585
2023-10-28 12:00	0.14	0.9	0.945	3.59	278.2	0	0	988.2	-1.9	65.6	12.578
2023-10-28 13:00	0.21	0.855	0.9	3.48	265.5	0	0	988.6	-1.6	64.7	12.534
2023-10-28 14:00	0.12	0.855	0.99	2.78	264.5	0	0	988.8	-1.2	62.8	11.212
2023-10-28 15:00	0.20	0.9	0.99	2.04	283.5	0	0	989	-1.2	64.4	9.993
2023-10-28 16:00	0.20	0.945	0.945	1.69	282.1	0	0	988.9	-1.1	65.5	9.241
2023-10-29 08:00	0.02	3.915	3.96	2.03	233.2	0	0	987.9	-0.7	80	11.491
2023-10-29 09:00	0.02	1.665	1.71	2.54	257.3	0	0	988.2	-0.3	75.7	12.929
2023-10-29 10:00	0.10	1.26	1.26	2.46	262.4	0	0	987.9	-0.1	71.5	13.334
2023-10-29 11:00	0.16	1.08	1.17	2.73	236.9	0	0	987.7	0.7	61.5	13.534
2023-10-29 12:00	0.07	0.99	1.035	2.9	263.4	0	0	987.2	0.8	56	12.924
2023-10-29 13:00	0.06	0.99	1.035	2.19	275.5	0	0	986.7	1	55	12.794
2023-10-29 14:00	0.05	0.945	1.035	2.33	268.9	0	0	986.2	1.3	49.4	12.349
2023-10-29 15:00	0.09	0.945	0.99	1.32	290.4	0	0	985.7	1.1	49.7	10.326
2023-10-29 16:00	0.26	0.945	1.035	1.06	298.2	0	0	985.5	0.8	53.1	10.045
2023-10-29 17:00	0.21	0.945	1.035	0.49	311.6	0	0	985.5	0.6	57.5	10.014
2023-10-29 18:00	0.17	1.035	1.125	0.47	272.3	0	0	985.3	0.2	61.6	9.874
2023-10-29 19:00	0.11	1.08	1.215	0.37	268.2	0	0	985	-0.4	70.1	9.687
2023-10-29 20:00	0.05	1.125	1.125	0.42	316.6	0	0	984.9	-0.4	70.3	8.614
2023-10-30 10:00	0.07	2.52	2.565	2.64	306.5	0	0	980.1	-3	71.6	12.59
2023-10-30 11:00	0.20	1.485	1.485	2.82	312	0	0	980	-1.9	63.3	13.453
2023-10-30 12:00	0.08	1.305	1.35	2.68	312.9	0	0	980	-1.9	58.2	12.913
2023-10-30 13:00	0.24	1.35	1.395	3.1	291.8	0	0	979.9	-1.8	55	12.961
2023-10-30 14:00	0.18	1.08	1.17	3.46	296.4	0	0	979.8	-1	48.5	13.462
2023-10-30 15:00	0.20	0.945	0.99	3.1	295.5	0	0	980.4	-1.2	46.1	12.626
2023-10-30 16:00	0.16	0.9	0.945	1.67	304.2	0	0	981.1	-2	47.5	10.526
2023-10-30 17:00	0.16	0.9	0.945	1.21	298.8	0	0	981.6	-3.1	51	9.825
2023-10-30 18:00	0.05	0.855	0.99	0.59	235.9	0	0	982.2	-4	55.9	9.785
2023-10-30 19:00	0.23	0.9	0.99	0.39	201.1	0	0	982.5	-6.4	69.8	9.641
2023-10-30 20:00	0.31	0.945	1.035	0.29	238.3	0	0	982.8	-7.1	70.7	9.302
2023-10-30 21:00	0.25	0.855	0.9	0.31	159.9	0	0	982.9	-8.2	73.6	8.192
2023-10-31 08:00	0.15	6.03	6.12	0.86	265.8	0	0	985	-7.8	80.4	12.072
2023-10-31 09:00	0.03	2.88	2.97	0.99	313.5	0	0	985.1	-5.7	76.1	13.533
2023-10-31 10:00	0.06	1.44	1.485	1.11	322.8	0	0	985	-3.8	73.1	13.802
2023-10-31 11:00	0.22	0.81	0.81	1.18	316.7	0	0	984.9	-2.7	62.2	13.591
2023-10-31 12:00	0.14	0.675	0.81	2.08	307	0	0	984.6	-1.7	52.9	13.131
2023-10-31 13:00	0.23	0.675	0.72	2.62	316.7	0	0	984.5	-1.7	54.3	13.169
2023-10-31 14:00	0.30	0.63	0.675	3.12	314.5	0	0	984.6	-2	53.9	13.194

2023-10-31 15:00	0.24	0.585	0.585	2.57	315.5	0	0	984.8	-2.5	52.3	11.25
2023-10-31 16:00	0.15	0.585	0.63	1.92	319.5	0	0	985	-2.8	49.8	10.14
2023-10-31 17:00	0.16	0.54	0.585	1.32	310.7	0	0	985.3	-3.3	47.5	9.935
2023-10-31 18:00	0.08	0.54	0.54	1.04	309.7	0	0	985.7	-3.3	48.4	9.851
2023-10-31 19:00	0.24	0.54	0.63	1.2	307.9	0	0	985.9	-3.7	52.9	9.628
2023-10-31 20:00	0.18	0.63	0.63	1.37	303.8	0	0	986	-4	60.3	8.442
2023-11-01 08:00	0.18	2.25	3.105	1.99	201.5	0	0	986.5	-5.6	64.7	12.393
2023-11-01 09:00	0.14	1.395	3.465	3.19	215.4	0	0	986.2	-4.1	56	13.531
2023-11-01 10:00	0.03	0.675	0.81	3.24	230.5	0	0	985.7	-3.1	53.7	13.269
2023-11-01 11:00	0.17	0.675	0.855	3.68	238.8	0	0	985.2	-2.1	53.1	13.585
2023-11-01 12:00	0.18	0.675	0.855	3.64	229.1	0	0	984.2	-1.4	52.4	13.762
2023-11-01 13:00	0.13	0.72	0.855	4.38	220.5	0	0	983.5	-0.7	52.6	13.176
2023-11-01 14:00	0.14	0.675	0.81	4.22	220.2	0	0	983	-0.2	51.9	13.179
2023-11-01 15:00	0.13	0.72	0.945	3.5	216.4	0	0	982.6	0.1	50.8	12.832
2023-11-01 16:00	0.12	0.675	0.765	2.37	201.8	0	0	982.2	-0.1	51.5	10.507
2023-11-01 17:00	0.17	0.675	0.765	2.06	185.8	0	0	982	-0.9	54.2	10.291
2023-11-01 18:00	0.18	0.72	0.81	1.94	188.6	0	0	982.1	-1.4	56	10.212
2023-11-01 19:00	0.14	0.765	0.855	1.7	188.2	0	0	982.2	-2.4	59.7	10.126
2023-11-01 20:00	0.11	0.765	0.855	1.75	187.3	0	0	982.1	-2.9	61	10.031
2023-11-01 21:00	0.20	0.81	0.9	1.96	180.3	0	0	982.2	-3.1	63.7	9.898
2023-11-01 22:00	0.08	0.9	1.035	2.19	190.6	0	0	982.2	-2.4	66.1	9.231
2023-11-01 23:00	0.09	0.945	0.99	2.11	202	0	0	982	-1.8	67.8	8.049
2023-11-02 09:00	0.04	2.655	2.835	2.51	235.4	0	0	982.8	0.4	66.6	8.719
2023-11-02 10:00	0.29	1.8	1.935	3.6	255.6	0	0	983.2	0.4	63.5	9.147
2023-11-02 11:00	0.08	1.485	1.665	3.38	260.2	0	0	983.5	0.2	60.8	9.451
2023-11-02 12:00	0.29	1.665	1.845	3	252.3	0	0	983.5	0.1	62.4	10.716
2023-11-02 13:00	0.18	1.53	1.665	2.78	236.7	0	0	983.3	0.4	58.9	10.245
2023-11-02 14:00	0.08	1.485	1.62	2.49	235.8	0	0	983.2	0.8	56.8	9.534
2023-11-03 09:00	0.33	11.97	12.195	2.69	191.7	0	0	973.7	1.9	83.5	9.361
2023-11-03 10:00	0.13	9.675	10.035	2.97	194.6	0	0	973.6	2.1	82.1	9.983
2023-11-04 09:00	0.08	2.52	2.61	2.45	222.3	0	0	986.9	-3.6	75.1	11.583
2023-11-04 10:00	0.07	1.62	1.71	2.6	226.4	0	0	986.5	-3.1	73.4	12.521
2023-11-04 11:00	0.08	1.08	1.125	3.11	245.6	0	0	986.1	-2.9	71.6	12.665
2023-11-04 12:00	0.15	1.035	1.08	3.59	228	0	0	985.5	-1.7	68.6	13.638
2023-11-04 13:00	0.17	0.9	0.99	3.22	236.9	0	0	985.1	-1.2	66.2	13.437
2023-11-04 14:00	0.08	1.08	1.125	3.13	236.1	0	0	984.6	-0.8	64.6	13.236
2023-11-04 15:00	0.07	1.35	1.44	2.4	242.3	0	0	984.3	-0.3	64.1	12.567
2023-11-04 16:00	0.29	1.215	1.305	1.66	235.7	0	0	984.2	-0.6	65.2	11.066
2023-11-04 17:00	0.27	1.17	1.215	0.94	199.7	0	0	984.1	-1.7	68.8	9.963
2023-11-04 18:00	0.46	1.17	1.26	0.78	188.9	0	0	983.9	-2.8	73	9.909
2023-11-04 19:00	0.33	1.26	1.35	0.86	203.2	0	0	983.8	-3.1	74.8	9.795
2023-11-04 20:00	0.14	1.26	1.35	1.81	310.1	0	0	984.5	-3.1	75	9.451
2023-11-04 21:00	0.20	1.305	1.305	1	345.9	0	0	984.9	-3.5	73.8	8.841
2023-11-04 22:00	0.00	1.26	1.26	0.43	2	0	0	984.9	-3.5	73.5	8.55
2023-11-05 09:00	0.20	2.34	2.385	1.71	351.6	0	0	989.8	-7.1	72.8	10.788
2023-11-05 10:00	0.18	1.17	1.215	1.25	285.8	0	0	990.1	-6.7	69.2	12.697
2023-11-05 11:00	0.06	0.9	0.945	1.3	156.5	0	0	989.9	-5.5	65.8	13.739
2023-11-05 12:00	0.11	0.765	0.855	1.52	258.7	0	0	989.5	-4.5	60.6	13.756
2023-11-05 13:00	0.18	0.72	0.765	1.35	219.1	0	0	989	-3.5	58.4	13.227
2023-11-05 14:00	0.24	0.675	0.765	1.05	102.1	0	0	988.5	-3	55.9	13.256
2023-11-05 15:00	0.38	0.72	0.72	1.23	126.9	0	0	987.7	-3.4	56.8	12.142
2023-11-05 16:00	0.14	0.765	0.81	0.93	107.9	0	0	987.9	-4.1	60.5	10.177
2023-11-05 17:00	0.16	0.855	0.9	0.55	66.9	0	0	987.8	-4.8	64.9	10.117
2023-11-05 18:00	0.05	0.855	0.9	0.71	83	0	0	987.5	-5.7	68.3	9.983
2023-11-05 19:00	0.23	0.9	0.9	0.6	80.4	0	0	987.2	-6.8	72.1	9.882
2023-11-05 20:00	0.20	1.035	1.08	0.92	86.7	0	0	986.6	-7.1	73.8	9.41
2023-11-05 21:00	0.39	1.26	1.305	0.84	79.6	0	0	986.3	-7	73.4	8.288
2023-11-07 11:00	0.00	5.535	5.715	4	323	0	0	982	-2.9	75.3	8.016
2023-11-07 12:00	0.10	3.78	3.87	3.62	334.6	1.1	0	982.5	-3.4	74.9	13.957
2023-11-07 13:00	0.08	2.43	2.565	3.22	338.5	0.2	0	983.3	-3.2	73.8	13.562
2023-11-07 14:00	0.18	1.845	1.98	3.15	336.1	0	0	984.1	-3	72.2	13.683
2023-11-07 15:00	0.09	1.71	1.845	2.99	322.6	0	0	984.8	-2.8	71.1	13.116
2023-11-07 16:00	0.12	1.71	1.845	2.44	328.7	0	0	985.6	-3.5	71.8	13.266
2023-11-08 09:00	0.31	6.39	6.435	0.63	59.9	0	0	990	-9.9	83.2	13.275
2023-11-08 10:00	0.57	3.825	3.915	0.61	84.4	0	0	989.6	-7.6	82.1	13.988
2023-11-08 11:00	0.15	2.655	2.7	1.69	106.3	0	0	988.4	-5.6	81.7	13.737
2023-11-08 12:00	0.21	1.845	1.89	3.22	113.5	0	0	987	-3.5	72.8	13.28
2023-11-08 13:00	0.19	1.485	1.53	2.86	120.6	0	0	986.5	-2.2	68.8	13.279
2023-11-08 14:00	0.11	1.395	1.44	2.14	111.2	0	0	986.2	-2.3	71.7	13.232
2023-11-08 15:00	0.10	1.575	1.755	1.93	94.4	0	0	985.4	-2.4	76.5	9.494
2023-11-11 12:00	0.38	1.71	1.71	1.52	240.2	0	0	996.3	-1.8	72.4	11.465
2023-11-11 14:00	0.06	2.025	2.025	1.6	237.4	0	0	996.1	-1.2	75	8.423
2023-11-12 09:00	0.22	3.465	3.51	2.59	165.1	0	0	996.2	-3	75.9	13.978
2023-11-12 10:00	0.34	2.385	2.43	2.73	158.2	0	0	995.9	-1.3	72.2	13.974
2023-11-12 11:00	0.11	1.665	1.71	2.96	155	0	0	995.3	-0.1	70.6	13.523
2023-11-12 12:00	0.22	1.53	1.575	2.62	148.8	0	0	994.8	-0.1	73.3	11.719
2023-11-12 13:00	0.17	2.16	2.295	3.42	148.6	0	0	993.3	0.4	73.7	13.229
2023-11-12 14:00	0.53	2.115	2.34	3.58	141	0	0	992.7	0.5	74.8	13.078
2023-11-13 10:00	0.51	4.41	4.545	2.3	203.7	0	0	977.6	3.6	85.4	13.963
2023-11-13 11:00	0.04	2.7	2.88	2.53	212.9	0	0	977.7	3.8	83.7	13.873
2023-11-13 12:00	0.09	1.575	1.665	2.31	255.2	0	0	978.1	3.7	83.3	13.967
2023-11-13 13:00	0.00	1.125	1.125	2.28	259.6	0	0	978.3	3.9	81.8	8.311
2023-11-14 10:00	0.06	2.07	2.115	1.57	182.7	0	0	991.7	0.3	81.4	13.942
2023-11-14 11:00	0.13	1.26	1.26	1.75	191	0	0	991.3	1.1	78.3	13.963
2023-11-14 12:00	0.29	0.765	0.765	2.43	196.9	0	0	990.5	1.5	70.8	13.683
2023-11-14 13:00	0.17	0.675	0.72	2.63	177.7	0	0	989.5	1.5	71.6	13.249
2023-11-14 14:00	0.13	0.675	0.765	3.21	167.9	0	0	988.4	1.5	71.2	13.247
2023-11-14 15:00	0.35	0.72	0.765	3.17	165	0	0	987.5	1.4	72.4	12.542
2023-11-15 09:00	0.68	3.78	4.905	2.85	208.2	0	0	977	5.8	62.5	13.958
2023-11-15 10:00	0.91	3.6	5.31	3.4	227.2	0	0	976.9	7.5	57.6	13.977

2023-11-15 11:00	0.78	3.015	4.545	4.35	246	0	0	977	8.9	51.6	13.584
2023-11-15 12:00	0.41	1.755	2.655	4.73	254.2	0	0	977.2	9.7	40.3	13.288
2023-11-15 13:00	0.85	0.99	1.44	4.95	252.4	0	0	977	10.1	33.3	13.297
2023-11-15 14:00	0.77	0.585	1.035	4.88	256.6	0	0	977.2	10.3	30.3	13.268
2023-11-15 15:00	0.12	0.585	1.035	4.58	267.2	0	0	977.9	9.4	31.1	13.237
2023-11-15 16:00	0.47	0.585	1.035	3.42	269.4	0	0	978.8	8	33	13.243
2023-11-16 09:00	0.16	1.665	2.07	2.82	171.7	0	0	979.7	0.6	71.6	13.886
2023-11-16 10:00	0.05	1.035	1.395	3.35	171.5	0	0	978.7	3.3	59.2	13.974
2023-11-16 12:00	0.27	1.62	2.34	4.18	159.2	0	0	974.8	6.2	46.5	13.61
2023-11-16 13:00	0.31	1.62	2.43	4.52	168	0	0	972.9	6.8	46.3	13.134
2023-11-16 16:00	0.17	2.205	3.645	5.47	166.6	0	0	968.7	9.2	48.2	13.182
2023-11-17 09:00	0.09	1.125	1.26	2.91	308.6	0	0	973.5	-2.4	66.2	13.847
2023-11-17 10:00	0.00	0.72	0.72	3.25	296.5	0	0	974.2	-2.6	66.3	13.857
2023-11-17 11:00	0.18	0.585	0.675	3.07	311	0	0	974.7	-2.4	64.3	13.955
2023-11-17 12:00	0.07	0.405	0.495	3.9	295.2	0	0	975	-2.2	58.9	13.798
2023-11-17 13:00	0.03	0.315	0.405	4.34	294.3	0	0	975.5	-2.4	58.5	13.248
2023-11-17 14:00	0.19	0.27	0.36	4.05	292	0	0	976.2	-2.9	58.3	12.997
2023-11-18 11:00	0.32	1.89	2.115	2.46	230.8	0	0	970.8	1	73.8	13.876
2023-11-18 12:00	0.10	1.755	1.845	1.79	254.1	0	0	970.4	1.2	76.7	13.922
2023-11-18 13:00	0.47	2.295	2.655	1.85	234.7	0	0	970	0.7	83.1	13.823
2023-11-20 09:00	0.36	3.42	3.465	1.23	206	0	0	996.8	-10.3	78	13.962
2023-11-20 10:00	0.09	0.99	1.08	1.22	208.7	0	0	996.9	-7.4	69.3	13.971
2023-11-20 11:00	0.33	0.63	0.675	1.61	216.3	0	0	996.7	-5.4	58.6	13.493
2023-11-20 12:00	0.11	0.495	0.54	1.52	231.3	0	0	996.4	-3.6	49.5	13.231
2023-11-20 13:00	0.33	0.45	0.495	1.53	198.5	0	0	996.3	-2.2	42.8	13.272
2023-11-20 14:00	0.26	0.45	0.495	1.58	164.6	0	0	996.1	-1.5	39.1	13.277
2023-11-20 15:00	0.50	0.45	0.45	1.87	163.4	0	0	995.9	-1.6	36.9	13.243
2023-11-20 16:00		0.45	0.45	1.8	187	0	0	996	-1.7	36.3	13.113
2023-11-21 08:00	0.05	1.98	2.43	2.22	131.7	0	0	988.4	-6.2	66.2	8.358
2023-11-21 09:00	0.24	1.125	1.62	3.52	142.8	0	0	987.7	-5.1	59.9	13.836
2023-11-21 10:00	0.33	0.99	1.98	3.02	137.3	0	0	986.5	-4.2	55.1	13.958
2023-11-21 11:00	0.23	0.9	1.8	3.01	136.6	0	0	985.3	-3.3	50.9	13.311
2023-11-21 12:00	0.29	0.765	1.53	2.81	143.1	0	0	984.4	-2.4	48	13.225
2023-11-21 13:00	0.43	0.855	1.485	2.67	143.9	0	0	983	-2.3	47.6	13.156
2023-11-21 14:00	0.60	0.99	1.935	2.94	135.9	0	0	981.5	-2.5	48.7	12.965
2023-11-21 15:00	0.63	0.99	1.935	2.72	143.2	0	0	980.8	-2.6	49.7	11.582
2023-11-22 09:00	0.83	1.26	1.26	0.53	232.1	0	0	975.9	-2.3	72.8	13.979
2023-11-22 10:00	0.16	0.45	0.495	0.81	251.6	0	0	958.5	-1.9	67.3	12.929
2023-11-22 11:00	0.09	0.36	0.495	1.66	225.1	0	0	975.2	-2.1	70.1	11.743
2023-11-22 12:00	0.24	0.54	0.72	1.83	253.6	0	0	974.7	-1.6	70.7	12.822
2023-11-22 13:00	0.21	0.405	0.495	3.06	250	0	0	974.2	-1.2	69	13.185
2023-11-22 14:00	0.22	0.36	0.855	2.99	243	0	0	973.8	-0.8	60.4	13.6
2023-11-22 15:00	0.00	0.27	0.27	2.03	279.8	0	0	973.6	-0.8	62.2	13.117
2023-11-23 11:00	0.16	0.945	0.99	3.44	295.8	0	0	977.6	-8.1	60.1	13.962
2023-11-23 12:00	0.00	0.54	0.765	4.5	303.3	0	0	978	-7.2	53.4	13.953
2023-11-23 13:00	0.27	0.585	0.72	3.92	310.7	0	0	978.5	-8.3	54.4	13.951
2023-11-23 14:00	0.50	0.765	0.945	3.15	316.2	0	0	979.5	-9.6	57.4	13.754
2023-11-24 10:00	0.26	1.485	1.665	4.39	261.6	0	0	987.6	-13.4	62.3	13.937
2023-11-24 11:00	0.26	1.35	2.07	4.41	268.4	0	0	987.4	-12.4	62.1	13.927
2023-11-24 12:00	0.21	1.17	1.395	4.38	258.9	0	0	986.8	-11.3	59.4	13.52
2023-11-24 13:00	0.16	1.08	1.215	4.06	252.8	0	0	986.6	-10.1	57.5	13.225
2023-11-24 14:00	0.22	1.08	1.26	3.75	238.2	0	0	986.5	-9.2	56.4	13.161
2023-11-24 15:00	0.04	1.035	1.125	3.77	247.7	0	0	986.5	-8.5	53.6	12.588
2023-11-24 16:00	0.00	1.035	1.125	2.31	252.2	0	0	986.6	-8.3	51.4	12.47
2023-11-25 08:00	0.20	2.16	2.16	3.46	227.6	0	0	981.5	-3.3	65.9	13.956
2023-11-25 09:00	0.18	3.375	3.51	3.81	230.2	0	0	981.6	-2.5	64.4	13.954
2023-11-25 10:00	0.13	4.365	4.545	4.22	232.1	0	0	981.6	-0.8	59.3	13.883
2023-11-25 11:00	0.40	1.395	1.62	3.92	226.2	0	0	980.9	1	50.3	13.249
2023-11-25 12:00	0.29	1.62	2.025	4.72	228.9	0	0	980.2	2.4	44.5	13.246
2023-11-25 13:00	0.19	1.98	2.385	4.18	228.5	0	0	979.7	2.6	42.4	13.215
2023-11-25 14:00	0.26	1.575	2.07	4.9	214.8	0	0	979.5	2.1	48.1	13.22
2023-11-25 15:00	0.05	1.35	1.62	4.95	217.5	0	0	979.5	1.3	51.6	13.143
2023-11-27 12:00	0.40	1.35	1.845	4.29	275.1	0	0	963	-4.1	79.4	13.932
2023-11-28 12:00	0.74	1.98	2.025	2.7	284	0	0	977	-11.6	73.9	8.072
2023-12-01 10:00	0.00	3.42	3.42	0	0	0	0	982.2	-9.4	75	8.396
2023-12-01 11:00	0.44	1.35	1.44	0.38	316	0	0	982.3	-8.8	70.3	13.927
2023-12-01 12:00	0.35	0.675	0.765	1.41	234.2	0	0	982.3	-7.5	65.5	13.92
2023-12-01 13:00	0.10	0.585	0.63	1.82	220.5	0	0	982.4	-6.9	64	13.152
2023-12-01 14:00	0.61	0.585	0.585	1.93	218.1	0	0	982.5	-6.6	66.1	8.245
2023-12-02 11:00	0.25	1.17	1.215	1.28	185.7	0	0	986.4	-5.2	73.5	13.862
2023-12-02 12:00	0.31	0.81	0.9	1.83	201.4	0	0	986.4	-4	71.6	13.93
2023-12-02 13:00	0.22	0.765	0.855	1.94	169.3	0	0	986.4	-2.8	69.7	13.285
2023-12-02 14:00	0.35	0.81	0.9	1.95	167.2	0	0	986.4	-2.2	68.2	11.644
2023-12-02 15:00	0.29	0.675	0.72	1.68	176.5	0	0	986.6	-2.3	70.1	12.367
2023-12-03 09:00	0.21	3.915	3.96	0.97	71.5	0	0	984.5	-12	80.3	13.929
2023-12-03 10:00	0.52	1.35	1.395	1.49	74.8	0	0	984.3	-9.4	73.5	13.872
2023-12-03 11:00	0.36	0.9	0.99	2.35	84.2	0	0	983.5	-6.9	66.3	13.413
2023-12-03 12:00	0.51	0.855	0.945	2.82	81.8	0.1	0	982.7	-5.7	63.1	13.213
2023-12-03 13:00	0.18	0.675	0.765	2.87	71.7	0.3	0	981.7	-5.2	62.4	13.141
2023-12-03 14:00	0.28	0.585	0.63	3.06	50.5	0.2	0	980.7	-5.3	61.9	13.138
2023-12-03 15:00	0.31	0.54	0.585	1.82	27.7	0	0	980.2	-5.9	66.3	12.531
2023-12-04 09:00	0.19	1.98	2.025	1.03	336.2	0	0	978.9	-15.6	76.6	13.927
2023-12-04 10:00	0.08	0.675	0.72	1.27	2.1	0	0	978.9	-12.8	73.5	13.924
2023-12-04 11:00	0.32	0.585	0.63	1.5	29.3	0	0	978.7	-10.5	70.2	13.298
2023-12-04 12:00	0.42	0.585	0.585	1.44	11.6	0	0	978.8	-8.4	66	13.219
2023-12-04 13:00	0.16	0.495	0.54	1.77	34.1	0.1	0	979.1	-7.3	65.5	13.213
2023-12-04 14:00	0.34	0.54	0.585	1.06	18.4	0.1	0	979.8	-6.9	66.7	11.022
2023-12-04 15:00	0.40	0.585	0.585	1.17	11.6	0	0	980.1	-6.9	68	10.16
2023-12-06 09:00	2.55	4.725	4.725	0.27	194.5	0	0	987.2	-11.7	75.7	13.906
2023-12-06 10:00	1.47	1.845	1.935	0.45	281.4	0	0	986.9	-9.6	70.9	13.932

2023-12-06 11:00	0.83	1.215	1.305	0.99	179.3	0	0	986.1	-7.7	68	13.9
2023-12-06 12:00	0.36	0.855	0.855	2.02	211.8	0	0	985.3	-7.4	69.8	13.359
2023-12-06 13:00	0.25	0.585	0.585	2.52	203.2	0	0	984.7	-7.5	66.3	13.08

APPENDIX C

Laboratory Results

SGS GALSON

Mr. Ryan Fletcher
Wood E&I Solutions Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

August 23, 2022

Account# 24170

Login# L572042

Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on August 16, 2022. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Lisa Swab
Laboratory Director

Enclosure(s)

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.

- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.

- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at http://www.sgsgalson.com in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS

Date Sampled : 12-JUL-22 - 04-AUG-22
Date Received : 16-AUG-22

Account No.: 24170
Login No. : L572042

Date Analyzed : 22-AUG-22
Report ID : 1315526

Asbestos Fiber Count (A Rules)

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
ASBESTOS-1	L572042-1	1/100	<7	<2700	2,880,000	<0.001
ASBESTOS-2	L572042-2	2/100	<7	<2700	2,680,000	<0.001

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Sample Matrix : 25mm MCE PCM
Analytical Method : mod. NIOSH 7400 "A" Rules
Limit of Detection : 5.5 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : SLS
Approved by : RCF
Date : 23-AUG-22

Supervisor: BDB

cc -Cubic Centimeters mm2 -Square Millimeters

GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : Wood E&I Solutions Canada Limited
Site :

Date Sampled : 12-JUL-22 - 04-AUG-22 Account No.: 24170
Date Received: 16-AUG-22 Login No. : L572042
Date Analyzed: 22-AUG-22

L572042 (Report ID: 1315526):
SOPs: ia-pcm(32)
Per NIOSH 7400, fiber counts less than 100 f/mm2 or greater than 1300 f/mm2 have a
greater than optimal variability and are probably biased.
Fiber count samples will be discarded 60 days from the date of this report.
NIOSH 7400 Requires 2 blanks or 10% of the total samples whichever is greater to be submitted for each sampling event.
The current intra-laboratory coefficients of variation (CVs) for the applicable fiber ranges are as
follows:
0.139 (5-20 fibers/100 fields)
0.108 (>20-50 fibers/100 fields)
0.081 (>50-100 fibers/100 fields)
0.098 (>100 fibers/100 fields)
The stated CVs apply to the media, technology, and SOP(s) referenced in the report and do not take
into account any uncertainty associated with the sampling process.

777661862730
Date:08/16/22
Shipper:FEDEX
Initials:BCF

Prep:UNKNOWN
L572042

119

GALSON CHAIN OF CUSTODY

Turn Around Time (TAT):	(surcharge)
☐ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%
☐ Next Day by Noon	150%
☐ Same Day	200%

☑ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/

Client Acct No.: 24170

Original Prep No.: PSY659587

CS Rep: BHONEYCUTT

Online COC No.: 250701

Report To :	Mr. Ryan Fletcher
Company Name :	Wood E&I Solutions
Address 1 :	160 Traders Blvd. E
Address 2 :	Unit 2-3
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	647 - 283 - 4638
Cell No. :	647 - 283 - 4638
Email reports to :	ryan.fletcher@woodplc.com
Email EDD to :	ryan.fletcher@woodplc.com
Comments :	

Invoice To :	Grace Adrover
Company Name :	Wood E&I Solutions
Address 1 :	160 Traders Blvd. E
Address 2 :	
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	905 - 568 - 2929
Email Address :	APInvoice.Canada@woodplc.com, grace.adrover@woodplc.com
Comments :	
P.O. No. :	OMEMA2002.2021 E.100*5800.57300
Payment info. :	☐ I will call SGS Galson to provide credit card info ☐ Card on File (enter the last five digits on the line below)

Comments : - remainder of samples to follow

State Sampled :

Please indicate which OEL(s) this data will be used for :
☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ : _____ (Specify Limit(s)) ☑ Other : MECP (Specify Other) AAQC

Site Name : | Project : | Sampled By : | List description of industry or Process/interferences present in sampling area :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume / Sample Time / Sample Area *	Liters / Minutes / in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
Asbestos - 1	11 July 2022	25mm 0.8u MCE for PCM/TEM	1440 min	2680	Asbestos Fiber Count (A Rules) and Chrysotile	mod. NIOSH 7400 "A" Rules; PCM + NIOSH 7402	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	Ryan Fletcher		11-Aug		Received By :	Bill Fischer		16Aug22	1208
Relinquished By :					Received By :				

*** You must fill in these columns for any samples which you are submitting.**

Samples received after 3pm will be considered as next day's business.

Online COC No. : 250701
Prep No. : PSY659587
Account No. : 24170
Draft : 6/24/2022 8:05:56 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS North America, Inc. | 6601 Kirkville Road E. Syracuse, NY 13057, USA t +1 888 432 5227 | +1 315 432 5227 www.galsonlabs.com | www.sgs.com

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SGS GALSON CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume / Sample Time / Sample Area *	Liters / Minutes / in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
Asbestos-2	4-Aug 2022	25mm 0.8u MCE for PCM/TEM	1340 min	2680 L	Asbestos Fiber Count (A Rules) and Chrysotile	mod. NIOSH 7400 "A" Rules; PCM/NIOSH 7402	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	R Fletcher	11-Aug		Received By :	Bill Fischer	16Aug22	1208
Relinquished By :				Received By :			

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 250701
Prep No. : PSY659587
Account No. : 24170
Draft : 6/24/2022 8:05:56 AM

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SGS GALSON

Mr. Ryan Fletcher
Wood E&I Solutions Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

September 29, 2022

Account# 24170

Login# L575253

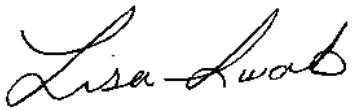
Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on September 23, 2022. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson



Lisa Swab
Laboratory Director

Enclosure(s)

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- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

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- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

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National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 16-AUG-22 - 17-AUG-22
Date Received : 23-SEP-22

Account No.: 24170
Login No. : L575253
Date Analyzed : 28-SEP-22
Report ID : 1321868

Asbestos Fiber Count (A Rules)

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
PSY653632 ASBESTOS-3	L575253-1	2/100	<7	<2700	2,920,000	<0.001
PSY659587 ASBESTOS-4	L575253-2	2/100	<7	<2700	2,740,000	<0.001

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Sample Matrix : 25mm MCE PCM
Analytical Method : mod. NIOSH 7400 "A" Rules
Limit of Detection : 5.5 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : MJS
Approved by : BDB
Date : 29-SEP-22

Supervisor: BDB

cc -Cubic Centimeters mm2 -Square Millimeters

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY FOOTNOTE REPORT

Client Name : Wood E&I Solutions Canada Limited
Site :

Date Sampled : 16-AUG-22 - 17-AUG-22 Account No.: 24170
Date Received: 23-SEP-22 Login No. : L575253
Date Analyzed: 28-SEP-22

L575253 (Report ID: 1321868):
SOPs: ia-pcm(32)
Per NIOSH 7400, fiber counts less than 100 f/mm2 or greater than 1300 f/mm2 have a
greater than optimal variability and are probably biased.
Fiber count samples will be discarded 60 days from the date of this report.
NIOSH 7400 Requires 2 blanks or 10% of the total samples whichever is greater to be submitted for each sampling event.
The current intra-laboratory coefficients of variation (CVs) for the applicable fiber ranges are as
follows:
0.139 (5-20 fibers/100 fields)
0.108 (>20-50 fibers/100 fields)
0.081 (>50-100 fibers/100 fields)
0.098 (>100 fibers/100 fields)
The stated CVs apply to the media, technology, and SOP(s) referenced in the report and do not take
into account any uncertainty associated with the sampling process.

L5752253

770011298155
Date:09/23/22
Shipper:FEDEX
Initials:BCF
Prep:UNKNOWN

132

ALSON CHAIN OF CUSTODY

Turn Around Time (TAT):	(surcharge)
☒ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%
☐ Next Day by Noon	150%
☐ Same Day	200%

☑ Samples submitted using the FreePumpLoan™ Program
☐ Samples submitted using the FreeSamplingBadges™ Program

You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/

Client Acct No.: 24170
Original Prep No.: PSY659587
CS Rep: BHONEYCUTT
Online COC No.: 250701

Report To: Mr. Ryan Fletcher
Company Name: Wood E&I Solutions
Address 1: 160 Traders Blvd. E
Address 2: Unit 2-3
City, State Zip: Mississauga, ON L4Z3K7
Country: Canada
Phone No.: 647 - 283 - 4638
Cell No.: 647 - 283 - 4638
Email reports to: ryan.fletcher@woodplc.com
Email EDD to: ryan.fletcher@woodplc.com
Comments:

Invoice To: Grace Adrover
Company Name: Wood E&I Solutions
Address 1: 160 Traders Blvd. E
Address 2:
City, State Zip: Mississauga, ON L4Z3K7
Country: Canada
Phone No.: 905 - 568 - 2929
Email Address: APInvoice.Canada@woodplc.com, grace.adrover@woodplc.com
Comments:
P.O. No.: OMEMA2002.2021E.100*5800.57300
Payment info.: ☐ I will call SGS Galson to provide credit card info ☐ Card on File (enter the last five digits on the line below)

Comments:

State Sampled:

Please indicate which OEL(s) this data will be used for:
☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ: _____ (Specify Limit(s)) ☑ Other: MECP (Specify Other) AAQC

Site Name:
Project:
Sampled By:
List description of industry or Process/interferences present in sampling area:

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume / Sample Time / Sample Area *	Liters / Minutes / in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
PSY 659592 Asbestos-3	Aug-16	25mm 0.8u MCE for PCM/TEM	1960min	2420	Asbestos Fiber Count (A Rules) ~~and Chrysotile~~	mod. NIOSH 7400 "A" Rules; PCM ~~& NIOSH 7402~~	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By:	Ryan Fletcher	22-Sep 22		Received By:	Bill Fischer	23Sep22	1213
Relinquished By:				Received By:			

* You must fill in these columns for any samples which you are submitting.
Samples received after 3pm will be considered as next day's business.

Online COC No.: 250701
Prep No.: PSY659587
Account No.: 24170
Draft: 6/24/2022 8:05:56 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

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SGS GALSON CHAIN OF CUSTODY

PSY 659587

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
Asbestos-4	Aug-17	25mm 0.8u MCE for PCM/TEM	1370min	2740	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
		25mm 0.8u MCE for PCM/TEM			Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :					Received By :	Bill Fischer	Bill Fischer	23Sep22	1213
Relinquished By :					Received By :				

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 250701
Prep No. : PSY659587
Account No. : 24170
Draft : 6/24/2022 8:05:56 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

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Page : 2 / 2

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SGS GALSON

Mr. Ryan Fletcher
Wood E&I Solutions Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

April 27, 2023

Account# 24170

Login# L591938

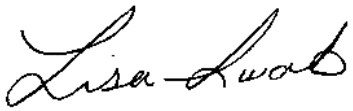
Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on April 21, 2023. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson



Lisa Swab
Laboratory Director

Enclosure(s)

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.

- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.

- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at http://www.sgsgalson.com in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

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LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 04-APR-23 - 11-APR-23
Date Received : 21-APR-23

Account No.: 24170
Login No. : L591938
Date Analyzed : 24-APR-23
Report ID : 1354294

Asbestos Fiber Count (A Rules)

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
CNC-ASBESTOS-APRIL4	L591938-3	3/100	<7	<2700	2,880,000	<0.001
CNC-ASBESTOS APRIL11	L591938-4	1/100	<7	<2700	2,840,000	<0.001

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Sample Matrix : 25mm MCE PCM
Analytical Method : mod. NIOSH 7400 "A" Rules
Limit of Detection : 5.5 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : SLS
Approved by : RCF
Date : 25-APR-23

Supervisor: BDB

cc -Cubic Centimeters mm2 -Square Millimeters

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LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 04-APR-23 - 11-APR-23
Date Received : 21-APR-23

Account No.: 24170
Login No. : L591938
Date Analyzed : 26-APR-23
Report ID : 1355157

Diesel Particulate Matter as Carbon

Sample ID	Lab ID	Air Vol liter	Analyte	Total ug	Conc ug/m3
CNC-DP-APRIL 4	L591938-1	11010	Organic Carbon	20	1.8
			Elemental Carbon	<0.52	<0.047
			Total Carbon	20	1.8
CNC-DP-APRIL 11	L591938-2	8556	Organic Carbon	22	2.5
			Elemental Carbon	<0.52	<0.061
			Total Carbon	22	2.5

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.8ug OC & EC; 3.6ug TC
Analytical Method : mod. NIOSH 5040; TOA
Collection Media : 25mm Quartz

Method Detection Limit: 0.52ug OC & EC; 1.0ug TC
Submitted by: PMH/JGC
Approved by : JGC
Supervisor: JGC
Date : 27-APR-23

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East Syracuse, NY 13057
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FAX: (315) 437-0571
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Client Name : Wood E&I Solutions Canada Limited
Site :

Date Sampled : 04-APR-23 - 11-APR-23 Account No.: 24170
Date Received: 21-APR-23 Login No. : L591938
Date Analyzed: 24-APR-23 - 26-APR-23

L591938 (Report ID: 1354294):
SOPs: ia-pcm(32)
Per NIOSH 7400, fiber counts less than 100 f/mm2 or greater than 1300 f/mm2 have a
greater than optimal variability and are probably biased.
Fiber count samples will be discarded 60 days from the date of this report.
NIOSH 7400 Requires 2 blanks or 10% of the total samples whichever is greater to be submitted for each sampling event.
The current intra-laboratory coefficients of variation (CVs) for the applicable fiber ranges are as
follows:
0.149 (5-20 fibers/100 fields)
0.109 (>20-50 fibers/100 fields)
0.088 (>50-100 fibers/100 fields)
0.083 (>100 fibers/100 fields)
The stated CVs apply to the media, technology, and SOP(s) referenced in the report and do not take
into account any uncertainty associated with the sampling process.

L591938 (Report ID: 1355157):
SOPs: ic-n5040(32)
Reported sample results in brackets are considered estimated, as they are below the level of quantitation.

L591938 (Report ID: 1355157):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the
media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process.
The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient
data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Diesel Particulate Matter as Carbon	+/-11%	104%

1Z5X626A1542431694
Date:04/21/23
Shipper:UPS
Initials:AMF

Canada

R105

Prep:UNKNOWN

L5919135

GALSON CHAIN OF CUSTODY

Turn Around Time (TAT):	(surcharge)
☑ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%

Need a quicker turn around time? Please call for availability and pricing.

☑ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

Client Acct No.: 24170

Original Prep No.: PSY690456

CS Rep: BHONEYCUTT

Online COC No.: 268048

Report To :	Mr. Ryan Fletcher
Company Name :	Wood E&I Solutions Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	Unit 2-3
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	647 - 283 - 4638
Cell No. :	647 - 283 - 4638
Email reports to :	ryan.fletcher@woodplc.com
Email EDD to :	ryan.fletcher@woodplc.com
Comments :	

Invoice To :	Grace Adrover
Company Name :	Wood E&I Solutions Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	
Email Address :	APInvoice.Canada@woodplc.com, grace.adrover@woodplc.com
Comments :	
P.O. No. :	OMEMA2008Z.2021A.20*
Payment info. :	☐ I will call SGS Galson to provide credit card info ☐ Card on File (enter the last five digits on the line below)

Comments :
Sample Pumps were sent to New York separately.

Province Sampled : Ontario

Please indicate which OEL(s) this data will be used for :
☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ : Specify Limit(s)
☑ Other : Ontario AAQC and Health Canada — Specify Other

Site Name :	Project :	Sampled By :	List description of industry or Process/interferences present in sampling area :

Sample ID (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area	Liters Minutes in², cm², ft²	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
CNC-DP-APRIL 4	4/4/2023	25mm QFF, 3pc (N5040)	11010	L	Diesel Particulate	mod. NIOSH 5040; TOA	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	Ryan Fletcher		4/20/2023	10:10	Received By :	Niyati More	N.M.	4/20/23	
Relinquished By :					Received By :	Ava Ferreira		4/21/23	9:12

Samples received after 3pm will be considered as next day's business.

Online COC No. : 268048
Prep No. : PSY690456
Account No. : 24170
Finalized : 4/20/2023 10:13:35 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

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SGS GALSON CHAIN OF CUSTODY

Comments :

Sample ID (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area	Liters Minutes in², cm², ft²	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
CNC-DP-APRIL 11	4/11/2023	25mm QFF, 3pc (N5040)	8556	L	Diesel Particulate	mod. NIOSH 5040; TOA	
CNC-ASBESTOS-APRIL4	4/4/2023	25mm 0.8u MCE for PCM/TEM	2880	L	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
CNC-ASBESTOS APRIL11	4/11/2023	25mm 0.8u MCE for PCM/TEM	2840	L	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	Ryan Fletcher		4/20/2023	10:10	Received By :			4/20/23	
Relinquished By :					Received By :	Ava Ferreira	N.M.	4/21/23	912

Samples received after 3pm will be considered as next day's business.

Online COC No. : 268048
Prep No. : PSY690456
Account No. : 24170
Finalized : 4/20/2023 10:13:35 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

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Sampling Time / Air Volume Calculations

Sample No. (Sample ID)	Start Time	Stop Time	Minutes	Flow Rate	Calculated Air Volume
Sample #1 (CNC-DP-APRIL 4)	4/4/2023 00:00	4/6/2023 13:10	3670	3	11010
Sample #2 (CNC-DP-APRIL 11)	4/11/2023 14:15	4/13/2023 13:47	2852	3	8556
Sample #3 (CNC-ASBESTOS-APRIL4)	4/4/2023 13:15	4/5/2023 13:15	1440	2	2880
Sample #4 (CNC-ASBESTOS APRIL11)	4/11/2023 14:10	4/12/2023 13:50	1420	2	2840

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	Ryan Fletcher		4/20/2023	10:10	Received By :	Ava Ferreira		4/20/23	
Relinquished By :					Received By :			4/21/23	912

Samples received after 3pm will be considered as next day's business.

Online COC No. : 268048
Prep No. : PSY690456
Account No. : 24170
Finalized : 4/20/2023 10:13:35 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

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SGS GALSON

Ryan Fletcher
Wood E&I Solutions Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

September 06, 2023

Account# 24170

Login# L603626

Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on August 30, 2023. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Lisa Swab
Laboratory Director

Enclosure(s)

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.

- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.

- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at http://www.sgsgalson.com in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

SGS GALSON

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East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 21-JUN-23 - 22-AUG-23
Date Received : 30-AUG-23

Account No.: 24170
Login No. : L603626
Date Analyzed : 01-SEP-23
Report ID : 1377734

Asbestos Fiber Count (A Rules)

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
JUNE 21/23	L603626-1	12/100	15.3	5885	2,880,000	0.002
AUGUST 14/23	L603626-2	19/100	24.2	9318	2,830,000	0.003
AUGUST 22/23	L603626-3	2/100	<7	<2700	2,880,000	<0.001

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Sample Matrix : 25mm MCE PCM
Analytical Method : mod. NIOSH 7400 "A" Rules
Limit of Detection : 5.5 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : MJS
Approved by : SLS
Date : 01-SEP-23

Supervisor: BDB

cc -Cubic Centimeters mm2 -Square Millimeters

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LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 14-AUG-23 - 22-AUG-23
Date Received : 30-AUG-23

Account No.: 24170
Login No. : L603626
Date Analyzed : 05-SEP-23
Report ID : 1378291

Diesel Particulate Matter as Carbon

Sample ID	Lab ID	Air Vol liter	Analyte	Total ug	Conc ug/m3
AUG. 14/23	L603626-4	5520	Organic Carbon	25	4.5
			Elemental Carbon	<0.52	<0.094
			Total Carbon	25	4.5
AUG. 22/23	L603626-5	5680	Organic Carbon	16	2.9
			Elemental Carbon	<0.52	<0.092
			Total Carbon	16	2.9

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.8ug OC & EC; 3.6ug TC
Method Detection Limit: 0.52ug OC & EC; 1.0ug TC
Analytical Method : mod. NIOSH 5040; TOA
Submitted by: PMH/JGC
Approved by : JGC
Date : 06-SEP-23
Collection Media : 25mm Quartz
Supervisor: JGC

GALSON

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East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : Wood E&I Solutions Canada Limited
Site :

Date Sampled : 21-JUN-23 - 22-AUG-23 Account No.: 24170
Date Received: 30-AUG-23 Login No. : L603626
Date Analyzed: 01-SEP-23 - 05-SEP-23

L603626 (Report ID: 1377734):
SOPs: ia-pcm(33)
Per NIOSH 7400, fiber counts less than 100 f/mm2 or greater than 1300 f/mm2 have a greater than optimal variability and are probably biased.
Fiber count samples will be discarded 60 days from the date of this report.
NIOSH 7400 Requires 2 blanks or 10% of the total samples whichever is greater to be submitted for each sampling event.
The current intra-laboratory coefficients of variation (CVs) for the applicable fiber ranges are as follows:
0.142 (5-20 fibers/100 fields)
0.115 (>20-50 fibers/100 fields)
0.082 (>50-100 fibers/100 fields)
0.091 (>100 fibers/100 fields)
The stated CVs apply to the media, technology, and SOP(s) referenced in the report and do not take into account any uncertainty associated with the sampling process.

L603626 (Report ID: 1378291):
SOPs: ic-n5040(32)
Reported sample results in brackets are considered estimated, as they are below the level of quantitation.

L603626 (Report ID: 1378291):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Diesel Particulate Matter as Carbon	+/-10.2%	104%

1ZA4206Y6813895537
Date: 08/30/23
Shipper: UPS
Initials: KLD
Prep: UNKNOWN

L6003626

(61)

GALSON CHAIN OF CUSTODY

Turn Around Time (TAT):	(surcharge)
☐ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%
☐ Next Day by Noon	150%
☐ Same Day	200%

☑ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/

Client Acct No.: 24170

Original Prep No.: PSY706058

CS Rep: BHONEYCUTT

Online COC No.: 276998

Report To :	Ryan Fletcher
Company Name :	Wood E&I Solutions Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	Unit 2-3
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	647 - 283 - 4638
Cell No. :	647 - 283 - 4638
Email reports to :	ryan.fletcher@wsp.com
Email EDD to :	ryan.fletcher@wsp.com
Comments :	

Invoice To :	Grace Adrover
Company Name :	Wood E&I Solutions Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	905 - 568 - 2929
Email Address :	APInvoice.Canada@woodplc.com, grace.adrover@woodplc.com
Comments :	
P.O. No. :	
Payment info. :	☐ I will call SGS Galson to provide credit card info ☐ Card on File (enter the last five digits on the line below)

Comments :

State Sampled :

Please indicate which OEL(s) this data will be used for :
☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ : _____ (Specify Limit(s)) ☐ Other : _____ (Specify Other)

Site Name :	Project :	Sampled By :	List description of industry or Process/interferences present in sampling area :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
June 21/23	June 21/23	11	24hours	flowrate=2.0Lpm	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
August 14/23	Aug. 14/23	25mm 0.8u MCE for PCM/TEM	23hours, 35mins	11			
August 22/23	Aug. 22/23	11	24hours	11			

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	[signature]	Adam Gauthier	Aug. 25/23	—	Received By :	Kathryn L. Drago	[signature]	8/30/23	1156
Relinquished By :					Received By :				

*** You must fill in these columns for any samples which you are submitting.**

Samples received after 3pm will be considered as next day's business.

Online COC No. : 276998
Prep No. : PSY706058
Account No. : 24170
Draft : 7/28/2023 3:41:59 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS GALSON CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
Aug. 14/23	Aug. 14/23	25mm QFF, 3pc (N5040)	46 hours	flow rate = 2.0 Lpm	Diesel Particulate	mod. NIOSH 5040; TOA	
Aug. 22/23	Aug 22/23	25mm QFF, 3pc (N5040)	47 hours, 20 mins	11	Diesel Particulate	mod. NIOSH 5040; TOA	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	Adam Gauthier	Aug 25/23	—	Received By :	Kathryn L. Drago	8/30/23	1156
Relinquished By :				Received By :			

*** You must fill in these columns for any samples which you are submitting.**

Samples received after 3pm will be considered as next day's business.

Online COC No. : 276998
Prep No. : PSY706058
Account No. : 24170
Draft : 7/28/2023 3:41:59 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS GALSON

Mr. Ryan Fletcher
Wood E&I Solutions Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

April 27, 2023

Account# 24170

Login# L591938

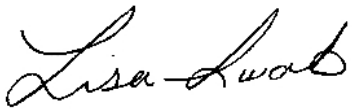
Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on April 21, 2023. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson



Lisa Swab
Laboratory Director

Enclosure(s)

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.

- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.

- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at http://www.sgsgalson.com in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

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LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 04-APR-23 - 11-APR-23
Date Received : 21-APR-23

Account No.: 24170
Login No. : L591938
Date Analyzed : 24-APR-23
Report ID : 1354294

Asbestos Fiber Count (A Rules)

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
CNC-ASBESTOS-APRIL4	L591938-3	3/100	<7	<2700	2,880,000	<0.001
CNC-ASBESTOS APRIL11	L591938-4	1/100	<7	<2700	2,840,000	<0.001

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Sample Matrix : 25mm MCE PCM
Analytical Method : mod. NIOSH 7400 "A" Rules
Limit of Detection : 5.5 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : SLS
Approved by : RCF
Date : 25-APR-23

Supervisor: BDB

cc -Cubic Centimeters mm2 -Square Millimeters

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LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 04-APR-23 - 11-APR-23
Date Received : 21-APR-23

Account No.: 24170
Login No. : L591938
Date Analyzed : 26-APR-23
Report ID : 1355157

Diesel Particulate Matter as Carbon

Sample ID	Lab ID	Air Vol liter	Analyte	Total ug	Conc ug/m3
CNC-DP-APRIL 4	L591938-1	11010	Organic Carbon	20	1.8
			Elemental Carbon	<0.52	<0.047
			Total Carbon	20	1.8
CNC-DP-APRIL 11	L591938-2	8556	Organic Carbon	22	2.5
			Elemental Carbon	<0.52	<0.061
			Total Carbon	22	2.5

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.8ug OC & EC; 3.6ug TC
Analytical Method : mod. NIOSH 5040; TOA
Collection Media : 25mm Quartz

Method Detection Limit: 0.52ug OC & EC; 1.0ug TC
Submitted by: PMH/JGC
Approved by : JGC
Supervisor: JGC
Date : 27-APR-23

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East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : Wood E&I Solutions Canada Limited
Site :

Date Sampled : 04-APR-23 - 11-APR-23 Account No.: 24170
Date Received: 21-APR-23 Login No. : L591938
Date Analyzed: 24-APR-23 - 26-APR-23

L591938 (Report ID: 1354294):
SOPs: ia-pcm(32)
Per NIOSH 7400, fiber counts less than 100 f/mm2 or greater than 1300 f/mm2 have a
greater than optimal variability and are probably biased.
Fiber count samples will be discarded 60 days from the date of this report.
NIOSH 7400 Requires 2 blanks or 10% of the total samples whichever is greater to be submitted for each sampling event.
The current intra-laboratory coefficients of variation (CVs) for the applicable fiber ranges are as
follows:
0.149 (5-20 fibers/100 fields)
0.109 (>20-50 fibers/100 fields)
0.088 (>50-100 fibers/100 fields)
0.083 (>100 fibers/100 fields)
The stated CVs apply to the media, technology, and SOP(s) referenced in the report and do not take
into account any uncertainty associated with the sampling process.

L591938 (Report ID: 1355157):
SOPs: ic-n5040(32)
Reported sample results in brackets are considered estimated, as they are below the level of quantitation.

L591938 (Report ID: 1355157):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the
media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process.
The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient
data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Diesel Particulate Matter as Carbon	+/-11%	104%

1Z5X626A1542431694
Date:04/21/23
Shipper:UPS
Initials:AMF

Canada

R105

Prep:UNKNOWN

L5919135

GALSON CHAIN OF CUSTODY

Turn Around Time (TAT):	(surcharge)
☑ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%

Need a quicker turn around time? Please call for availability and pricing.

☑ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

Client Acct No.: 24170

Original Prep No.: PSY690456

CS Rep: BHONEYCUTT

Online COC No.: 268048

Report To :	Mr. Ryan Fletcher
Company Name :	Wood E&I Solutions Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	Unit 2-3
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	647 - 283 - 4638
Cell No. :	647 - 283 - 4638
Email reports to :	ryan.fletcher@woodplc.com
Email EDD to :	ryan.fletcher@woodplc.com
Comments :	

Invoice To :	Grace Adrover
Company Name :	Wood E&I Solutions Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	
Email Address :	APInvoice.Canada@woodplc.com, grace.adrover@woodplc.com
Comments :	
P.O. No. :	OMEMA2008Z.2021A.20*
Payment info. :	☐ I will call SGS Galson to provide credit card info ☐ Card on File (enter the last five digits on the line below)

Comments :
Sample Pumps were sent to New York separately.

Province Sampled : Ontario

Please indicate which OEL(s) this data will be used for :
☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ : Specify Limit(s)
☑ Other : Ontario AAQC and Health Canada — Specify Other

Site Name :	Project :	Sampled By :	List description of industry or Process/interferences present in sampling area :

Sample ID (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area	Liters Minutes in², cm², ft²	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
CNC-DP-APRIL 4	4/4/2023	25mm QFF, 3pc (N5040)	11010	L	Diesel Particulate	mod. NIOSH 5040; TOA	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	Ryan Fletcher		4/20/2023	10:10	Received By :	Niyati More	N.M.	4/20/23	
Relinquished By :					Received By :	Ava Ferreira		4/21/23	9:12

Samples received after 3pm will be considered as next day's business.

Online COC No. : 268048
Prep No. : PSY690456
Account No. : 24170
Finalized : 4/20/2023 10:13:35 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS Galson | 5700 Timberlea Blvd Unit 3 Mississauga, ON L4W 5B9, CAN t +1 888 432 5227 www.galsonlabs.ca | www.sgs.com

Member of the SGS Group (SGS SA)

SGS GALSON CHAIN OF CUSTODY

Comments :

Sample ID (Maximum of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area	Liters Minutes in², cm², ft²	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
CNC-DP-APRIL 11	4/11/2023	25mm QFF, 3pc (N5040)	8556	L	Diesel Particulate	mod. NIOSH 5040; TOA	
CNC-ASBESTOS-APRIL4	4/4/2023	25mm 0.8u MCE for PCM/TEM	2880	L	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
CNC-ASBESTOS APRIL11	4/11/2023	25mm 0.8u MCE for PCM/TEM	2840	L	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	Ryan Fletcher		4/20/2023	10:10	Received By :			4/20/23	
Relinquished By :					Received By :	Ava Ferreira	N.M.	4/21/23	912

Samples received after 3pm will be considered as next day's business.

Online COC No. : 268048
Prep No. : PSY690456
Account No. : 24170
Finalized : 4/20/2023 10:13:35 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS Galson | 5700 Timberlea Blvd Unit 3 Mississauga, ON L4W 5B9, CAN t +1 888 432 5227 www.galsonlabs.ca | www.sgs.com

Member of the SGS Group (SGS SA)

Sampling Time / Air Volume Calculations

Sample No. (Sample ID)	Start Time	Stop Time	Minutes	Flow Rate	Calculated Air Volume
Sample #1 (CNC-DP-APRIL 4)	4/4/2023 00:00	4/6/2023 13:10	3670	3	11010
Sample #2 (CNC-DP-APRIL 11)	4/11/2023 14:15	4/13/2023 13:47	2852	3	8556
Sample #3 (CNC-ASBESTOS-APRIL4)	4/4/2023 13:15	4/5/2023 13:15	1440	2	2880
Sample #4 (CNC-ASBESTOS APRIL11)	4/11/2023 14:10	4/12/2023 13:50	1420	2	2840

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	Ryan Fletcher		4/20/2023	10:10	Received By :	Ava Ferreira		4/20/23	
Relinquished By :					Received By :			4/21/23	912

Samples received after 3pm will be considered as next day's business.

Online COC No. : 268048
Prep No. : PSY690456
Account No. : 24170
Finalized : 4/20/2023 10:13:35 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

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Member of the SGS Group (SGS SA)

SGS GALSON

Ryan Fletcher
Wood E&I Solutions Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

July 18, 2023

Account# 24170

Login# L599009

Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on July 12, 2023. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Lisa Swab
Laboratory Director

Enclosure(s)

Terms and Conditions & General Disclaimers

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- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

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- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at http://www.sgsgalson.com in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

SGS GALSON

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East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client	: Wood E&I Solutions Canada Limi	Account No.:	24170
Site	: GREAT BEAR PROJECT	Login No. :	L599009
Project No.	: OMEMA2303.2023D.100		
Date Sampled	: 29-JUN-23 - 01-JUL-23	Date Analyzed :	18-JUL-23
Date Received	: 12-JUL-23	Report ID :	1368922

Diesel Particulate Matter as Carbon

Sample ID	Lab ID	Air Vol liter	Analyte	Total ug	Conc ug/m3
TEARDROP PSY699304-1	L599009-1	10223.56	Organic Carbon	13	1.3
			Elemental Carbon	<0.52	<0.051
			Total Carbon	13	1.3
TEARDROP PSY699304-2	L599009-2	8052.369	Organic Carbon	64	8.0
			Elemental Carbon	[1.4]	[0.17]
			Total Carbon	66	8.1

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.8ug OC & EC; 3.6ug TC Method Detection Limit: 0.52ug OC & EC; 1.0ug TC
Analytical Method : mod. NIOSH 5040; TOA Submitted by: PMH/JGC Approved by : JGC Date : 18-JUL-23
Collection Media : 25mm Quartz Supervisor: JGC

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Client Name : Wood E&I Solutions Canada Limited
Site : GREAT BEAR PROJECT
Project No. : OMEMA2303.2023D.100

Date Sampled : 29-JUN-23 - 01-JUL-23 Account No.: 24170
Date Received: 12-JUL-23 Login No. : L599009
Date Analyzed: 18-JUL-23

L599009 (Report ID: 1368922):
SOPs: ic-n5040(32)
Reported sample results in brackets are considered estimated, as they are below the level of quantitation.

L599009 (Report ID: 1368922):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Diesel Particulate Matter as Carbon	+/-11%	104%

1Z5X626A1541307142
Date:07/12/23
Shipper:UPS
Initials:AMF

Prep:UNKNOWN

☐ New Client?

Client Account No.*: 24170

Report To*: Ryan Fletcher WSP E+I

Invoice To*: apinvoice.canada@woodplc.com

18

Phone No.*:
Cell No.:
Email Results to: ryan.fletcher@wsp.com
Email address:

Phone No.:
Email:
P.O. No.: OMEMA2303.2023D.100.5120.573000
Credit Card: ☐ Card on File ☐ Call for Credit Card Info.

☐ Samples submitted using the FreePumpLoan™ Program ☐ Samples submitted using the FreeSamplingBadges™ Program

Tel: (315) 432-5227
888-432-LABS (5227) Canada
Fax: (315) 437-0571
www.galsonlabs.com

L599009

Need Results By:	(surcharge)
☑ KMA Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%
☐ Next Day by Noon	150%
☐ Same Day	200%

Site Name: Great Bear Project Project: OMEMA2303.2023D.100 Sampled by: Jacob McFee

Comments:

List description of industry or Process/interferences present in sampling area:

Ambient outdoor conditions, left for a period of 48 hours at 4-6 ft off the ground.

State samples were collected in (e.g., NY)

Please indicate which OEL this data will be used for:
☐ OSHA PEL ☐ ACGIH TLV ☐ Cal OSHA
☐ MSHA ☐ Other (specify):

Sample Identification* (Maxmium of 20 Characters)	Date Sampled	Collection Medium	Sample Volume Sample Time Sample Area*	Sample Units*: L, ml,min,in2,cm2,ft2	Analysis Requested*	Method Reference^	Hexavalent Chromium Process (e.g., welding plating, painting, etc.)*
Teardrop PSY699304-1	07/01/23	25mm QFF	10223.56	L	Diesel Particulate Matter	NIOSH 5040	Ambient Conditions
Teardrop PSY699304-2	06/29/23	25mm QFF	8052.369	L	Diesel Particulate Matter	NIOSH 5040	Ambient Conditions

^Galson Laboratories will subsititute our routine/preferred method if it does not match the method listed on the COC unless this box is checked: ☐ Use method(s) listed on COC

For metals analysis: if requesting an analyte with the option of a lower LOQ, please indicate if the lower LOQ is required (only available for certain analytes - see SAG):

For crystalline silica: form(s) of silica needed must be indicated (Quartz, Cristobalite, and/or Tridymite)*:

Chain of Custody	Print Name/Signature	Date	Time		Print Name/Signature	Date	Time
Relinquished by:	Jacob McFee			Received by:	Niyati Modi	7/11/23	8:40am
Relinquished by:				Received by:	Ana Ferreira	7/12/23	855

Samples received after 3pm will be considered as next day's business.
* Required fields, failure to complete these fields may result in a delay in your samples being processed.

SGS GALSON

Ryan Fletcher
Wood E&I Solutions Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

September 06, 2023

Account# 24170

Login# L603626

Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on August 30, 2023. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Lisa Swab
Laboratory Director

Enclosure(s)

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National/International	Accreditation/Recognition	Lab ID#	Program/Sector
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State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

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LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 21-JUN-23 - 22-AUG-23
Date Received : 30-AUG-23

Account No.: 24170
Login No. : L603626
Date Analyzed : 01-SEP-23
Report ID : 1377734

Asbestos Fiber Count (A Rules)

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
JUNE 21/23	L603626-1	12/100	15.3	5885	2,880,000	0.002
AUGUST 14/23	L603626-2	19/100	24.2	9318	2,830,000	0.003
AUGUST 22/23	L603626-3	2/100	<7	<2700	2,880,000	<0.001

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Sample Matrix : 25mm MCE PCM
Analytical Method : mod. NIOSH 7400 "A" Rules
Limit of Detection : 5.5 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : MJS
Approved by : SLS
Date : 01-SEP-23

Supervisor: BDB

cc -Cubic Centimeters mm2 -Square Millimeters

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LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Date Sampled : 14-AUG-23 - 22-AUG-23
Date Received : 30-AUG-23

Account No.: 24170
Login No. : L603626
Date Analyzed : 05-SEP-23
Report ID : 1378291

Diesel Particulate Matter as Carbon

Sample ID	Lab ID	Air Vol liter	Analyte	Total ug	Conc ug/m3
AUG. 14/23	L603626-4	5520	Organic Carbon	25	4.5
			Elemental Carbon	<0.52	<0.094
			Total Carbon	25	4.5
AUG. 22/23	L603626-5	5680	Organic Carbon	16	2.9
			Elemental Carbon	<0.52	<0.092
			Total Carbon	16	2.9

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.8ug OC & EC; 3.6ug TC
Method Detection Limit: 0.52ug OC & EC; 1.0ug TC
Analytical Method : mod. NIOSH 5040; TOA
Submitted by: PMH/JGC
Approved by : JGC
Date : 06-SEP-23
Collection Media : 25mm Quartz
Supervisor: JGC

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Client Name : Wood E&I Solutions Canada Limited
Site :

Date Sampled : 21-JUN-23 - 22-AUG-23 Account No.: 24170
Date Received: 30-AUG-23 Login No. : L603626
Date Analyzed: 01-SEP-23 - 05-SEP-23

L603626 (Report ID: 1377734):
SOPs: ia-pcm(33)
Per NIOSH 7400, fiber counts less than 100 f/mm2 or greater than 1300 f/mm2 have a greater than optimal variability and are probably biased.
Fiber count samples will be discarded 60 days from the date of this report.
NIOSH 7400 Requires 2 blanks or 10% of the total samples whichever is greater to be submitted for each sampling event.
The current intra-laboratory coefficients of variation (CVs) for the applicable fiber ranges are as follows:
0.142 (5-20 fibers/100 fields)
0.115 (>20-50 fibers/100 fields)
0.082 (>50-100 fibers/100 fields)
0.091 (>100 fibers/100 fields)
The stated CVs apply to the media, technology, and SOP(s) referenced in the report and do not take into account any uncertainty associated with the sampling process.

L603626 (Report ID: 1378291):
SOPs: ic-n5040(32)
Reported sample results in brackets are considered estimated, as they are below the level of quantitation.

L603626 (Report ID: 1378291):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Diesel Particulate Matter as Carbon	+/-10.2%	104%

1ZA4206Y6813895537
Date: 08/30/23
Shipper: UPS
Initials: KLD
Prep: UNKNOWN

L6003626

(61)

GALSON CHAIN OF CUSTODY

Turn Around Time (TAT):	(surcharge)
☐ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%
☐ Next Day by Noon	150%
☐ Same Day	200%

☑ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/

Client Acct No.: 24170

Original Prep No.: PSY706058

CS Rep: BHONEYCUTT

Online COC No.: 276998

Report To :	Ryan Fletcher
Company Name :	Wood E&I Solutions Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	Unit 2-3
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	647 - 283 - 4638
Cell No. :	647 - 283 - 4638
Email reports to :	ryan.fletcher@wsp.com
Email EDD to :	ryan.fletcher@wsp.com
Comments :	

Invoice To :	Grace Adrover
Company Name :	Wood E&I Solutions Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	905 - 568 - 2929
Email Address :	APInvoice.Canada@woodplc.com, grace.adrover@woodplc.com
Comments :	
P.O. No. :	
Payment info. :	☐ I will call SGS Galson to provide credit card info ☐ Card on File (enter the last five digits on the line below)

Comments :

State Sampled :

Please indicate which OEL(s) this data will be used for :
☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ : _____ (Specify Limit(s)) ☐ Other : _____ (Specify Other)

Site Name :	Project :	Sampled By :	List description of industry or Process/interferences present in sampling area :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
June 21/23	June 21/23	11	24hours	flowrate=2.0Lpm	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
August 14/23	Aug. 14/23	25mm 0.8u MCE for PCM/TEM	23hours, 35mins	11			
August 22/23	Aug. 22/23	11	24hours	11			

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	[signature]	Adam Gauthier	Aug. 25/23	—	Received By :	Kathryn L. Drago	[signature]	8/30/23	1156
Relinquished By :					Received By :				

*** You must fill in these columns for any samples which you are submitting.**

Samples received after 3pm will be considered as next day's business.

Online COC No. : 276998
Prep No. : PSY706058
Account No. : 24170
Draft : 7/28/2023 3:41:59 PM

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SGS GALSON CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
Aug. 14/23	Aug. 14/23	25mm QFF, 3pc (N5040)	46 hours	flow rate = 2.0 Lpm	Diesel Particulate	mod. NIOSH 5040; TOA	
Aug. 22/23	Aug 22/23	25mm QFF, 3pc (N5040)	47 hours, 20 mins	11	Diesel Particulate	mod. NIOSH 5040; TOA	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature	Date	Time		Print Name / Signature	Date	Time
Relinquished By :	Adam Gauthier	Aug 25/23	—	Received By :	Kathryn L. Drago	8/30/23	1156
Relinquished By :				Received By :			

*** You must fill in these columns for any samples which you are submitting.**

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Online COC No. : 276998
Prep No. : PSY706058
Account No. : 24170
Draft : 7/28/2023 3:41:59 PM

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SGS GALSON

Ryan Fletcher
WSP E&I Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

October 11, 2023

Account# 24170

Login# L606876

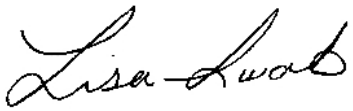
Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on October 05, 2023. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson



Lisa Swab
Laboratory Director

Enclosure(s)

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Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
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ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

SGS GALSON

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FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : NS
Project No. : OMEMA2002.2021E.100
Date Sampled : 26-SEP-23
Date Received : 05-OCT-23

Account No.: 24170
Login No. : L606876

Date Analyzed : 11-OCT-23
Report ID : 1385310

Asbestos Fiber Count (A Rules)

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
CNC#1 ASLO	L606876-1	2/100	<7	<2700	2,870,000	<0.001

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Sample Matrix : 25mm MCE PCM
Analytical Method : mod. NIOSH 7400 "A" Rules
Limit of Detection : 5.5 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : BDB
Approved by : SLS
Date : 11-OCT-23

Supervisor: BDB

cc -Cubic Centimeters mm2 -Square Millimeters

SGS GALSON

6601 Kirkville Road
East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client	: Wood E&I Solutions Canada Limi	Account No.:	24170
Site	: NS	Login No. :	L606876
Project No.	: OMEMA2002.2021E.100		
Date Sampled	: 26-SEP-23	Date Analyzed :	10-OCT-23
Date Received	: 05-OCT-23	Report ID :	1385321

Diesel Particulate Matter as Carbon

Sample ID	Lab ID	Air Vol liter	Analyte	Total ug	Conc ug/m3
CNC#2 DPM	L606876-2	5804	Organic Carbon	26	4.6
			Elemental Carbon	<0.52	<0.090
			Total Carbon	26	4.6

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.8ug OC & EC; 3.6ug TC Method Detection Limit: 0.52ug OC & EC; 1.0ug TC
Analytical Method : mod. NIOSH 5040; TOA Submitted by: PMH/JGC Approved by : JGC Date : 11-OCT-23
Collection Media : 25mm Quartz Supervisor: JGC

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East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY FOOTNOTE REPORT

Client Name : Wood E&I Solutions Canada Limited
Site :
Project No. : OMEMA2002.2021E.100

Date Sampled : 26-SEP-23 Account No.: 24170
Date Received: 05-OCT-23 Login No. : L606876
Date Analyzed: 10-OCT-23 - 11-OCT-23

L606876 (Report ID: 1385310):
SOPs: ia-pcm(33)
Per NIOSH 7400, fiber counts less than 100 f/mm2 or greater than 1300 f/mm2 have a
greater than optimal variability and are probably biased.
Fiber count samples will be discarded 60 days from the date of this report.
NIOSH 7400 Requires 2 blanks or 10% of the total samples whichever is greater to be submitted for each sampling event.
The current intra-laboratory coefficients of variation (CVs) for the applicable fiber ranges are as
follows:
0.142 (5-20 fibers/100 fields)
0.115 (>20-50 fibers/100 fields)
0.082 (>50-100 fibers/100 fields)
0.091 (>100 fibers/100 fields)
The stated CVs apply to the media, technology, and SOP(s) referenced in the report and do not take
into account any uncertainty associated with the sampling process.

L606876 (Report ID: 1385321):
SOPs: ic-n5040(32)
Reported sample results in brackets are considered estimated, as they are below the level of quantitation.

L606876 (Report ID: 1385321):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the
media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process.
The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient
data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Diesel Particulate Matter as Carbon	+/-10.2%	104%

1Z5X626A1541226220
Date:10/05/23
Shipper:UPS
Initials:BCF
Prep:UNKNOWN

R90 L6068764 CANADA

GALSON

CHAIN OF CUSTODY

Turn Around Time (TAT):	(surcharge)
☐ 2802 Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%

Need a quicker turn around time? Please call for availability and pricing.

☑ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/

Client Acct No.: 24170

Original Prep No.: PON712255

CS Rep: BHONEYCUTT

Online COC No.: 280552

Report To: Ryan Fletcher
Company Name: Wood E&I Solutions Canada Limited
Address 1: 160 Traders Blvd. E
Address 2: Unit 2-3
City, State Zip: Mississauga, ON L4Z3K7
Country: Canada
Phone No.: 647 - 283 - 4638
Cell No.: 647 - 283 - 4638
Email reports to: ryan.fletcher@wsp.com
Email EDD to: ryan.fletcher@wsp.com
Comments:

Invoice To: ~~Grace Adrover~~ AP Invoice Canada
Company Name: ~~Wood E&I Solutions~~ Canada Limited
Address 1: 160 Traders Blvd. E
Address 2:
City, State Zip: Mississauga, ON L4Z3K7
Country: Canada
Phone No.: 905 - 568 - 2929
Email Address: APInvoice.Canada@~~woodplc.com~~.wsp.com
grace.adrover@woodplc.com
Comments:
P.O. No.:
Payment info.: ☐ I will call SGS Galson to provide credit card info
☐ Card on File (enter the last five digits on the line below)

Comments:

Province Sampled:

Please indicate which OEL(s) this data will be used for:
☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ: _____ Specify Limit(s) ☐ Other: _____ Specify Other

Site Name:

Project: OMEMA2002.2021E.100

Sampled By:

List description of industry or Process/interferences present in sampling area:

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
CNC #1 Asb	Sept. 26/23	25mm 0.8u MCE for PCM/TEM	23 hours, 55 min	flow rate = 2.0 lpm	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
CNC #2 DPM	Sept 26/23	11 25mm off Treated Filter	48 hours, 22 mins	↓	Diesel Particulate		

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By:	Adam Gauthier		Sept. 29/23	1200	Received By:	Nivan Mark	N.M.	10/4/23	10:12am
Relinquished By:					Received By:	Bill Fischer		05 OCT 23	0920

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No.: 280552
Prep No.: PON712255
Account No.: 24170
Draft: 9/19/2023 12:05:37 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS GALSON **CHAIN OF CUSTODY**

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in^2, cm^2, ft^2 *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
		25mm QFF, 3pc (N5040)			Diesel Particulate	mod. NIOSH 5040; TOA	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :					Received By :	Bill Fischer	Bill Fischer	23-09-23	0920
Relinquished By :					Received By :				

*** You must fill in these columns for any samples which you are submitting.**

Samples received after 3pm will be considered as next day's business.

Online COC No. : 280552
Prep No. : PON712255
Account No. : 24170
Draft : 9/19/2023 12:05:37 PM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

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SGS GALSON

Ryan Fletcher
WSP E&I Canada Limited
160 Traders Blvd. E
Unit 2-3
Mississauga, ON L4Z3K7
Canada

November 13, 2023

Account# 24170

Login# L609914

Dear Ryan Fletcher:

Enclosed are the analytical results for the samples received by our laboratory on November 07, 2023. All samples on the chain of custody were received in good condition unless otherwise noted. Any additional observations will be noted on the chain of custody.

Please contact client services at (888) 432-5227 if you would like any additional information regarding this report. Thank you for using SGS Galson.

Sincerely,

SGS Galson

Lisa Swab
Laboratory Director

Enclosure(s)

Terms and Conditions & General Disclaimers

- This document is issued by the Company under its General Conditions of Service accessible at http://www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

- Any holder of this document is advised that information contained herein reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

Analytical Disclaimers

- Unless otherwise noted within the report, all quality control results associated with the samples were within established control limits or did not impact reported results.

- Note: The findings recorded within this report were drawn from analysis of the sample(s) provided to the laboratory by the Client (or a third party acting at the Client's direction). The laboratory does not have control over the sampling process, including but not limited to the use of field equipment and collection media, as well as the sampling duration, collection volume or any other collection parameter used by the Client. The findings herein constitute no warranty of the sample's representativeness of any sampled environment, and strictly relate to the samples as they were presented to the laboratory. For recommended sampling collection parameters, please refer to the Sampling and Analysis Guide at www.sgsgalson.com.

- Unrounded results are carried through the calculations that yield the final result and the final result is rounded to the number of significant figures appropriate to the accuracy of the analytical method. Please note that results appearing in the columns preceding the final result column may have been rounded and therefore, if carried through the calculations, may not yield an identical final result to the one reported.

- The stated LOQs for each analyte represent the demonstrated LOQ concentrations prior to correction for desorption efficiency (if applicable).

- Unless otherwise noted within the report, results have not been blank corrected for any field blank or method blank data.

Accreditations SGS Galson holds a variety of accreditations and recognitions. Our quality management system conforms with the requirements of ISO/IEC 17025. Where applicable, samples may also be analyzed in accordance with the requirements of ELAP, NELAC, or LELAP under one of the state accrediting bodies listed below. Current Scopes of Accreditation can be viewed at http://www.sgsgalson.com in the accreditations section of the "About" page. To determine if the analyte tested falls under our scope of accreditation, please visit our website or call Client Services at (888) 432-5227.

National/International	Accreditation/Recognition	Lab ID#	Program/Sector
AIHA-LAP, LLC - IHLAP, ELLAP, EMLAP	ISO/IEC 17025 and USEPA NLLAP	Lab ID 100324	Industrial Hygiene, Environmental Lead, Environmental Microbiology

State	Accreditation/Recognition	Lab ID#	Program/Sector
New York (NYSDOH)	ELAP and NELAC (TNI)	Lab ID: 11626	Air Analysis, Solid and Hazardous Waste
Louisiana (LDEQ)	LELAP	Lab ID: 04083	Air Analysis, Solid Chemical Materials

Legend

< - Less than	mg - Milligrams	MDL - Method Detection Limit	ppb - Parts per Billion
> - Greater than	ug - Micrograms	NA - Not Applicable	ppm - Parts per Million
l - Liters	m3 - Cubic Meters	NS - Not Specified	ppbv - ppb Volume
LOQ - Limit of Quantitation	kg - Kilograms	ND - Not Detected	ppmv - ppm Volume
ft2 - Square Feet	cm2 - Square Centimeters	in2 - Square Inches	ng - Nanograms

SGS GALSON

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East Syracuse, NY 13057
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FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : CRAWFORD
Project No. : OMEMA2304S.11000.
Date Sampled : 16-OCT-23
Date Received : 07-NOV-23

Account No.: 24170
Login No. : L609914
Date Analyzed : 08-NOV-23
Report ID : 1390674

Asbestos Fiber Count (A Rules)

Sample ID	Lab ID	Fibers/ Fields	Fibers/ mm2	Fibers/ Filter	Air Volume (cc)	Fibers/ cc
ASB CNC 1	L609914-1	19/100	24.2	9318	2,840,000	0.003
CNC ASB BLANK	L609914-2	0/100	<7	<2700	NA	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Sample Matrix : 25mm MCE PCM
Analytical Method : mod. NIOSH 7400 "A" Rules
Limit of Detection : 5.5 Fibers/ 100 Fields
Microscope field area : 0.00785 mm2
Filter collection area: 385 mm2

Submitted by : SLS
Approved by : BDB
Date : 09-NOV-23

Supervisor: BDB

cc -Cubic Centimeters mm2 -Square Millimeters

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East Syracuse, NY 13057
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FAX: (315) 437-0571
www.sgsgalson.com

LABORATORY ANALYSIS REPORT

Client : Wood E&I Solutions Canada Limi
Site : CRAWFORD
Project No. : OMEMA2304S.11000.
Date Sampled : 16-OCT-23
Date Received : 07-NOV-23

Account No.: 24170
Login No. : L609914
Date Analyzed : 13-NOV-23
Report ID : 1391468

Diesel Particulate Matter as Carbon

Sample ID	Lab ID	Air Vol liter	Analyte	Total ug	Conc ug/m3
DPM CNC 1	L609914-3	8640	Organic Carbon	3.0	0.35
			Elemental Carbon	<0.52	<0.060
			Total Carbon	3.0	0.35
CNC DPM BLANK	L609914-4	NA	Organic Carbon	6.2	NA
			Elemental Carbon	<0.52	NA
			Total Carbon	6.2	NA

COMMENTS: Please see attached lab footnote report for any applicable footnotes.

Level of Quantitation: 1.8ug OC & EC; 3.6ug TC Method Detection Limit: 0.52ug OC & EC; 1.0ug TC
Analytical Method : mod. NIOSH 5040; TOA Submitted by: PMH Approved by : JGC Date : 13-NOV-23
Collection Media : 25mm Quartz Supervisor: JGC

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East Syracuse, NY 13057
(315) 432-5227
FAX: (315) 437-0571
www.sgsgalson.com

Client Name : Wood E&I Solutions Canada Limited
Site : CRAWFORD
Project No. : OMEMA2304S.11000.

Date Sampled : 16-OCT-23 Account No.: 24170
Date Received: 07-NOV-23 Login No. : L609914
Date Analyzed: 08-NOV-23 - 13-NOV-23

L609914 (Report ID: 1390674):
SOPs: ia-pcm(33)
Per NIOSH 7400, fiber counts less than 100 f/mm2 or greater than 1300 f/mm2 have a greater than optimal variability and are probably biased.
Fiber count samples will be discarded 60 days from the date of this report.
NIOSH 7400 Requires 2 blanks or 10% of the total samples whichever is greater to be submitted for each sampling event.
The current intra-laboratory coefficients of variation (CVs) for the applicable fiber ranges are as follows:
0.142 (5-20 fibers/100 fields)
0.115 (>20-50 fibers/100 fields)
0.082 (>50-100 fibers/100 fields)
0.091 (>100 fibers/100 fields)
The stated CVs apply to the media, technology, and SOP(s) referenced in the report and do not take into account any uncertainty associated with the sampling process.

L609914 (Report ID: 1391468):
SOPs: ic-n5040(32)
Reported sample results in brackets are considered estimated, as they are below the level of quantitation.
Actual values for field blank are reported. Sample results have been corrected for the field blank.

L609914 (Report ID: 1391468):
Accuracy and mean recovery data presented below is based on a 95% confidence interval (k=2). The estimated accuracy applies to the media, technology, and SOP referenced in this report and does not account for the uncertainty associated with the sampling process. The accuracy is based solely on spike recovery data from internal quality control samples. Where N/A appears below, insufficient data is available to provide statistical accuracy and mean recovery values for the associated analyte.

Parameter	Accuracy	Mean Recovery
Diesel Particulate Matter as Carbon	+/-10.2%	104%

1Z5X626A1542868115
Date: 11/07/23
Shipper: UPS
Initials: KMS

Prep: UNKNOWN

L609914

CAIN R35

GALSON CHAIN OF CUSTODY

Turn Around Time (TAT):	(Surcharge)
☐ Standard	0%
☐ 4 Business Days	35%
☐ 3 Business Days	50%
☐ 2 Business Days	75%
☐ Next Day by 6pm	100%

Need a quicker turn around time? Please call for availability and pricing.

☑ Samples submitted using the FreePumpLoan™ Program

☐ Samples submitted using the FreeSamplingBadges™ Program

You may edit and complete this COC electronically by logging in to your Client Portal account at https://portal.galsonlabs.com/

Client Acct No.: 24170

Original Prep No.: PON713956

CS Rep: BHONEYCUTT

Online COC No.: 281526

Report To :	Ryan Fletcher
Company Name :	WSP E&I Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	Unit 2-3
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	647 - 283 - 4638
Cell No. :	647 - 283 - 4638
Email reports to :	ryan.fletcher@wsp.com
Email EDD to :	ryan.fletcher@wsp.com
Comments :	

Invoice To :	Grace Adrover
Company Name :	WSP E&I Canada Limited
Address 1 :	160 Traders Blvd. E
Address 2 :	
City, State Zip :	Mississauga, ON L4Z3K7
Country :	Canada
Phone No. :	905 - 568 - 2929
Email Address :	APInvoice.Canada@wsp.com, grace.adrover@woodplc.com
Comments :	
P.O. No. :	
Payment info. :	☐ I will call SGS Galson to provide credit card info ☐ Card on File (enter the last five digits on the line below)

Comments :

Province Sampled :

Please indicate which OEL(s) this data will be used for :
☐ OSHA PEL ☐ ACGIH TLV ☐ MSHA ☐ Cal OSHA
☐ IAQ : _____ (Specify Limit(s)) ☐ Other : _____ (Specify Other)

Site Name : Crawford

Project : OMEMA2304S.11000.

Sampled By : David Deciaume

List description of industry or Process/interferences present in sampling area :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g., welding, plating, painting, etc.)
Asb CNC 1	Oct 16, 2023	25mm 0.8u MCE for PCM/TEM	23h 40m	2.0Lpm	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	David Deciaume	Deciaume	Nov 1, 2023		Received By :	Nino ft Morr		11/6/23	
Relinquished By :					Received By :	Kris Stone	Kris Stone	11/7/23	0915

*** You must fill in these columns for any samples which you are submitting.**

Samples received after 3pm will be considered as next day's business.

Online COC No. : 281526
Prep No. : PON713956
Account No. : 24170
Draft : 10/3/2023 11:05:25 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS GALSON — CHAIN OF CUSTODY

Comments :

Sample ID * (Maximum of 20 Characters)	Date Sampled *	Collection Medium	Sample Volume Sample Time Sample Area *	Liters Minutes in², cm², ft² *	Analysis Requested	Method Reference ^	Hexavalent Chromium Process (e.g. welding, plating, painting, etc)
CNC-Asb-Blank		25mm 0.8u MCE for PCM/TEM	—	—	Asbestos Fiber Count (A Rules)	mod. NIOSH 7400 "A" Rules; PCM	
DPM CNC-1	Oct16 2023	25mm QFF, 3pc (N5040)	48h	3.0Lpm	Diesel Particulate	mod. NIOSH 5040; TOA	
CNC DPM-Blank		25mm QFF, 3pc (N5040)	—	—	Diesel Particulate	mod. NIOSH 5040; TOA	

☐ ^ If the method(s) indicated on the COC are not our routine/preferred method(s), we will substitute our routine/preferred methods. If this is not acceptable, check here to have us contact you.

Chain of Custody	Print Name / Signature		Date	Time		Print Name / Signature		Date	Time
Relinquished By :	David Duciaume		Nov 1, 2023		Received By :	Nivati More		11/6/23	
Relinquished By :					Received By :	Kris Stone		11/7/23	0915

* You must fill in these columns for any samples which you are submitting.

Samples received after 3pm will be considered as next day's business.

Online COC No. : 281526
Prep No. : PON713956
Account No. : 24170
Draft : 10/3/2023 11:05:25 AM

All services are rendered in accordance with the applicable SGS General Conditions of Service accessible via: http://www.sgs.com/en/Terms-and-Conditions.aspx

SGS Galson | 5700 Timberlea Blvd Unit 3 Mississauga, ON L4W 5B9, CAN t +1 888 432 5227 www.galsonlabs.ca | www.sgs.com
Member of the SGS Group (SGS SA)

Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/03/22
Report #: R7053527
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C269791
Received: 2022/03/16, 16:39

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2022/03/17	2022/03/18	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2022/03/17	2022/03/21	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2022/03/17	2022/03/17		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C269791
Report Date: 2022/03/22

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		SCN579		
Sampling Date		2022/03/03		
COC Number		n/a		
	UNITS	**FEBRUARY DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	<1.0	1.0	7888159
Soluble Particulate	mg	<2.0	2.0	7890212
Charge/Prep Analysis				
Volume of sample	ml	19	1	7888154

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C269791
Report Date: 2022/03/22

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C269791
Report Date: 2022/03/22

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
7888159	JNA	Spiked Blank	Insoluble Particulate	2022/03/18		95	%	85 - 115
7888159	JNA	Method Blank	Insoluble Particulate	2022/03/18	<1.0		mg	
7890212	JNA	Spiked Blank	Soluble Particulate	2022/03/21		99	%	85 - 115
7890212	JNA	Method Blank	Soluble Particulate	2022/03/21	<0.20		mg	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C269791
Report Date: 2022/03/22

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Brenda Moore

Brenda Moore, Team Lead, Inorganic

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Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: na

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/05/05
Report #: R7112188
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2A6914
Received: 2022/04/21, 15:47

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2022/04/27	2022/04/28	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2022/04/27	2022/04/29	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2022/04/27	2022/04/27		

Remarks:

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All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: na

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/05/05
Report #: R7112188
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2A6914
Received: 2022/04/21, 15:47

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2A6914
Report Date: 2022/05/05

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		SKS396		
Sampling Date		2022/04/04		
COC Number		na		
	UNITS	**MARCH DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	1.3	1.0	7961632
Soluble Particulate	mg	4.2	1.7	7961635
Charge/Prep Analysis				
Volume of sample	ml	310	1	7961631
RDL = Reportable Detection Limit QC Batch = Quality Control Batch				

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2A6914
Report Date: 2022/05/05

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: SKS396
Sample ID: MARCH DUSTFALL
Matrix: Water

Collected: 2022/04/04
Shipped:
Received: 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	7961632	2022/04/27	2022/04/28	Joseph-Noel Andres
Soluble Part. in Dustfall (D1739mod)	BAL	7961635	2022/04/27	2022/04/29	Joseph-Noel Andres
Volume of Sample Received		7961631	2022/04/27	2022/04/27	Joseph-Noel Andres

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Bureau Veritas Job #: C2A6914
Report Date: 2022/05/05

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
7961632	Insoluble Particulate	2022/04/28	98	85 - 115	<1.0	mg
7961635	Soluble Particulate	2022/04/29	100	85 - 115	<0.20	mg

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Bureau Veritas Job #: C2A6914
Report Date: 2022/05/05

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Frank Mo, B.Sc., Inorganic Lab. Manager

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

AIR

CAM FCD-01302 /3

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
March Dustfall			3 mar - 4 april					X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #: OMEMA2002.2021E.100*.5120.573000
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 2021/04/21 15:47

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21-Apr-22 15:47
Gina Baybayan
C2A6914
MUM AIR-RmTmp

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/08/12
Report #: R7250538
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2L2843
Received: 2022/07/28, 16:03

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	2	2022/08/08	2022/08/09	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	2	2022/08/08	2022/08/10	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	2	2022/08/08	2022/08/08		

Remarks:

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Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/08/12
Report #: R7250538
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2L2843
Received: 2022/07/28, 16:03

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
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Bureau Veritas Job #: C2L2843
Report Date: 2022/08/12

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		THO290		THO291		
Sampling Date		2022/06/04		2022/07/02		
COC Number		n/a		n/a		
	UNITS	**MAY DUSTFALL**	**RDL**	**JUNE DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	4.3	1.0	3.0	1.0	8154193
Soluble Particulate	mg	2.0	1.6	4.2	1.7	8154214
Charge/Prep Analysis						
Volume of sample	ml	220	1	290	1	8154166

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C2L2843
Report Date: 2022/08/12

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: THO290
Sample ID: MAY DUSTFALL
Matrix: Water

Collected: 2022/06/04
Shipped:
Received: 2022/07/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8154193	2022/08/08	2022/08/09	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8154214	2022/08/08	2022/08/10	Mohammad Wahidul Alam
Volume of Sample Received		8154166	2022/08/08	2022/08/08	Mohammad Wahidul Alam

Bureau Veritas ID: THO291
Sample ID: JUNE DUSTFALL
Matrix: Water

Collected: 2022/07/02
Shipped:
Received: 2022/07/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8154193	2022/08/08	2022/08/09	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8154214	2022/08/08	2022/08/10	Mohammad Wahidul Alam
Volume of Sample Received		8154166	2022/08/08	2022/08/08	Mohammad Wahidul Alam

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	23.0°C

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8154193	Insoluble Particulate	2022/08/09	97	85 - 115	<1.0	mg
8154214	Soluble Particulate	2022/08/10	99	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

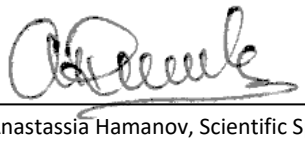
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Bureau Veritas Job #: C2L2843
Report Date: 2022/08/12

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
May Dustfall			May 4 - June 4					X
June Dustfall			June 4 - July 2					X

28-Jul-22 16:03
Gina Baybayan
C2L2843
SDS AIP DmTmn

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation:
Date/Time:

Received by: SABEL/Sadie Temp: 22,23,24
Affiliation: no ice
Date/Time: 22/07/28 ~~16:05~~ 16:03

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/05
Report #: R7329480
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2R4331
Received: 2022/09/22, 14:27

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2022/10/03	2022/10/04	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2022/10/03	2022/10/05	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2022/10/03	2022/10/03		

Remarks:

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* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/05
Report #: R7329480
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2R4331
Received: 2022/09/22, 14:27

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
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For Service Group specific validation please refer to the Validation Signature Page.

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2R4331
Report Date: 2022/10/05

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		TUR846		
Sampling Date		2022/09/02		
COC Number		n/a		
	UNITS	**AUGUST DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	3.7 (1)	2.0	8261548
Soluble Particulate	mg	7.6	1.9	8261551
Charge/Prep Analysis				
Volume of sample	ml	670	1	8261540

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Multiple Filters are used. Results and DLs are adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C2R4331
Report Date: 2022/10/05

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TUR846
Sample ID: AUGUST DUSTFALL
Matrix: Water

Collected: 2022/09/02
Shipped:
Received: 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8261548	2022/10/03	2022/10/04	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8261551	2022/10/03	2022/10/05	Mohammad Wahidul Alam
Volume of Sample Received		8261540	2022/10/03	2022/10/03	Mohammad Wahidul Alam

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8261548	Insoluble Particulate	2022/10/04	98	85 - 115	<1.0	mg
8261551	Soluble Particulate	2022/10/05	99	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

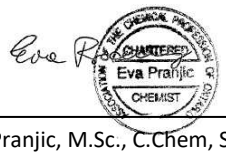
Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C2R4331
Report Date: 2022/10/05

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

AIR

3/3

CAM FCD-01302 /3

BUREAU VERITAS

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
August Dustfall			August 4 - September 2					X

22-Sep-22 14:27
Gina Baybayan
C2R4331
KTN AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 2022/09/22 14:27

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

22-Sep-22 14:27
Gina Baybayan
C2R4331
KTN AIR-RmTmp

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/24
Report #: R7355607
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2T6718
Received: 2022/10/12, 16:28

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2022/10/20	2022/10/24	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2022/10/20	2022/10/24	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2022/10/20	2022/10/20		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/24
Report #: R7355607
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2T6718
Received: 2022/10/12, 16:28

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2T6718
Report Date: 2022/10/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		TZJ891		
Sampling Date		2022/10/04		
COC Number		n/a		
	UNITS	**SEPTEMBER DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	12.2 (1)	2.0	8296299
Soluble Particulate	mg	17.6	1.9	8296303
Charge/Prep Analysis				
Volume of sample	ml	1800	1	8296295

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Multiple Filters are used. Results and DLs are adjusted accordingly.

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Bureau Veritas Job #: C2T6718
Report Date: 2022/10/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TZJ891
Sample ID: SEPTEMBER DUSTFALL
Matrix: Water

Collected: 2022/10/04
Shipped:
Received: 2022/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8296299	2022/10/20	2022/10/24	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8296303	2022/10/20	2022/10/24	Mohammad Wahidul Alam
Volume of Sample Received		8296295	2022/10/20	2022/10/20	Mohammad Wahidul Alam

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Bureau Veritas Job #: C2T6718
Report Date: 2022/10/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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Bureau Veritas Job #: C2T6718
Report Date: 2022/10/24

QUALITY ASSURANCE REPORT

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8296299	Insoluble Particulate	2022/10/24	101	85 - 115	<1.0	mg
8296303	Soluble Particulate	2022/10/24	98	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

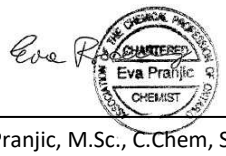
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Bureau Veritas Job #: C2T6718
Report Date: 2022/10/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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AIR

1/1

CAM FCD-01302 /3

BUREAU VERITAS
6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com
Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/~~Wood~~ WSP E+I
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
September Dustfall			September 2 - October 4					X

12-Oct-22 16:28
Gina Baybayan
C2T6718
URE AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 12/10/22 16:28

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Your P.O. #: C026200346
Your Project #: OMEMA.2002.2021E.100*
Site Location: OMEMA.2002.2021E.100*
Your C.O.C. #: N/A

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/11/28
Report #: R7407688
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2X8024
Received: 2022/11/17, 14:07

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2022/11/22	2022/11/24	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2022/11/21	2022/11/24	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2022/11/22	2022/11/22		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA.2002.2021E.100*
Site Location: OMEMA.2002.2021E.100*
Your C.O.C. #: N/A

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/11/28
Report #: R7407688
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2X8024
Received: 2022/11/17, 14:07

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C2X8024
Report Date: 2022/11/28

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: OMEMA.2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		UII688		
Sampling Date		2022/11/02		
	UNITS	**OCTOBER DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	19.4 (1)	2.0	8358494
Soluble Particulate	mg	12.4	1.9	8358497
Charge/Prep Analysis				
Volume of sample	ml	1500	1	8358492

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Multiple Filters are used. Results and DLs are adjusted accordingly.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C2X8024
Report Date: 2022/11/28

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: OMEMA.2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: UII688
Sample ID: OCTOBER DUSTFALL
Matrix: Water

Collected: 2022/11/02
Shipped:
Received: 2022/11/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8358494	2022/11/22	2022/11/24	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8358497	2022/11/21	2022/11/24	Mohammad Wahidul Alam
Volume of Sample Received		8358492	2022/11/22	2022/11/22	Mohammad Wahidul Alam

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C2X8024
Report Date: 2022/11/28

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: OMEMA.2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C2X8024
Report Date: 2022/11/28

QUALITY ASSURANCE REPORT

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: OMEMA.2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8358494	Insoluble Particulate	2022/11/24	98	85 - 115	<1.0	mg
8358497	Soluble Particulate	2022/11/24	99	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

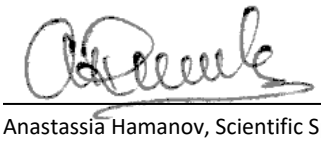
Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C2X8024
Report Date: 2022/11/28

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: OMEMA.2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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CAM FCD-01302

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Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*								
October Dustfall			October 4 - November 2					X								

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" sample
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation:
Date/Time: 15-Nov 3pm

Received by: Alan ACOM
Affiliation:
Date/Time: 22/11/17 1407

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17-Nov-22 14:07
Gina Baybayan
C2X8024

620522

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/12/23
Report #: R7442902
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2AF357
Received: 2022/12/13, 11:58

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2022/12/19	2022/12/20	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2022/12/19	2022/12/21	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2022/12/19	2022/12/19		

Remarks:

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All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

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Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/12/23
Report #: R7442902
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2AF357
Received: 2022/12/13, 11:58

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas Job #: C2AF357
Report Date: 2022/12/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		UOM728		
Sampling Date		2022/12/02		
COC Number		n/a		
	UNITS	NOVEMBER DUSTFALL	RDL	QC Batch
Insoluble Particulate	mg	1.6	1.0	8411459
Soluble Particulate	mg	10.2	2.0	8411464
Charge/Prep Analysis				
Volume of sample	ml	2000	1	8411458

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Bureau Veritas Job #: C2AF357
Report Date: 2022/12/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: UOM728
Sample ID: NOVEMBER DUSTFALL
Matrix: Water

Collected: 2022/12/02
Shipped:
Received: 2022/12/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8411459	2022/12/19	2022/12/20	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8411464	2022/12/19	2022/12/21	Mohammad Wahidul Alam
Volume of Sample Received		8411458	2022/12/19	2022/12/19	Mohammad Wahidul Alam

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Bureau Veritas Job #: C2AF357
Report Date: 2022/12/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	13.0°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8411459	Insoluble Particulate	2022/12/20	100	85 - 115	<1.0	mg
8411464	Soluble Particulate	2022/12/21	101	85 - 115	0.20, RDL=0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

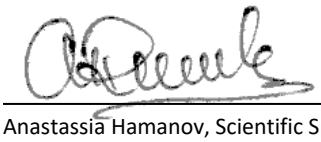
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Bureau Veritas Job #: C2AF357
Report Date: 2022/12/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP	01-Nov-22	Teflon	48.04	20204381	01-Nov-22		X		X	X
TSP	30-Nov-22	Teflon	48.04	12500227 460	30-Nov-22		X		X	X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

Client Signature:
Affiliation:
Date/Time: 2022 Dec 12

Received by:
Affiliation:
Date/Time: 13-Dec-22 11:58

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Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	Silica by NIOSH 7500	PM10	Metals	Dustfall*
PM10	06-Nov-22	Teflon	21.07	20202889	06-Nov-22			X		
PM10	12-Nov-22	Teflon	24.05	20202888	12-Nov-22			X		
PM10	18-Nov-22	Teflon	24.08	22021841	18-Nov-22			X		
PM10	24-Nov-22	Teflon	24.05	20204384	24-Nov-22			X		
PM10	30-Nov-22	Teflon	24.05	12500459	30-Nov-22			X		

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 13/12/13 11:58

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Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
November Dustfall			October 4 - November 2					X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: RC
Affiliation:
Date/Time:

Received by: FEDEX #619375
Affiliation: COURIER
Date/Time: 1158 13/12/13

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/14
Report #: R7508868
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C331745
Received: 2023/02/02, 13:30

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2023/02/08	2023/02/10	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2023/02/08	2023/02/10	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2023/02/08	2023/02/08		

Remarks:

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Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/14
Report #: R7508868
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C331745
Received: 2023/02/02, 13:30

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C331745
Report Date: 2023/02/14

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		UYR407		
Sampling Date		2023/01/02		
COC Number		n/a		
	UNITS	DECEMBER DUSTFALL	RDL	QC Batch
Insoluble Particulate	mg	4.2	1.0	8493362
Soluble Particulate	mg	3.0	1.6	8493364
Charge/Prep Analysis				
Volume of sample	ml	230	1	8493354

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Bureau Veritas Job #: C331745
Report Date: 2023/02/14

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: UYR407
Sample ID: DECEMBER DUSTFALL
Matrix: Water

Collected: 2023/01/02
Shipped:
Received: 2023/02/02

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8493362	2023/02/08	2023/02/10	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8493364	2023/02/08	2023/02/10	Mohammad Wahidul Alam
Volume of Sample Received		8493354	2023/02/08	2023/02/08	Mohammad Wahidul Alam

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Bureau Veritas Job #: C331745
Report Date: 2023/02/14

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C331745
Report Date: 2023/02/14

QUALITY ASSURANCE REPORT

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8493362	Insoluble Particulate	2023/02/10	98	85 - 115	<1.0	mg
8493364	Soluble Particulate	2023/02/10	97	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

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Bureau Veritas Job #: C331745
Report Date: 2023/02/14

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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Toll Free: 1-800-668-0639
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Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
December Dustfall			2Dec22 - 2Jan23					X

02-Feb-23 13:30
Ashton Gibson
C331745
URE AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation: Canada Nickel Company
Date/Time:

Received by: Rupinder / RUPINDER
Affiliation:
Date/Time: 2023/02/02 13:30

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Feb 1st 2023

646307 13 V

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/24
Report #: R7522275
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C347509
Received: 2023/02/17, 08:30

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2023/02/22	2023/02/24	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2023/02/22	2023/02/24	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2023/02/22	2023/02/22		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/24
Report #: R7522275
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C347509
Received: 2023/02/17, 08:30

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas Job #: C347509
Report Date: 2023/02/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VBY267		
Sampling Date		2023/02/02		
COC Number		na		
	UNITS	**JANUARY**	**RDL**	**QC Batch**
Insoluble Particulate	mg	<1.0	1.0	8516523
Soluble Particulate	mg	3.2	1.5	8516526
Charge/Prep Analysis				
Volume of sample	ml	140	1	8516512

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Bureau Veritas Job #: C347509
Report Date: 2023/02/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VBY267
Sample ID: JANUARY
Matrix: Water

Collected: 2023/02/02
Shipped:
Received: 2023/02/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8516523	2023/02/22	2023/02/24	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8516526	2023/02/22	2023/02/24	Mohammad Wahidul Alam
Volume of Sample Received		8516512	2023/02/22	2023/02/22	Mohammad Wahidul Alam

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Bureau Veritas Job #: C347509
Report Date: 2023/02/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8516523	Insoluble Particulate	2023/02/24	98	85 - 115	<1.0	mg
8516526	Soluble Particulate	2023/02/24	99	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

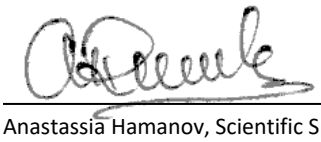
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Bureau Veritas Job #: C347509
Report Date: 2023/02/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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CAM FCD-01302 /3

BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*								
January			Jan 2- Feb 2, 2023					X								

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation: WSP
Date/Time: Feb. 16, 2023

Received by: J-7 ~
Affiliation:
Date/Time: 23/02/17 08:30

17-Feb-23 08:30
Gina Baybayan
C347509
J_L AIR-RmTmp

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: N/A

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/22
Report #: R7556777
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C368780
Received: 2023/03/10, 09:00

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2023/03/16	2023/03/21	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2023/03/16	2023/03/21	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2023/03/16	2023/03/16		

Remarks:

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* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: N/A

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/22
Report #: R7556777
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C368780
Received: 2023/03/10, 09:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas Job #: C368780
Report Date: 2023/03/22

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VGJ075		
Sampling Date		2023/03/03		
	UNITS	**FEBRUARY DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	4.2	1.0	8556685
Soluble Particulate	mg	5.6	1.6	8556687
Charge/Prep Analysis				
Volume of sample	ml	230	1	8556680

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C368780
Report Date: 2023/03/22

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VGJ075
Sample ID: FEBRUARY DUSTFALL
Matrix: Water

Collected: 2023/03/03
Shipped:
Received: 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8556685	2023/03/16	2023/03/21	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8556687	2023/03/16	2023/03/21	Mohammad Wahidul Alam
Volume of Sample Received		8556680	2023/03/16	2023/03/16	Mohammad Wahidul Alam

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Bureau Veritas Job #: C368780
Report Date: 2023/03/22

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8556685	Insoluble Particulate	2023/03/21	100	85 - 115	<1.0	mg
8556687	Soluble Particulate	2023/03/21	101	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

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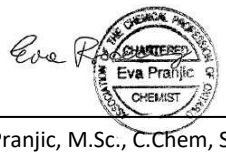
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Bureau Veritas Job #: C368780
Report Date: 2023/03/22

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

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AIR

CAM FCD-01302 /3

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com
Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
February Dustfall			Feb 2- Mar 3, 2023					X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 07-Mar-23

Received by:
Affiliation:
Date/Time: 2023/03/10 09:00

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10-Mar-23 09:00
Gina Baybayan
C368780

JDK AIR-RmTmp

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/04/25
Report #: R7601376
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3A1459
Received: 2023/04/12, 09:21

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2023/04/19	2023/04/24	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2023/04/19	2023/04/24	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2023/04/19	2023/04/19		

Remarks:

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* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/04/25
Report #: R7601376
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3A1459
Received: 2023/04/12, 09:21

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas Job #: C3A1459
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VNH382		
Sampling Date		2023/04/04		
COC Number		n/a		
	UNITS	**MARCH DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	4.4	1.0	8616574
Soluble Particulate	mg	5.2	1.4	8616579
Charge/Prep Analysis				
Volume of sample	ml	110	1	8616566

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Bureau Veritas Job #: C3A1459
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VNH382
Sample ID: MARCH DUSTFALL
Matrix: Water

Collected: 2023/04/04
Shipped:
Received: 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8616574	2023/04/19	2023/04/24	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8616579	2023/04/19	2023/04/24	Mohammad Wahidul Alam
Volume of Sample Received		8616566	2023/04/19	2023/04/19	Mohammad Wahidul Alam

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Bureau Veritas Job #: C3A1459
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8616574	Insoluble Particulate	2023/04/24	96	85 - 115	<1.0	mg
8616579	Soluble Particulate	2023/04/24	99	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

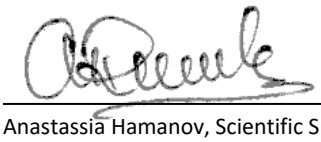
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Bureau Veritas Job #: C3A1459
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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AID

CAM FCD-01302 /3

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
March Dustfall			March 3 - April 4					X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:	Adam Gauthier	Received by:	Ryan SAMBA BASSOLA
Affiliation:	WSP	Affiliation:	
Date/Time:	06-Apr-23	Date/Time:	2023/04/12 09:21

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

12-Apr-23 09:21
Gina Baybayan
C3A1459

KSS AIR-RmTmp

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your C.O.C. #: N/A

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/05/24
Report #: R7642015
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3D4239
Received: 2023/05/11, 08:57

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2023/05/18	2023/05/23	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2000/05/18	2000/05/23	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2023/05/18	2023/05/18		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your C.O.C. #: N/A

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/05/24
Report #: R7642015
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3D4239
Received: 2023/05/11, 08:57

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763
==========

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Bureau Veritas Job #: C3D4239
Report Date: 2023/05/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		VUB000		
Sampling Date		2023/05/04		
	UNITS	APRIL DUSTFALL	RDL	QC Batch
Insoluble Particulate	mg	13.2 (1)	4.0	8672548
Soluble Particulate	mg	12.6	1.9	8672551
Charge/Prep Analysis				
Volume of sample	ml	1200	1	8672538

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
(1) Multiple Filters are used. Results and DLs are adjusted accordingly.

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Bureau Veritas Job #: C3D4239
Report Date: 2023/05/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VUB000
Sample ID: APRIL DUSTFALL
Matrix: Water

Collected: 2023/05/04
Shipped:
Received: 2023/05/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8672548	2023/05/18	2023/05/23	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8672551	2000/05/18	2000/05/23	Mohammad Wahidul Alam
Volume of Sample Received		8672538	2023/05/18	2023/05/18	Mohammad Wahidul Alam

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Bureau Veritas Job #: C3D4239
Report Date: 2023/05/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Each temperature is the average of up to three cooler temperatures taken at receipt

Package 1	20.0°C

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8672548	Insoluble Particulate	2023/05/23	100	85 - 115	<1.0	mg
8672551	Soluble Particulate	2000/05/23	98	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

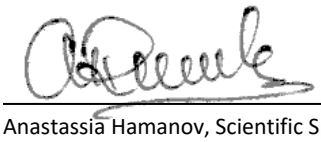
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Bureau Veritas Job #: C3D4239
Report Date: 2023/05/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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www.bvlabs.com

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Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG/DD adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
April Dustfall			April 4-May4					X

11-May-23 08:57
Ashton Gibson
C3D4239
AN4 AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 09-May-23

Received by:
Affiliation:
Date/Time: 2023/05/11 0857

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20/20/20 noise

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/06/26
Report #: R7688889
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H5992
Received: 2023/06/16, 09:05

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2023/06/20	2023/06/22	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2023/06/20	2023/06/22	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2023/06/20	2023/06/20		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/06/26
Report #: R7688889
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3H5992
Received: 2023/06/16, 09:05

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763
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Bureau Veritas Job #: C3H5992
Report Date: 2023/06/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		WCX755		
Sampling Date		2023/06/07		
COC Number		n/a		
	UNITS	**MAY DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	10.8	1.0	8738530
Soluble Particulate	mg	9.6	1.6	8738534
Charge/Prep Analysis				
Volume of sample	ml	190	1	8738311

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3H5992
Report Date: 2023/06/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: WCX755
Sample ID: MAY DUSTFALL
Matrix: Water

Collected: 2023/06/07
Shipped:
Received: 2023/06/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8738530	2023/06/20	2023/06/22	Mohammad Wahidul Alam
Soluble Part. in Dustfall (D1739mod)	BAL	8738534	2023/06/20	2023/06/22	Mohammad Wahidul Alam
Volume of Sample Received		8738311	2023/06/20	2023/06/20	Mohammad Wahidul Alam

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3H5992
Report Date: 2023/06/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3H5992
Report Date: 2023/06/26

QUALITY ASSURANCE REPORT

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

			SPIKED BLANK		Method Blank	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**Value**	**UNITS**
8738530	Insoluble Particulate	2023/06/22	100	85 - 115	<1.0	mg
8738534	Soluble Particulate	2023/06/22	101	85 - 115	<0.20	mg

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3H5992
Report Date: 2023/06/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

AIR

CAM FCD-01302 /3

BUREAU VERITAS
6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com
Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*							
May Dustfall	-	-	May 4- June 7, 2023	-				X							

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002 2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:	Adam Gauthier	Received by:	
Affiliation:	WSP	Affiliation:	
Date/Time:	15-Jun-23	Date/Time:	

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

ByA SAMPA BAYBAYA 2023/06/16 09:05

16-Jun-23 09:05
Gina Baybayan
C3H5992
AK0 AIR-001

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27

Attention: Ryan Fletcher

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/02/24
Report #: R3138743
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C209755
Received: 2022/02/15, 09:30

Sample Matrix: Air
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2022/02/20	2022/02/24	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	4	2022/02/16	2022/02/24	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

==========

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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C209755
Report Date: 2022/02/24

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27
Your P.O. #: 100*5120.573000
Sampler Initials: CD

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		AOR350	AOR789	AOR433	AOR838		
Sampling Date		2021/12/03 12:00	2021/12/03 12:00	2022/01/03 12:00	2022/01/03 12:00		
	UNITS	DECEMBER	DECEMBER-DUP	JANUARY	JANUARY-DUP	RDL	QC Batch
Passive Monitoring							
Calculated NO2	ppb	0.5	N/A	<0.1	N/A	0.1	A504639
Calculated SO2	ppb	<0.1	<0.1	<0.1	<0.1	0.1	A500987

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Job #: C209755
Report Date: 2022/02/24

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27
Your P.O. #: 100*5120.573000
Sampler Initials: CD

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C209755
Report Date: 2022/02/24

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27
Your P.O. #: 100*5120.573000
Sampler Initials: CD

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A500987	SS6	Spiked Blank	Calculated SO2			100	%	90 - 110
A500987	SS6	Method Blank	Calculated SO2		<0.1		ppb	
A504639	SS6	Spiked Blank	Calculated NO2			101	%	90 - 110
A504639	SS6	Method Blank	Calculated NO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C209755
Report Date: 2022/02/24

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27
Your P.O. #: 100*5120.573000
Sampler Initials: CD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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09-Feb-22 14:09

Gina Baybayan

C234522

AIR

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9 RJM AIR-RmTmp

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Laxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@woodplc.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall
SO2-December	3-Dec-21	12:00	3-Jan	12:00		X											
NO2-December	3-Dec-21	12:00	3-Jan	12:00				X									
SO2-December Duplicate	3-Dec-21	12:00	3-Jan	12:00		X											
NO2 Blank								X									
SO2-January	3-Jan-22	12:00	4-Feb	12:00		X											
NO2-January	3-Jan-22	12:00	4-Feb	12:00				X									
SO2- January Dup	3-Jan-22	12:00	4-Feb	12:00		X											
NO2 Blank								X									

RECEIVED
FEB 15 2022
DR

Notes/Comments: Project located in Timmins, ON

5 SO2
3 NO2
CC91320

Sampled By AG Phone/Email adamgauthier@canadanickel.com Received By _____ Date/Time _____ Project # OMEMA2002.2021E

Date Shipped 9-Feb Signature _____ PO# OMEMA2002.2021E.100*.5120.573000

1409

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27

Attention: Ryan Fletcher

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/02/24
Report #: R3138743
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C209755
Received: 2022/02/15, 09:30

Sample Matrix: Air
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2022/02/20	2022/02/24	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	4	2022/02/16	2022/02/24	PTC SOP-00149	Passive SO2 in ATM

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C209755
Report Date: 2022/02/24

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27
Your P.O. #: 100*5120.573000
Sampler Initials: CD

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		AOR350	AOR789	AOR433	AOR838		
Sampling Date		2021/12/03 12:00	2021/12/03 12:00	2022/01/03 12:00	2022/01/03 12:00		
	UNITS	DECEMBER	DECEMBER-DUP	JANUARY	JANUARY-DUP	RDL	QC Batch
Passive Monitoring							
Calculated NO2	ppb	0.5	N/A	<0.1	N/A	0.1	A504639
Calculated SO2	ppb	<0.1	<0.1	<0.1	<0.1	0.1	A500987

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Job #: C209755
Report Date: 2022/02/24

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27
Your P.O. #: 100*5120.573000
Sampler Initials: CD

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C209755
Report Date: 2022/02/24

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27
Your P.O. #: 100*5120.573000
Sampler Initials: CD

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A500987	SS6	Spiked Blank	Calculated SO2			100	%	90 - 110
A500987	SS6	Method Blank	Calculated SO2		<0.1		ppb	
A504639	SS6	Spiked Blank	Calculated NO2			101	%	90 - 110
A504639	SS6	Method Blank	Calculated NO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C209755
Report Date: 2022/02/24

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2021/12/02 - 2022/01/27
Your P.O. #: 100*5120.573000
Sampler Initials: CD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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09-Feb-22 14:09

Gina Baybayan

C234522

AIR

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9 RJM AIR-RmTmp

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Laxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@woodplc.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall
SO2-December	3-Dec-21	12:00	3-Jan	12:00		X											
NO2-December	3-Dec-21	12:00	3-Jan	12:00				X									
SO2-December Duplicate	3-Dec-21	12:00	3-Jan	12:00		X											
NO2 Blank								X									
SO2-January	3-Jan-22	12:00	4-Feb	12:00		X											
NO2-January	3-Jan-22	12:00	4-Feb	12:00				X									
SO2- January Dup	3-Jan-22	12:00	4-Feb	12:00		X											
NO2 Blank								X									

RECEIVED
FEB 15 2022
DR

Notes/Comments: Project located in Timmins, ON

5 SO2
3 NO2
CC91320

Sampled By AG Phone/Email adamgauthier@canadanickel.com Received By _____ Date/Time _____ Project # OMEMA2002.2021E

Date Shipped 9-Feb Signature _____ PO# OMEMA2002.2021E.100*.5120.573000

1409

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/02/04 - 2022/03/03

Attention: Ryan Fletcher

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/03/28
Report #: R3152613
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C218103
Received: 2022/03/18, 10:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2022/03/23	2022/03/28	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2022/03/24	2022/03/28	PTC SOP-00149	Passive SO2 in ATM

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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Bureau Veritas Job #: C218103
Report Date: 2022/03/28

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/02/04 - 2022/03/03
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		AQJ405	AQJ406		
Sampling Date		2022/02/04 00:00	2022/02/04 00:00		
	UNITS	FEBRUARY	FEBRUARY DUP	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	<0.1	N/A	0.1	A533196
Calculated SO2	ppb	<0.1	<0.1	0.1	A534963

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C218103
Report Date: 2022/03/28

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/02/04 - 2022/03/03
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A533196	SS6	Spiked Blank	Calculated NO2			103	%	90 - 110
A533196	SS6	Method Blank	Calculated NO2		<0.1		ppb	
A534963	OZ	Spiked Blank	Calculated SO2			102	%	90 - 110
A534963	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C218103
Report Date: 2022/03/28

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/02/04 - 2022/03/03
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@woodplc.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall
SO2-February	4-Feb-22	12:00	3-Mar-22	12:00		X											
NO2-February	4-Feb-22	12:00	3-Mar-22	12:00				X									
SO2-February Duplicate	4-Feb-22	12:00	3-Mar-22	12:00		X											
NO2 Blank								X									

Notes/Comments: Project located in Timmins, ON

RECEIVED MAR 16 @ 1032

2 NO_2
2 SO_2

Sampled By AG Phone/Email adamgauthier@canadanickel.com

Date Shipped RP 16. March

Received By DIPKA SWA Date/Time 2022/03/16 16:39

Signature

19/19/19 no ice

Project # OMEMA2002.2021E

PO# OMEMA2002.2021E.100*.5120.573000

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/03/04 - 2022/04/04

Attention: Ryan Fletcher

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/05/05
Report #: R3168839
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C227149
Received: 2022/04/26, 12:00

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2022/04/27	2022/05/04	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2022/04/27	2022/05/04	PTC SOP-00149	Passive SO2 in ATM

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Encryption Key

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Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

==========

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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C227149
Report Date: 2022/05/05

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/03/04 - 2022/04/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		ASA854	ASA855		
Sampling Date		2022/03/04 12:00	2022/03/04 12:00		
	UNITS	MARCH	MARCH DUP	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	<0.1	N/A	0.1	A561510
Calculated SO2	ppb	<0.1	<0.1	0.1	A561916

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C227149
Report Date: 2022/05/05

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/03/04 - 2022/04/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A561510	XSZ	Spiked Blank	Calculated NO2			95	%	90 - 110
A561510	XSZ	Method Blank	Calculated NO2		<0.1		ppb	
A561916	OZ	Spiked Blank	Calculated SO2			102	%	90 - 110
A561916	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C227149
Report Date: 2022/05/05

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/03/04 - 2022/04/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Appendix C

AIR

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9
Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

AIR-RmTr

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@woodplc.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Analysis Required

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
SO2-March	4-Mar-22	12:00	4-Apr-22	12:00		X												
NO2-March	4-Mar-22	12:00	4-Apr-22	12:00				X										
SO2-March Duplicate	4-Mar-22	12:00	4-Apr-22	12:00		X												
								X										

RECU/RECEIVED
26-04-2022
DB

Notes/Comments: Project located in Timmins, ON

2 SO2
1 NO2 @12:00

Sampled By AG Phone/Email adamgauthier@canadanickel.com Received By Date/Time Project # OMEMA2002.2021E

Date Shipped Signature 2022/04/21 15:47 PO# OMEMA2002.2021E.100*.5120.573000

Crawford Project Air Quality Baseline Report

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/04/04 - 2022/05/04

Attention: Ryan Fletcher

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/06/07
Report #: R3181705
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C236335
Received: 2022/05/27, 08:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2022/05/31	2022/06/06	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	1	2022/05/31	2022/06/06	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C236335
Report Date: 2022/06/07

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/04/04 - 2022/05/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		ATW623	ATW624		
Sampling Date		2022/04/04 12:00	2022/04/04 12:00		
	UNITS	**APRIL**	**APRIL DUP**	**RDL**	**QC Batch**
Passive Monitoring					
Calculated NO2	ppb	<0.1	<0.1	0.1	A591983
Calculated SO2	ppb	0.2	N/A	0.1	A592764

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C236335
Report Date: 2022/06/07

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/04/04 - 2022/05/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A591983	XSZ	Spiked Blank	Calculated NO2			96	%	90 - 110
A591983	XSZ	Method Blank	Calculated NO2		<0.1		ppb	
A592764	OZ	Spiked Blank	Calculated SO2			100	%	90 - 110
A592764	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C236335
Report Date: 2022/06/07

WOOD ENVIRONMENT & INFRASTRUCTURE SOLUTIONS
Client Project #: OMEMA2002.2021E
Site Location: 2022/04/04 - 2022/05/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Appendix C

AIR

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

C236335

Maxxam Job Number C236332

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@woodplc.com
airgroup@woodplc.com

Service Requested
☐ RUSH (Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Analysis Required

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) PM/TSP Only	SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
SO2-April	4-Apr-22	12:00	4-May-22	12:00		X												
NO2-April	4-Apr-22	12:00	4-May-22	12:00				X										
SO2-April Blank	4-Apr-22	12:00	4-May-22	12:00		X												
NO2-April Dup	4-Apr-22	12:00	4-May-22	12:00				X										
NO2-April Blank	4-Apr-22	12:00	4-May-22	12:00				X										

Notes/Comments: Project located in Timmins, ON

Sampled By AG Phone/Email adamgauthier@canadanickel.com Received By [signature] Date/Time 6 May 22 1209 Project # OMEMA2002.2021E

Date Shipped _____ Signature [signature] PO# OMEMA2002.2021E.100*.5120.573000

3 NO2
2 SO2
COS130

Crawford Project Air Quality Baseline Report

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/05/04 - 2022/07/02

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/08/10
Report #: R3213612
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C256085
Received: 2022/07/29, 10:00

Sample Matrix: Air
Samples Received: 4

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2022/08/02	2022/08/08	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	4	2022/08/02	2022/08/08	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C256085
Report Date: 2022/08/10

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/05/04 - 2022/07/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		AYN060	AYN061	AYN067	AYN066		
Sampling Date		2022/05/04 00:00	2022/05/04 00:00	2022/06/04 00:00	2022/06/04 00:00		
	UNITS	MAY	MAY DUP	JUNE	JUNE DUP	RDL	QC Batch
Passive Monitoring							
Calculated NO2	ppb	0.1	N/A	<0.1	N/A	0.1	A665142
Calculated SO2	ppb	0.3	0.2	<0.1	<0.1	0.1	A665873

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C256085
Report Date: 2022/08/10

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/05/04 - 2022/07/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A665142	OZ	Spiked Blank	Calculated NO2			104	%	90 - 110
A665142	OZ	Method Blank	Calculated NO2		<0.1		ppb	
A665873	OZ	Spiked Blank	Calculated SO2			100	%	90 - 110
A665873	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C256085
Report Date: 2022/08/10

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/05/04 - 2022/07/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Appendix C

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@woodplc.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) PM/TSP Only	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall
May SO2	04-May-22		04-Jun-22			X											
May SO2 Dup	04-May-22		04-Jun-22			X											
May SO2 Blank						X											
May NO2	04-May-22		04-Jun-22					X									
May NO2 Blank								X									
June SO2	04-Jun-22		02-Jul-22			X											
June SO2 Dup	04-Jun-22		02-Jul-22			X											
June SO2 Blank						X											
June NO2	04-Jun-22		02-Jul-22					X									
June NO2 Blank								X									

Notes/Comments: Project located in Timmins, ON

Sampled By AG Phone/Email adamgauthier@canadanickel.com Received By ISABEL Date/Time 22/07/28 12:03 Project # OMEMA2002.2021E

Date Shipped Signature PO# C026200346

NB 22-07-29 6 SO2 4 NO2 C10100

Crawford Project Air Quality Baseline Report

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/07/02 - 2022/08/04

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/08/25
Report #: R3221345
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C260755
Received: 2022/08/16, 08:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2022/08/22	2022/08/23	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2022/08/17	2022/08/24	PTC SOP-00149	Passive SO2 in ATM

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Results relate only to the items tested.

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C260755
Report Date: 2022/08/25

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/07/02 - 2022/08/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		AZQ808	AZQ809		
Sampling Date		2022/07/02 00:00	2022/07/02 00:00		
	UNITS	JULY	JULY DUP	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	0.7	N/A	0.1	A689985
Calculated SO2	ppb	<0.1	<0.1	0.1	A684145

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Job #: C260755
Report Date: 2022/08/25

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/07/02 - 2022/08/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C260755
Report Date: 2022/08/25

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/07/02 - 2022/08/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A684145	OZ	Spiked Blank	Calculated SO2			105	%	90 - 110
A684145	OZ	Method Blank	Calculated SO2		<0.1		ppb	
A689985	XSZ	Spiked Blank	Calculated NO2	2022/08/23		99	%	90 - 110
A689985	XSZ	Method Blank	Calculated NO2	2022/08/23	<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C260755
Report Date: 2022/08/25

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/07/02 - 2022/08/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG, CD

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Appendix C

Crawford Project Air Quality Baseline Report

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page ___ of ___

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@woodplc.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) PM/TSP Only	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
July SO2 Blank						X												
July NO2 Blank								X										
July SO2	02-Jul-22		04-Aug-22			X												
July SO2 Dup	02-Jul-22		04-Aug-22			X												
July NO2	02-Jul-22		04-Aug-22					X										

Notes/Comments: Project located in Timmins, ON

Sampled By AG Phone/Email adamgauthier@canadanickel.com Received By Mustafa Date/Time 2022/08/15 13:40 Project # OMEMA2002.2021E

Date Shipped _____ Signature _____ PO# C026200346

DB 22-08-16
3 SO2
2 NO2
C08130

595583

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/08/04 - 2022/09/02

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/10/04
Report #: R3242741
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C273700
Received: 2022/09/23, 10:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2022/09/26	2022/09/26	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2022/09/26	2022/09/23	PTC SOP-00149	Passive SO2 in ATM

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Results relate only to the items tested.

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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Bureau Veritas Job #: C273700
Report Date: 2022/10/04

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/08/04 - 2022/09/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BCP072	BCP073		
Sampling Date		2022/08/04 00:00	2022/08/04 00:00		
	UNITS	AUG	AUG DUP	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	<0.1	N/A	0.1	A730096
Calculated SO2	ppb	<0.1	<0.1	0.1	A726588

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C273700
Report Date: 2022/10/04

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/08/04 - 2022/09/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A726588	OZ	Spiked Blank	Calculated SO2	2022/09/23		97	%	90 - 110
A726588	OZ	Method Blank	Calculated SO2	2022/09/23	<0.1		ppb	
A730096	XSZ	Spiked Blank	Calculated NO2	2022/09/26		96	%	90 - 110
A730096	XSZ	Method Blank	Calculated NO2	2022/09/26	<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C273700
Report Date: 2022/10/04

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/08/04 - 2022/09/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Appendix C

AIR

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@woodplc.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Analysis Required

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
August SO2 Blank						X												
August NO2 Blank								X										
August SO2	04-Aug-22		02-Sep-22			X												
August SO2 Dup	04-Aug-22		02-Sep-22			X												
August NO2	04-Aug-22		02-Sep-22					X										

Notes/Comments: Project located in Timmins, ON

JB 22-09-23
3 SO_2 2 NO_2 @ 10150

Sampled By AG Phone/Email adamgauthier@canadanickel.com Received By _____ Date/Time _____ Project # OMEMA2002.2021E

Date Shipped _____ Signature _____ PO# C026200346

Ryan Fletcher 22-Sept

Name of Company (1)(2)

Crawford Project Air Quality Baseline Report

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/09/03 - 2022/10/04

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/10/25
Report #: R3253396
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C281038
Received: 2022/10/14, 10:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2022/10/18	2022/10/18	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2022/10/18	2022/10/21	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

==========

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Bureau Veritas Job #: C281038
Report Date: 2022/10/25

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/09/03 - 2022/10/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BEO879	BEO880		
Sampling Date		2022/09/03 00:00	2022/09/03 00:00		
	UNITS	**SEPTEMBER**	**SEPTEMBER DUP**	**RDL**	**QC Batch**
Passive Monitoring					
Calculated NO2	ppb	<0.1	N/A	0.1	A760340
Calculated SO2	ppb	<0.1	<0.1	0.1	A761018

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C281038
Report Date: 2022/10/25

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/09/03 - 2022/10/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A760340	XSZ	Spiked Blank	Calculated NO2	2022/10/18		100	%	90 - 110
A760340	XSZ	Method Blank	Calculated NO2	2022/10/18	<0.1		ppb	
A761018	OZ	Spiked Blank	Calculated SO2			102	%	90 - 110
A761018	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C281038
Report Date: 2022/10/25

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/09/03 - 2022/10/04
Your P.O. #: 100*5120.573000
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Appendix C

AIR

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	~~Wood Plc~~ WSP Fwd
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@wsp.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
September SO2 Blank						X												
September NO2 Blank								X										
September SO2	03-Sep-22		04-Oct-22			X												
September SO2 Dup	03-Sep-22		04-Oct-22			X												
September NO2	03-Sep-22		04-Oct-22					X										

Notes/Comments: Project located in Timmins, ON

NB 22-10-14 @10:30

Sampled By: AG Phone/Email: adamgauthier@canadanickel.com Received By: Date/Time: Project #: OMEMA2002.2021E

Date Shipped: Signature: PO#: C026200346

12-Oct 2022

Crawford Project Air Quality Baseline Report

12/10/22 1628

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/10/04 - 2022/11/02

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/11/29
Report #: R3270413
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C291372
Received: 2022/11/18, 10:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2022/11/22	2022/11/28	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2022/11/22	2022/11/23	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

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Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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Bureau Veritas Job #: C291372
Report Date: 2022/11/29

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/10/04 - 2022/11/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BHH118	BHH119		
Sampling Date		2022/10/04 00:00	2022/10/04 00:00		
	UNITS	**OCTOBER**	**OCTOBER DUP**	**RDL**	**QC Batch**
Passive Monitoring					
Calculated NO2	ppb	0.3	N/A	0.1	A808265
Calculated SO2	ppb	0.4	0.1	0.1	A805747

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Job #: C291372
Report Date: 2022/11/29

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/10/04 - 2022/11/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C291372
Report Date: 2022/11/29

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/10/04 - 2022/11/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A805747	SS6	Spiked Blank	Calculated SO2	2022/11/23		99	%	90 - 110
A805747	SS6	Method Blank	Calculated SO2	2022/11/23	<0.1		ppb	
A808265	SS6	Spiked Blank	Calculated NO2			98	%	90 - 110
A808265	SS6	Method Blank	Calculated NO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Job #: C291372
Report Date: 2022/11/29

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/10/04 - 2022/11/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Appendix C

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@wsp.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) PM/TSP Only	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
October SO2 Blank						X												
October NO2 Blank								X										
October SO2	04-Oct-22		02-Nov-22			X												
October SO2 Dup	04-Oct-22		02-Nov-22			X												
October NO2	04-Oct-22		02-Nov-22					X										

Notes/Comments: Project located in Timmins, ON

Sampled By AG **Phone/Email** adamgauthier@canadanickel.com **Received By** **Date/Time** 22/11/17 14:07 **Project #** OMEMA2002.2021E

Date Shipped **Signature** **PO#** C026200346

22-11-18 C1010 350 2002

BV# 620522

Crawford Project Air Quality Baseline Report

Your P.O. #: 100*5120.573000
Your Project #: OMEMA2002.2021E
Site Location: 2022/11/02 - 2022/12/02

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2022/12/23
Report #: R3281721
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C298515
Received: 2022/12/14, 10:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2022/12/14	2022/12/19	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2022/12/16	2022/12/21	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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Bureau Veritas Job #: C298515
Report Date: 2022/12/23

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/11/02 - 2022/12/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BJC274	BJC275		
Sampling Date		2022/11/02 00:00	2022/11/02 00:00		
	UNITS	**NOVEMBER**	**NOVEMBER DUP**	**RDL**	**QC Batch**
Passive Monitoring					
Calculated NO2	ppb	0.2	N/A	0.1	A830433
Calculated SO2	ppb	0.1	0.1	0.1	A833648

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C298515
Report Date: 2022/12/23

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/11/02 - 2022/12/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A830433	OZ	Spiked Blank	Calculated NO2			99	%	90 - 110
A830433	OZ	Method Blank	Calculated NO2		<0.1		ppb	
A833648	OZ	Spiked Blank	Calculated SO2	2022/12/21		103	%	90 - 110
A833648	OZ	Method Blank	Calculated SO2	2022/12/21	<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C298515
Report Date: 2022/12/23

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: 2022/11/02 - 2022/12/02
Your P.O. #: 100*5120.573000
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Appendix C

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	Wood Plc
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	

Report To
Name & Email Address
ryan.fletcher@wsp.com
airgroup@woodplc.com

Service Requested
☐ RUSH (Please contact for TAT)
☒ REGULAR

Company Name

Project Name/LSD

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) PM/TSP Only	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
November SO2 Blank						X												
November NO2 Blank								X										
November SO2	02-Nov-22		02-Dec-22			X												
November SO2 Dup	02-Nov-22		02-Dec-22			X												
November NO2	02-Nov-22		02-Dec-22					X										

Notes/Comments: Project located in Timmins, ON

Sampled By: AG Phone/Email: adamgauthier@canadanickel.com Received By: Date/Time: Project #: OMEMA2002.2021E

Date Shipped: 12-Dec Signature: PO#: C026200346

12/13/13 1158 13/13/13 # 629325

DB 22-12-14 @10:30 3502 2402

Crawford Project Air Quality Baseline Report

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E
Site#: 2022/12/02 - 2023/01/02
Site Location: CANADA NICKEL CRAWFORD

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2023/02/13
Report #: R3299016
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C307687
Received: 2023/02/02, 10:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	1	2023/02/06	2023/02/10	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2023/02/03	2023/02/10	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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Bureau Veritas Job #: C307687
Report Date: 2023/02/13

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BLF923	BLF924		
Sampling Date		2022/12/02 00:00	2022/12/02 00:00		
	UNITS	**DECEMBER**	**DECEMBER DUP**	**RDL**	**QC Batch**
Passive Monitoring					
Calculated NO2	ppb	0.2	N/A	0.1	A873550
Calculated SO2	ppb	0.2	0.1	0.1	A872401

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Job #: C307687
Report Date: 2023/02/13

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C307687
Report Date: 2023/02/13

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A872401	OZ	Spiked Blank	Calculated SO2			103	%	90 - 110
A872401	OZ	Method Blank	Calculated SO2		<0.1		ppb	
A873550	SDK	Spiked Blank	Calculated NO2			96	%	90 - 110
A873550	SDK	Method Blank	Calculated NO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C307687
Report Date: 2023/02/13

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Invoice To	
Company Name	WSP E&I Canada Limited
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	905-568-2929

Report To
Name & Email Address
ryan.fletcher@wsp.com
caleb.vandenberg@wsp.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name
Canada Nickel
Project Name/LSD
Crawford

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
December SO2 Blank						X												
December NO2 Blank								X										
December SO2	2-Dec-22		2-Jan-23			X												
December SO2 Dup	2-Dec-22		2-Jan-23			X												
December NO2	2-Dec-22		2-Jan-23					X										

Notes/Comments: Project located in Timmins, ON

Sampled By AG Phone/Email adamgauthier@canadanickel.com

Date Shipped Feb 1st 2023

Received By _____ Date/Time _____

Signature _____

Project # OMEMA2002.2021E

PO# C026200346

DS 23-02-02 3SO2 C1015 2NO2

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E
Site#: 2023/01/02 - 2023/02/02
Site Location: CANADA NICKEL CRAWFORD

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2023/03/01
Report #: R3304871
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C311660
Received: 2023/02/17, 10:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2023/02/23	2023/02/28	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	1	2023/02/24	2023/02/28	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Branko Banjac, General Manager responsible for Alberta Petroleum laboratory operations.

Bureau Veritas Job #: C311660
Report Date: 2023/03/01

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BMD129	BMD130		
Sampling Date		2023/01/02 00:00	2023/01/02 00:00		
	UNITS	**JANUARY**	**JANUARY DUP**	**RDL**	**QC Batch**
Passive Monitoring					
Calculated NO2	ppb	<0.1	<0.1	0.1	A890417
Calculated SO2	ppb	0.2	N/A	0.1	A892081

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Job #: C311660
Report Date: 2023/03/01

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

NO2 trip blank missing, Default Lab Blank used. 2023/02/28 SG

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C311660
Report Date: 2023/03/01

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A890417	SDK	Spiked Blank	Calculated NO2			98	%	90 - 110
A890417	SDK	Method Blank	Calculated NO2		<0.1		ppb	
A892081	OZ	Spiked Blank	Calculated SO2			101	%	90 - 110
A892081	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C311660
Report Date: 2023/03/01

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu, Analyst II

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Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Invoice To	
Company Name	WSP E&I Canada Limited
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	905-568-2929

Report To
Name & Email Address
ryan.fletcher@wsp.com
caleb.vandenberg@wsp.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name
Canada Nickel
Project Name/LSD
Crawford

ANALYTICAL INFORMATION

Analysis Required

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall	
January SO2 Blank						X												
January NO2 Blank								X										
January SO2	2-Jan-23		2-Feb-23			X												
January NO2 Dup	2-Jan-23		2-Feb-23					X										
January NO2	2-Jan-23		2-Feb-23					X										

Notes/Comments: Project located in Timmins, ON

Sampled By: AG Phone/Email: adamgauthier@canadanickel.com Received By: Date/Time: Project #: OMEMA2002.2021E

Date Shipped: 16-Feb-23 Signature: PO#: C026200346

SO2 = 3
NO2 = 2

RECEIVED
FEB 17 2023
10:30

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E
Site#: 2023/02/02 - 2023/03/03
Site Location: CANADA NICKEL CRAWFORD

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2023/03/23
Report #: R3313711
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C318120
Received: 2023/03/14, 07:02

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2023/03/17	2023/03/20	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	1	2023/03/20	2023/03/22	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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Bureau Veritas Job #: C318120
Report Date: 2023/03/23

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BNO213	BNO214		
Sampling Date		2023/02/02	2023/02/02		
	UNITS	**FEBRUARY**	**FEBRUARY DUP**	**RDL**	**QC Batch**
Passive Monitoring					
Calculated NO2	ppb	0.4	0.3	0.1	A914266
Calculated SO2	ppb	0.3	N/A	0.1	A914390

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C318120
Report Date: 2023/03/23

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A914266	SDK	Spiked Blank	Calculated NO2	2023/03/20		98	%	90 - 110
A914266	SDK	Method Blank	Calculated NO2	2023/03/20	<0.1		ppb	
A914390	OZ	Spiked Blank	Calculated SO2			100	%	90 - 110
A914390	OZ	Method Blank	Calculated SO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Job #: C318120
Report Date: 2023/03/23

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Invoice To	
Company Name	WSP E&I Canada Limited
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	905-568-2929

Report To
Name & Email Address
ryan.fletcher@wsp.com
caleb.vandenberg@wsp.com
airgroup@woodplc.com

Service Requested
☐ **RUSH**
(Please contact for TAT)
☒ **REGULAR**

Company Name
Canada Nickel
Project Name/LSD
Crawford

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP		Dustfall
February SO2 Blank	2-Feb-23		3-Mar-23			X												
February NO2 Blank	2-Feb-23		3-Mar-23					X										
FEbruary SO2	2-Feb-23		3-Mar-23			X												
February SO2 Dup	2-Feb-23		3-Mar-23			X												
February NO2	2-Feb-23		3-Mar-23					X										

Notes/Comments: Project located in Timmins, ON

Sampled By AG **Phone/Email** adamgauthier@canadanickel.com **Received By** _____ **Date/Time** _____ **Project #** OMEMA2002.2021E

Date Shipped 7-Mar-23 **Signature** _____ **PO#** C026200346

3 NO2
2 SO2
DB 23-03-14
@10:30

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E
Site#: 2023/03/03 - 2023/04/04
Site Location: CANADA NICKEL CRAWFORD

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2023/04/24
Report #: R3326745
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C325690
Received: 2023/04/13, 11:00

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2023/04/19	2023/04/21	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	1	2023/04/18	2023/04/21	PTC SOP-00149	Passive SO2 in ATM

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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Bureau Veritas Job #: C325690
Report Date: 2023/04/24

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BOU928	BOU929		
Sampling Date		2023/03/03 00:00	2023/03/03 00:00		
	UNITS	FEBRUARY	FEBRUARY DUP	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	0.1	0.1	0.1	A939258
Calculated SO2	ppb	<0.1	N/A	0.1	A937840

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Job #: C325690
Report Date: 2023/04/24

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Samples were labeled "March". --YL6 20230418

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C325690
Report Date: 2023/04/24

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A937840	SS6	Spiked Blank	Calculated SO2			100	%	90 - 110
A937840	SS6	Method Blank	Calculated SO2		<0.1		ppb	
A939258	SDK	Spiked Blank	Calculated NO2			97	%	90 - 110
A939258	SDK	Method Blank	Calculated NO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C325690
Report Date: 2023/04/24

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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Appendix C

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9
Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Invoice To	
Company Name	WSP E&I Canada Limited
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	905-568-2929

Report To
Name & Email Address
ryan.fletcher@wsp.com
caleb.vandenberg@wsp.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name: **Canada Nickel**
Project Name/LSD: **Crawford**

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall
February SO2 Blank	03-Mar-23		04-Apr-23			X											
February NO2 Blank	03-Mar-23		04-Apr-23					X									
February SO2	03-Mar-23		04-Apr-23			X											
February NO2 Dup	03-Mar-23		04-Apr-23			X											
February NO2	03-Mar-23		04-Apr-23					X									

Notes/Comments: Project located in Timmins, ON

Sampled By: AG
Phone/Email: adamgauthier@canadanickel.com
Date Shipped: 06-Apr-23
Received By: SAMANTHA BASSA
Date/Time: 2023/04/12 09:21
Signature:
Project #: OMEMA2002.2021E
PO#: C026200346

AB 23-04-13 3NO2
@11:00 2SO2

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E
Site#: 2023/04/04 - 2023/05/04
Site Location: CANADA NICKEL CRAWFORD

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2023/05/24
Report #: R3339332
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C333983
Received: 2023/05/12, 10:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2023/05/17	2023/05/19	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	1	2023/05/16	2023/05/19	PTC SOP-00149	Passive SO2 in ATM

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Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

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Bureau Veritas Job #: C333983
Report Date: 2023/05/24

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BQJ735	BQJ736		
Sampling Date		2023/04/04 00:00	2023/04/04 00:00		
	UNITS	**FEBRUARY**	**FEBRUARY DUP**	**RDL**	**QC Batch**
Passive Monitoring					
Calculated NO2	ppb	<0.1	<0.1	0.1	A966957
Calculated SO2	ppb	0.1	N/A	0.1	A963733

RDL = Reportable Detection Limit
N/A = Not Applicable

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C333983
Report Date: 2023/05/24

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
A963733	OZ	Spiked Blank	Calculated SO2			101	%	90 - 110
A963733	OZ	Method Blank	Calculated SO2		<0.1		ppb	
A966957	SDK	Spiked Blank	Calculated NO2			98	%	90 - 110
A966957	SDK	Method Blank	Calculated NO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Bureau Veritas Job #: C333983
Report Date: 2023/05/24

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yang Liu

Yang Liu, Analyst II

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11-May-23 08:57
Ashton Gibson
C3D4247

AN4 AIR-RmTmp

Bay 10, 6744 - 50 St. Ed
Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number:

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	WSP E&I Canada Limited
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	905-568-2929

Report To
Name & Email Address
ryan.fletcher@wsp.com
caleb.vandenberg@wsp.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name
Canada Nickel
Project Name/LSD
Crawford

ANALYTICAL INFORMATION

Analysis Required

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) PM/TSP Only	SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall
February SO2 Blank	04-Apr-23		04-May-23			X											
February NO2 Blank	04-Apr-23		04-May-23					X									
February SO2	04-Apr-23		04-May-23			X											
February NO2 Dup	04-Apr-23		04-May-23			X											
February NO2	04-Apr-23		04-May-23					X									

wrong totals

Notes/Comments: Project located in Timmins, ON

Sampled By: AG/DD
Phone/Email: adamgauthier@canadanickel.com
Received By:
Date/Time:
Project #: OMEMA2002.2021E
Date Shipped: 09-May-23
Signature:
PO#: C026200346

2 SO_2
3 NO_2

on / MUSKAN
2023/05/11 0857

#3 23-05-12
C1030

PTC FCD-00457/2
page 1 of 1

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E
Site#: 2023/05/04 - 2023/06/07
Site Location: CANADA NICKEL CRAWFORD

Attention: Ryan Fletcher

WSP E&I Canada Limited
160 TRADERS BLVD. EAST
Units 2 & 3
MISSISSAUGA, ON
CANADA L4Z 3K7

Report Date: 2023/06/30
Report #: R3357741
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C345783
Received: 2023/06/21, 09:30

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2023/06/28	2023/06/29	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	1	2023/06/22	2023/06/29	PTC SOP-00149	Passive SO2 in ATM

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Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Customer Service Passives,
Email: PassiveAir@bureauveritas.com
Phone# (780) 378-8500

==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Branko Banjac, General Manager responsible for Alberta Petroleum laboratory operations.

Bureau Veritas Job #: C345783
Report Date: 2023/06/30

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF CHEMICAL ANALYSES OF AIR

Bureau Veritas ID		BSZ289	BSZ290		
Sampling Date		2023/05/04 00:00	2023/05/04 00:00		
	UNITS	MAY	MAY DUP	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	<0.1	<0.1	0.1	B013706
Calculated SO2	ppb	<0.1	N/A	0.1	B005839

RDL = Reportable Detection Limit
N/A = Not Applicable

Bureau Veritas Job #: C345783
Report Date: 2023/06/30

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Travel blanks were not returned to the lab. Default lab blank values were used in the calculation of final results.--YL6 20230627

Results relate only to the items tested.

Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C345783
Report Date: 2023/06/30

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
B005839	OZ	Spiked Blank	Calculated SO2			102	%	90 - 110
B005839	OZ	Method Blank	Calculated SO2		<0.1		ppb	
B013706	SDK	Spiked Blank	Calculated NO2			97	%	90 - 110
B013706	SDK	Method Blank	Calculated NO2		<0.1		ppb	

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

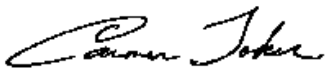
Bureau Veritas Edmonton: 6744 - 50th Street T6B 3M9 Telephone (780) 378-8500 Fax (780) 378-8699

Bureau Veritas Job #: C345783
Report Date: 2023/06/30

WSP E&I Canada Limited
Client Project #: OMEMA2002.2021E
Site Location: CANADA NICKEL CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Carmen Toker, CT, Manager Air Laboratory Services

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

AIR

Bay 10, 6744 - 50 St. Edmonton AB Canada T6B 3M9

Ph (780) 378-8500, Toll free (800) 386-7247, Fax (780) 378-8699

Maxxam Job Number

PASSIVE AIR CHAIN OF CUSTODY

Page 1 of 1

Invoice To	
Company Name	WSP E&I Canada Limited
Contact Name	apinvoice.canada@woodplc.com
Address	160 Traders Blvd E Mississauga ON
Postal Code	L4Z 3K7
Phone/Fax#	905-568-2929

Report To
Name & Email Address
ryan.fletcher@wsp.com
caleb.vandenberg@wsp.com
airgroup@woodplc.com

Service Requested
☐ RUSH
(Please contact for TAT)
☒ REGULAR

Company Name: **Canada Nickel**
Project Name/LSD: **Crawford**

ANALYTICAL INFORMATION

Sample ID or Location (LSD)	Sample Start Date (DD/MM/YY)	Time (24 hrs) (HH:MM)	Sample End Date (DD/MM/YY)	Time (HH:MM)	Volume (m3) *PM/TSP Only*	Analysis Required: SO2	H2S	NO2	O3	NOx	NH3	HNO3	VOC	PM2.5	PM10	TSP	Dustfall
May NO2	04-May-23		07-Jun-23					x									
May NO2	04-May-23		07-Jun-23					X									
May SO2	04-May-23		07-Jun-23			x											

Notes/Comments: Project located in Timmins, ON

Sampled By AG **Phone/Email** adamgauthier@canadanickel.com
Date Shipped 15-Jun-23
Received By [illegible] **Date/Time** 2023/06/16 09:05
Signature
Project # OMEMA2002.2021E
PO# C026200346

16-Jun-23 09:05
Gina Baybayan
C3H6009
AK0 AIR-RmTmp

NB 23-06-21
3PM
09:30

Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/03/07
Report #: R7032712
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C234494
Received: 2022/02/09, 14:09

Sample Matrix: Filter
Samples Received: 17

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	5	2022/03/04	2021/03/04	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	5	2022/02/28	2022/03/07	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	5	2022/03/03	2022/03/07	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Total Particulate	4	N/A	2022/02/15	BRL SOP-00109	Method IO-3.1
Particulates on Lo-Vol Filters	4	N/A	2022/02/16		
Particulate Calculation	9	N/A	2022/02/16	BRL SOP-00109	EPA IO-2mod
Total Particulate	9	N/A	2022/02/15	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	17	N/A	2022/02/14		

Sample Matrix: Water
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	2	2022/02/16	2022/02/17	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	2	2022/02/16	2022/02/22	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	2	2022/02/16	2022/02/16		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/03/07
Report #: R7032712
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C234494
Received: 2022/02/09, 14:09

Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
==========
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For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C234494
Report Date: 2022/03/07

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		RUU808	RUU809	RUU810	RUU811			RUU812		
Sampling Date		2021/11/18	2021/11/24	2021/11/30	2021/12/24			2021/12/30		
COC Number		n/a	n/a	n/a	n/a			n/a		
	UNITS	PM10 18-NOV	PM10 24-NOV	PM10 30-NOV	PM10 24-DEC	RDL	QC Batch	PM10 30-DEC	RDL	QC Batch
Particulate	ug/m3	3.7	7.3	7.1	6.5	1.2	7832555	<12	12	7832554
Particulate Weight on Filter	mg	N/A	N/A	N/A	N/A	N/A	N/A	<0.3	0.3	7837154
Particulate Weight on Filter	ug	90	175	170	155	30	7834569	N/A	N/A	N/A
Volume	m3	24.04	24.03	24.04	24.03	N/A	ONSITE	24.03	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		RUU817			RUU818			RUU819	RUU820		
Sampling Date		2022/01/05			2022/01/11			2022/01/17	2022/01/23		
COC Number		n/a			n/a			n/a	n/a		
	UNITS	PM10 5-JAN	RDL	QC Batch	PM10 11-JAN	RDL	QC Batch	PM10 17-JAN	PM10 23-JAN	RDL	QC Batch
Particulate	ug/m3	4.6	1.3	7832555	<13	13	7832554	4.8	3.0	1.3	7832555
Particulate Weight on Filter	mg	N/A	N/A	N/A	<0.3 (1)	0.3	7837154	N/A	N/A	N/A	N/A
Particulate Weight on Filter	ug	112	30	7834569	N/A	N/A	N/A	115	71 (2)	30	7834569
Volume	m3	24.00	N/A	ONSITE	24.00	N/A	ONSITE	24.00	24.00	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Negative weight observed
(2) Filter is found to be little torn

Bureau Veritas ID		RUU821		RUU822	RUU833	RUU834		RUU835	RUU836		
Sampling Date		2022/01/29		2022/02/04	2021/11/18	2021/11/24		2022/01/05	2022/01/17		
COC Number		n/a		n/a	n/a	n/a		n/a	n/a		
	UNITS	PM10 29-JAN	RDL	PM10 4-FEB	TSP 18-NOV	TSP 24-NOV	QC Batch	TSP 5-JAN	TSP 17-JAN	RDL	QC Batch
Particulate	ug/m3	3.4	1.3	N/A	N/A	N/A	7832555	8.3	<6.3	6.3	7832554
Particulate Weight on Filter	mg	N/A	N/A	N/A	N/A	N/A	N/A	0.4	<0.3	0.3	7837154
Particulate Weight on Filter	ug	82	30	N/A	N/A	N/A	7834569	N/A	N/A	N/A	N/A
Volume	m3	24.00	N/A	24.00	48.05	11.10	ONSITE	48.00	48.00	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C234494
Report Date: 2022/03/07

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		RUU837		RUU838		
Sampling Date		2022/01/23		2022/02/04		
COC Number		n/a		n/a		
	UNITS	**TSP 23-JAN**	**QC Batch**	**TSP 4-FEB**	**RDL**	**QC Batch**
Particulate	ug/m3	N/A	7832554	2.92	0.63	7832555
Particulate Weight on Filter	ug	N/A	N/A	140	30	7834569
Volume	m3	48.00	ONSITE	48.00	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C234494
Report Date: 2022/03/07

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		RUU834	RUU834		RUU835	RUU836	RUU837		
Sampling Date		2021/11/24	2021/11/24		2022/01/05	2022/01/17	2022/01/23		
COC Number		n/a	n/a		n/a	n/a	n/a		
	UNITS	TSP 24-NOV	TSP 24-NOV Lab-Dup	RDL	TSP 5-JAN	TSP 17-JAN	TSP 23-JAN	RDL	QC Batch
Metals									
Total Aluminum (Al)	ug	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	2.0	7862411
Total Aluminum (Al)	ug/m3	<0.18	N/A	0.18	<0.042	<0.042	<0.042	0.042	7856297
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	7862411
Total Antimony (Sb)	ug/m3	<0.0045	N/A	0.0045	<0.0010	<0.0010	<0.0010	0.0010	7856297
Total Arsenic (As)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	7862411
Total Arsenic (As)	ug/m3	<0.0045	N/A	0.0045	<0.0010	<0.0010	<0.0010	0.0010	7856297
Total Barium (Ba)	ug	<0.050	<0.050	0.050	<0.050	<0.050	0.063	0.050	7862411
Total Barium (Ba)	ug/m3	<0.0045	N/A	0.0045	<0.0010	<0.0010	0.0013	0.0010	7856297
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	7862411
Total Beryllium (Be)	ug/m3	<0.0027	N/A	0.0027	<0.00063	<0.00063	<0.00063	0.00063	7856297
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	7862411
Total Bismuth (Bi)	ug/m3	<0.0045	N/A	0.0045	<0.0010	<0.0010	<0.0010	0.0010	7856297
Total Boron (B)	ug	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	1.0	7862411
Total Boron (B)	ug/m3	<0.090	N/A	0.090	<0.021	<0.021	<0.021	0.021	7856297
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	7862411
Total Cadmium (Cd)	ug/m3	<0.00090	N/A	0.00090	<0.00021	<0.00021	<0.00021	0.00021	7856297
Total Calcium (Ca)	ug	13	12	5.0	<5.0	<5.0	<5.0	5.0	7862411
Total Calcium (Ca)	ug/m3	1.1	N/A	0.45	<0.10	<0.10	<0.10	0.10	7856297
Total Chromium (Cr)	ug	0.067	0.068	0.050	<0.050	<0.050	0.057	0.050	7862411
Total Chromium (Cr)	ug/m3	0.0060	N/A	0.0045	<0.0010	<0.0010	0.0012	0.0010	7856297
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	7862411
Total Cobalt (Co)	ug/m3	<0.0027	N/A	0.0027	<0.00063	<0.00063	<0.00063	0.00063	7856297
Total Copper (Cu)	ug	0.034	0.034	0.030	<0.030	0.031	<0.030	0.030	7862411
Total Copper (Cu)	ug/m3	0.0030	N/A	0.0027	<0.00063	0.00064	<0.00063	0.00063	7856297
Total Iron (Fe)	ug	<5.0	<5.0	5.0	<5.0	<5.0	<5.0	5.0	7862411
Total Iron (Fe)	ug/m3	<0.45	N/A	0.45	<0.10	<0.10	<0.10	0.10	7856297

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		RUU834	RUU834		RUU835	RUU836	RUU837		
Sampling Date		2021/11/24	2021/11/24		2022/01/05	2022/01/17	2022/01/23		
COC Number		n/a	n/a		n/a	n/a	n/a		
	UNITS	TSP 24-NOV	TSP 24-NOV Lab-Dup	RDL	TSP 5-JAN	TSP 17-JAN	TSP 23-JAN	RDL	QC Batch
Total Lead (Pb)	ug	<0.030	<0.030	0.030	<0.030	<0.030	0.042	0.030	7862411
Total Lead (Pb)	ug/m3	<0.0027	N/A	0.0027	<0.00063	<0.00063	0.00087	0.00063	7856297
Total Magnesium (Mg)	ug	1.5	1.5	1.0	<1.0	<1.0	<1.0	1.0	7862411
Total Magnesium (Mg)	ug/m3	0.13	N/A	0.090	<0.021	<0.021	<0.021	0.021	7856297
Total Manganese (Mn)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	7862411
Total Manganese (Mn)	ug/m3	<0.0045	N/A	0.0045	<0.0010	<0.0010	<0.0010	0.0010	7856297
Acid Extractable Mercury (Hg)	ug	<0.0025	N/A	0.0025	<0.0025	<0.0025	<0.0025	0.0025	7864459
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	7862411
Total Molybdenum (Mo)	ug/m3	<0.0027	N/A	0.0027	<0.00063	<0.00063	<0.00063	0.00063	7856297
Total Nickel (Ni)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	7862411
Total Nickel (Ni)	ug/m3	<0.0045	N/A	0.0045	<0.0010	<0.0010	<0.0010	0.0010	7856297
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	<5.0	<5.0	<5.0	5.0	7862411
Total Potassium (K)	ug	<5.0	<5.0	5.0	<5.0	<5.0	<5.0	5.0	7862411
Total Potassium (K)	ug/m3	<0.45	N/A	0.45	<0.10	<0.10	<0.10	0.10	7856297
Total Selenium (Se)	ug	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	0.10	7862411
Total Selenium (Se)	ug/m3	<0.0090	N/A	0.0090	<0.0021	<0.0021	<0.0021	0.0021	7856297
Total Silver (Ag)	ug	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	7862411
Total Silver (Ag)	ug/m3	<0.00090	N/A	0.00090	<0.00021	<0.00021	<0.00021	0.00021	7856297
Total Sodium (Na)	ug	6.7	6.7	5.0	<5.0	<5.0	<5.0	5.0	7862411
Total Sodium (Na)	ug/m3	0.60	N/A	0.45	<0.10	<0.10	<0.10	0.10	7856297
Total Strontium (Sr)	ug	0.065	0.066	0.050	<0.050	<0.050	<0.050	0.050	7862411
Total Strontium (Sr)	ug/m3	0.0059	N/A	0.0045	<0.0010	<0.0010	<0.0010	0.0010	7856297
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	7862411
Total Thallium (Tl)	ug/m3	<0.00090	N/A	0.00090	<0.00021	<0.00021	<0.00021	0.00021	7856297
Total Tin (Sn)	ug	<0.030	<0.030	0.030	<0.030	<0.030	0.090	0.030	7862411
Total Tin (Sn)	ug/m3	<0.0027	N/A	0.0027	<0.00063	<0.00063	0.0019	0.00063	7856297
Total Titanium (Ti)	ug	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	0.10	7862411

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Bureau Veritas Job #: C234494
Report Date: 2022/03/07

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		RUU834	RUU834		RUU835	RUU836	RUU837		
Sampling Date		2021/11/24	2021/11/24		2022/01/05	2022/01/17	2022/01/23		
COC Number		n/a	n/a		n/a	n/a	n/a		
	UNITS	**TSP 24-NOV**	**TSP 24-NOV Lab-Dup**	**RDL**	**TSP 5-JAN**	**TSP 17-JAN**	**TSP 23-JAN**	**RDL**	**QC Batch**
Total Titanium (Ti)	ug/m3	<0.0090	N/A	0.0090	<0.0021	<0.0021	<0.0021	0.0021	7856297
Total Uranium (U)	ug	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	7862411
Total Uranium (U)	ug/m3	<0.00090	N/A	0.00090	<0.00021	<0.00021	<0.00021	0.00021	7856297
Total Vanadium (V)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	7862411
Total Vanadium (V)	ug/m3	<0.0027	N/A	0.0027	<0.00063	<0.00063	<0.00063	0.00063	7856297
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	<0.50	<0.50	<0.50	0.50	7862411
Total Zinc (Zn)	ug/m3	<0.045	N/A	0.045	<0.010	<0.010	<0.010	0.010	7856297

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Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		RUU838		
Sampling Date		2022/02/04		
COC Number		n/a		
	UNITS	TSP 4-FEB	RDL	QC Batch
Metals				
Total Aluminum (Al)	ug	<2.0	2.0	7862411
Total Aluminum (Al)	ug/m3	<0.042	0.042	7856297
Total Antimony (Sb)	ug	<0.050	0.050	7862411
Total Antimony (Sb)	ug/m3	<0.0010	0.0010	7856297
Total Arsenic (As)	ug	<0.050	0.050	7862411
Total Arsenic (As)	ug/m3	<0.0010	0.0010	7856297
Total Barium (Ba)	ug	<0.050	0.050	7862411
Total Barium (Ba)	ug/m3	<0.0010	0.0010	7856297
Total Beryllium (Be)	ug	<0.030	0.030	7862411
Total Beryllium (Be)	ug/m3	<0.00063	0.00063	7856297
Total Bismuth (Bi)	ug	<0.050	0.050	7862411
Total Bismuth (Bi)	ug/m3	<0.0010	0.0010	7856297
Total Boron (B)	ug	<1.0	1.0	7862411
Total Boron (B)	ug/m3	<0.021	0.021	7856297
Total Cadmium (Cd)	ug	<0.010	0.010	7862411
Total Cadmium (Cd)	ug/m3	<0.00021	0.00021	7856297
Total Calcium (Ca)	ug	<5.0	5.0	7862411
Total Calcium (Ca)	ug/m3	<0.10	0.10	7856297
Total Chromium (Cr)	ug	0.088	0.050	7862411
Total Chromium (Cr)	ug/m3	0.0018	0.0010	7856297
Total Cobalt (Co)	ug	<0.030	0.030	7862411
Total Cobalt (Co)	ug/m3	<0.00063	0.00063	7856297
Total Copper (Cu)	ug	0.040	0.030	7862411
Total Copper (Cu)	ug/m3	0.00083	0.00063	7856297
Total Iron (Fe)	ug	<5.0	5.0	7862411
Total Iron (Fe)	ug/m3	<0.10	0.10	7856297
Total Lead (Pb)	ug	<0.030	0.030	7862411
Total Lead (Pb)	ug/m3	<0.00063	0.00063	7856297

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		RUU838		
Sampling Date		2022/02/04		
COC Number		n/a		
	UNITS	TSP 4-FEB	RDL	QC Batch
Total Magnesium (Mg)	ug	1.5	1.0	7862411
Total Magnesium (Mg)	ug/m3	0.031	0.021	7856297
Total Manganese (Mn)	ug	<0.050	0.050	7862411
Total Manganese (Mn)	ug/m3	<0.0010	0.0010	7856297
Acid Extractable Mercury (Hg)	ug	<0.0025	0.0025	7864459
Total Molybdenum (Mo)	ug	<0.030	0.030	7862411
Total Molybdenum (Mo)	ug/m3	<0.00063	0.00063	7856297
Total Nickel (Ni)	ug	<0.050	0.050	7862411
Total Nickel (Ni)	ug/m3	<0.0010	0.0010	7856297
Total Phosphorus (P)	ug	<5.0	5.0	7862411
Total Potassium (K)	ug	<5.0	5.0	7862411
Total Potassium (K)	ug/m3	<0.10	0.10	7856297
Total Selenium (Se)	ug	<0.10	0.10	7862411
Total Selenium (Se)	ug/m3	<0.0021	0.0021	7856297
Total Silver (Ag)	ug	<0.010	0.010	7862411
Total Silver (Ag)	ug/m3	<0.00021	0.00021	7856297
Total Sodium (Na)	ug	8.1	5.0	7862411
Total Sodium (Na)	ug/m3	0.17	0.10	7856297
Total Strontium (Sr)	ug	<0.050	0.050	7862411
Total Strontium (Sr)	ug/m3	<0.0010	0.0010	7856297
Total Thallium (Tl)	ug	<0.010	0.010	7862411
Total Thallium (Tl)	ug/m3	<0.00021	0.00021	7856297
Total Tin (Sn)	ug	<0.030	0.030	7862411
Total Tin (Sn)	ug/m3	<0.00063	0.00063	7856297
Total Titanium (Ti)	ug	<0.10	0.10	7862411
Total Titanium (Ti)	ug/m3	<0.0021	0.0021	7856297
Total Uranium (U)	ug	<0.010	0.010	7862411
Total Uranium (U)	ug/m3	<0.00021	0.00021	7856297
Total Vanadium (V)	ug	<0.030	0.030	7862411

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		RUU838		
Sampling Date		2022/02/04		
COC Number		n/a		
	UNITS	**TSP 4-FEB**	**RDL**	**QC Batch**
Total Vanadium (V)	ug/m3	<0.00063	0.00063	7856297
Total Zinc (Zn)	ug	<0.50	0.50	7862411
Total Zinc (Zn)	ug/m3	<0.010	0.010	7856297

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

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Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		RUU877		RUU878		
Sampling Date		2022/02/04		2022/01/03		
COC Number		n/a		n/a		
	UNITS	JANUARY DUSTFALL	RDL	DECEMBER DUSTFALL	RDL	QC Batch
Insoluble Particulate	mg	2.2	1.0	1.1	1.0	7836377
Soluble Particulate	mg	2.0	1.3	4.6	1.8	7838862
Charge/Prep Analysis						
Volume of sample	ml	100	1	510	1	7836342

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: RUU808 **Collected:** 2021/11/18
Sample ID: PM10 18-NOV **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU809 **Collected:** 2021/11/24
Sample ID: PM10 24-NOV **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU810 **Collected:** 2021/11/30
Sample ID: PM10 30-NOV **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU811 **Collected:** 2021/12/24
Sample ID: PM10 24-DEC **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU812 **Collected:** 2021/12/30
Sample ID: PM10 30-DEC **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Particulate	BAL	7837154	N/A	2022/02/15	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7832554	N/A	2022/02/16	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

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TEST SUMMARY

Bureau Veritas ID: RUU817 **Collected:** 2022/01/05
Sample ID: PM10 5-JAN **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU818 **Collected:** 2022/01/11
Sample ID: PM10 11-JAN **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Particulate	BAL	7837154	N/A	2022/02/15	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7832554	N/A	2022/02/16	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU819 **Collected:** 2022/01/17
Sample ID: PM10 17-JAN **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU820 **Collected:** 2022/01/23
Sample ID: PM10 23-JAN **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU821 **Collected:** 2022/01/29
Sample ID: PM10 29-JAN **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

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Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
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Site Location: OMEMA2002.2021E.100*.5120.573000
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TEST SUMMARY

Bureau Veritas ID: RUU822 **Collected:** 2022/02/04
Sample ID: PM10 4-FEB **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU833 **Collected:** 2021/11/18
Sample ID: TSP 18-NOV **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU834 **Collected:** 2021/11/24
Sample ID: TSP 24-NOV **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7864459	2022/03/04	2021/03/04	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7856297	2022/03/07	2022/03/07	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7862411	2022/03/03	2022/03/07	Arefa Dabhad
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU834 Dup **Collected:** 2021/11/24
Sample ID: TSP 24-NOV **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7862411	2022/03/03	2022/03/07	Arefa Dabhad

Bureau Veritas ID: RUU835 **Collected:** 2022/01/05
Sample ID: TSP 5-JAN **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7864459	2022/03/04	2021/03/04	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7856297	2022/03/07	2022/03/07	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7862411	2022/03/03	2022/03/07	Arefa Dabhad
Total Particulate	BAL	7837154	N/A	2022/02/15	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7832554	N/A	2022/02/16	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

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Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: RUU836 **Collected:** 2022/01/17
Sample ID: TSP 17-JAN **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7864459	2022/03/04	2021/03/04	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7856297	2022/03/07	2022/03/07	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7862411	2022/03/03	2022/03/07	Arefa Dabhad
Total Particulate	BAL	7837154	N/A	2022/02/15	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7832554	N/A	2022/02/16	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU837 **Collected:** 2022/01/23
Sample ID: TSP 23-JAN **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7864459	2022/03/04	2021/03/04	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7856297	2022/03/07	2022/03/07	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7862411	2022/03/03	2022/03/07	Arefa Dabhad
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU838 **Collected:** 2022/02/04
Sample ID: TSP 4-FEB **Shipped:**
Matrix: Filter **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7864459	2022/03/04	2021/03/04	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7856297	2022/03/07	2022/03/07	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7862411	2022/03/03	2022/03/07	Arefa Dabhad
Particulate Calculation	CALC	7832555	N/A	2022/02/16	Automated Statchk
Total Particulate	BAL	7834569	N/A	2022/02/15	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/02/14	Marinela Sim

Bureau Veritas ID: RUU877 **Collected:** 2022/02/04
Sample ID: JANUARY DUSTFALL **Shipped:**
Matrix: Water **Received:** 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	7836377	2022/02/16	2022/02/17	Joseph-Noel Andres
Soluble Part. in Dustfall (D1739mod)	BAL	7838862	2022/02/16	2022/02/22	Joseph-Noel Andres
Volume of Sample Received		7836342	2022/02/16	2022/02/16	Joseph-Noel Andres

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Bureau Veritas Job #: C234494
Report Date: 2022/03/07

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: RUU878
Sample ID: DECEMBER DUSTFALL
Matrix: Water

Collected: 2022/01/03
Shipped:
Received: 2022/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	7836377	2022/02/16	2022/02/17	Joseph-Noel Andres
Soluble Part. in Dustfall (D1739mod)	BAL	7838862	2022/02/16	2022/02/22	Joseph-Noel Andres
Volume of Sample Received		7836342	2022/02/16	2022/02/16	Joseph-Noel Andres

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Sample RUU822 [PM10 4-FEB] : The filter sample was received torn therefore results are not available.

Sample RUU833 [TSP 18-NOV] : The filter sample was received torn therefore results are not available.

Sample RUU834 [TSP 24-NOV] : The filter sample was received torn therefore results are not available.

Sample RUU837 [TSP 23-JAN] : The filter sample was received torn therefore results are not available.

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Reagent Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
7836377	Insoluble Particulate	2022/02/17			93	85 - 115	<1.0	mg				
7838862	Soluble Particulate	2022/02/22			101	85 - 115	<0.20	mg				
7862411	Total Aluminum (Al)	2022/03/07	102 (1)	70 - 130	96	85 - 115	<2.0	ug	NC (3)	20		
7862411	Total Antimony (Sb)	2022/03/07	100 (1)	70 - 130	95	85 - 115	<0.050	ug	NC (3)	20		
7862411	Total Arsenic (As)	2022/03/07	102 (1)	70 - 130	96	85 - 115	<0.050	ug	NC (3)	20		
7862411	Total Barium (Ba)	2022/03/07	104 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20		
7862411	Total Beryllium (Be)	2022/03/07	103 (1)	70 - 130	97	85 - 115	<0.030	ug	NC (3)	20		
7862411	Total Bismuth (Bi)	2022/03/07	96 (1)	70 - 130	94	85 - 115	<0.050	ug	NC (3)	20		
7862411	Total Boron (B)	2022/03/07	99 (1)	70 - 130	97	85 - 115	<1.0	ug	NC (3)	20		
7862411	Total Cadmium (Cd)	2022/03/07	99 (1)	70 - 130	95	85 - 115	<0.010	ug	NC (3)	20		
7862411	Total Calcium (Ca)	2022/03/07	102 (1)	70 - 130	96	85 - 115	<5.0	ug	1.0 (3)	20		
7862411	Total Chromium (Cr)	2022/03/07	99 (1)	70 - 130	93	85 - 115	<0.050	ug	1.1 (3)	20		
7862411	Total Cobalt (Co)	2022/03/07	103 (1)	70 - 130	98	85 - 115	<0.030	ug	NC (3)	20		
7862411	Total Copper (Cu)	2022/03/07	104 (1)	70 - 130	99	85 - 115	<0.030	ug	0.43 (3)	20		
7862411	Total Iron (Fe)	2022/03/07	103 (1)	70 - 130	98	85 - 115	<5.0	ug	NC (3)	20		
7862411	Total Lead (Pb)	2022/03/07	97 (1)	70 - 130	93	85 - 115	<0.030	ug	NC (3)	20		
7862411	Total Magnesium (Mg)	2022/03/07	103 (1)	70 - 130	96	85 - 115	<1.0	ug	0.17 (3)	20		
7862411	Total Manganese (Mn)	2022/03/07	103 (1)	70 - 130	97	85 - 115	<0.050	ug	NC (3)	20		
7862411	Total Molybdenum (Mo)	2022/03/07	99 (1)	70 - 130	92	85 - 115	<0.030	ug	NC (3)	20		
7862411	Total Nickel (Ni)	2022/03/07	103 (1)	70 - 130	96	85 - 115	<0.050	ug	NC (3)	20		
7862411	Total Phosphorus (P)	2022/03/07	107 (1)	70 - 130	108	85 - 115	<5.0	ug	NC (3)	20		
7862411	Total Potassium (K)	2022/03/07	103 (1)	70 - 130	96	85 - 115	<5.0	ug	NC (3)	20		
7862411	Total Selenium (Se)	2022/03/07	100 (1)	70 - 130	95	85 - 115	<0.10	ug	NC (3)	20		
7862411	Total Silver (Ag)	2022/03/07	106 (1)	70 - 130	94	85 - 115	<0.010	ug	NC (3)	20		
7862411	Total Sodium (Na)	2022/03/07	106 (1)	70 - 130	97	85 - 115	<5.0	ug	0.38 (3)	20		
7862411	Total Strontium (Sr)	2022/03/07	101 (1)	70 - 130	96	85 - 115	<0.050	ug	1.4 (3)	20		
7862411	Total Thallium (Tl)	2022/03/07	95 (1)	70 - 130	93	85 - 115	<0.010	ug	NC (3)	20		
7862411	Total Tin (Sn)	2022/03/07	100 (1)	70 - 130	97	85 - 115	<0.030	ug	NC (3)	20		
7862411	Total Titanium (Ti)	2022/03/07	99 (1)	70 - 130	94	85 - 115	<0.10	ug	NC (3)	20		

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		Reagent Blank	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	Value	UNITS
7862411	Total Uranium (U)	2022/03/07	98 (1)	70 - 130	92	85 - 115	<0.010	ug	NC (3)	20		
7862411	Total Vanadium (V)	2022/03/07	100 (1)	70 - 130	94	85 - 115	<0.030	ug	NC (3)	20		
7862411	Total Zinc (Zn)	2022/03/07	101 (1)	70 - 130	93	85 - 115	<0.50	ug	NC (3)	20		
7864459	Acid Extractable Mercury (Hg)	2021/03/04			99	90 - 110	<0.0025	ug	5.0 (2)	20	<0.0025	ug

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Reagent Blank: A blank matrix containing all reagents used in the analytical procedure. Used to determine any analytical contamination.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [RUU834-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [RUU834-01]

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Bureau Veritas Job #: C234494
Report Date: 2022/03/07

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Brenda Moore, Team Lead, Inorganic

John Bowman, Supervisor, Metals Group

Marinela Sim, Project Manager

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

AIR

CAM FCD-01302 /3

BUREAU VERITAS

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

1/4

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

09-Feb-22 14:09
Gina Baybayan
C234494
RJM AIR-RmTmp

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
PM10 18-Nov	24.04	10902328	18-Nov-21			X		
PM10 24-Nov	24.03	10902329	24-Nov-21			X		
PM10 30-Nov	24.04	10902331	30-Nov-21			X		
PM10 6-Dec		10902326	6-Dec			X		
PM10 12-Dec		10901100	12-Dec			X		
PM10 18-Dec		21101512	18-Dec			X		
PM10 24-Dec	24.03	10301097	24-Dec			X		
PM10 30-Dec	24.03	21101519	30-Dec			X		

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #: OMEMA2002.2021E.100*.5120.573000
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

filters torn after sampling

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 09/02/22 1405 1211 hrs

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RF 9-Feb 2022

BUREAU VERITAS
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Mississauga Ontario ,L5N 2L8
www.bvlabs.com
Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CAM FCD-01302 /3

3/4

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON
Phone: 905-568-2929 Fax:
Sampled by: AG

SECTION

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP 18-Nov	48.05	10902332	18-Nov-21		X		X	X
TSP 24-Nov	11.1	10902333	24-Nov-21		X		X	X
TSP 5-Jan	48	21101513						
TSP 17-Jan	48	21102151	17-Jan-22		X		X	X
TSP 23-Jan	48	93608565	23-Jan-22		X		X	X
TSP 29-Jan	48		29-Jan-22		X		X	X
TSP 4-Feb	48	93608561	4-Feb-22		X		X	X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #:
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

filters torn after sampling

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 09/Nov 15:09 17/11/21

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Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*									
January Dustfall			3 Jan - 4 Feb					X									
December Dustfall			3 Dec - 3 Jan					X									

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #: OMEMA2002.2021E.100*.5120.573000
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 1409 (7)11/21

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Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/03/31
Report #: R7066786
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C269786
Received: 2022/03/16, 16:39

Sample Matrix: Filter
Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	7	2022/03/29	2022/03/30	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	7	2022/03/17	2022/03/17	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	6	2022/03/28	2022/03/28	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Total Metals on Small Filter (6020Bmod)	1	2022/03/28	2022/03/29	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Total Particulate	10	N/A	2022/03/21	BRL SOP-00109	Method IO-3.1
Particulates on Lo-Vol Filters	10	N/A	2022/03/24		
Particulate Calculation	1	N/A	2022/03/22	BRL SOP-00109	EPA IO-2mod
Particulate Calculation	1	N/A	2022/03/29	BRL SOP-00109	EPA IO-2mod
Total Particulate	2	N/A	2022/03/21	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	12	N/A	2022/03/17		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

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Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/03/31
Report #: R7066786
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C269786
Received: 2022/03/16, 16:39

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
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Bureau Veritas Job #: C269786
Report Date: 2022/03/31

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		SCN569	SCN570	SCN571	SCN572			SCN573		
Sampling Date		2022/02/10	2022/02/16	2022/02/22	2022/02/28			2022/03/06		
COC Number		n/a	n/a	n/a	n/a			n/a		
	UNITS	PM10 10-FEB	PM10 16-FEB	PM10 22-FEB	PM10 28-FEB	RDL	QC Batch	PM10 6-MAR	RDL	QC Batch
Particulate	ug/m3	<12	<12	<12	<12	12	7900064	15.2	1.2	7888945
Particulate Weight on Filter	mg	<0.3 (1)	<0.3 (1)	<0.3 (1)	<0.3 (1)	0.3	7901202	N/A	N/A	N/A
Particulate Weight on Filter	ug	N/A	N/A	N/A	N/A	N/A	N/A	365	30	7895880
Volume	m3	24.03	24.03	24.03	24.03	N/A	ONSITE	24.03	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Edges of filter frayed
Loose filter material
Negative weight observed

Bureau Veritas ID		SCN762			SCN763	SCN764	SCN765	SCN766	SCN767		
Sampling Date		2022/01/29			2022/02/10	2022/02/16	2022/02/22	2022/02/28	2022/03/06		
COC Number		n/a			n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP 29-JAN	RDL	QC Batch	TSP 10-FEB	TSP 16-FEB	TSP 22-FEB	TSP 28-FEB	TSP 6-MAR	RDL	QC Batch
Particulate	ug/m3	2.68	0.62	7900065	<6.2	8.3	<6.2	<6.2	<6.2	6.2	7900064
Particulate Weight on Filter	mg	N/A	N/A	N/A	<0.3 (1)	0.4 (2)	<0.3 (1)	<0.3 (2)	<0.3 (1)	0.3	7901202
Particulate Weight on Filter	ug	129	30	7895880	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Volume	m3	48.07	N/A	ONSITE	48.06	48.03	48.05	48.05	48.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Edges of filter frayed
Loose filter material
Negative weight observed
(2) Edges of filter frayed

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C269786
Report Date: 2022/03/31

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		SCN768		
Sampling Date		2022/03/12		
COC Number		n/a		
	UNITS	**TSP 12-MAR**	**RDL**	**QC Batch**
Particulate	ug/m3	<6.2	6.2	7900064
Particulate Weight on Filter	mg	<0.3 (1)	0.3	7901202
Volume	m3	48.03	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Edges of filter frayed

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C269786
Report Date: 2022/03/31

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SCN762	SCN762	SCN763	SCN764	SCN765	SCN766		
Sampling Date		2022/01/29	2022/01/29	2022/02/10	2022/02/16	2022/02/22	2022/02/28		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP 29-JAN	TSP 29-JAN Lab-Dup	TSP 10-FEB	TSP 16-FEB	TSP 22-FEB	TSP 28-FEB	RDL	QC Batch
Metals									
Total Aluminum (Al)	ug	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	7906749
Total Aluminum (Al)	ug/m3	<0.042	N/A	<0.042	<0.042	<0.042	<0.042	0.042	7888942
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7906749
Total Antimony (Sb)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	7888942
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7906749
Total Arsenic (As)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	7888942
Total Barium (Ba)	ug	<0.050	<0.050	0.065	0.12	0.058	0.057	0.050	7906749
Total Barium (Ba)	ug/m3	<0.0010	N/A	0.0013	0.0024	0.0012	0.0012	0.0010	7888942
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	7906749
Total Beryllium (Be)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	7888942
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7906749
Total Bismuth (Bi)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	7888942
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	7906749
Total Boron (B)	ug/m3	<0.021	N/A	<0.021	<0.021	<0.021	<0.021	0.021	7888942
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7906749
Total Cadmium (Cd)	ug/m3	<0.00021	N/A	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	7888942
Total Calcium (Ca)	ug	<5.0	<5.0	<5.0	5.6	<5.0	<5.0	5.0	7906749
Total Calcium (Ca)	ug/m3	<0.10	N/A	<0.10	0.12	<0.10	<0.10	0.10	7888942
Total Chromium (Cr)	ug	<0.050	<0.050	0.11	0.051	0.052	0.059	0.050	7906749
Total Chromium (Cr)	ug/m3	<0.0010	N/A	0.0023	0.0011	0.0011	0.0012	0.0010	7888942
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	7906749
Total Cobalt (Co)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	7888942
Total Copper (Cu)	ug	0.067	0.065	0.19	0.090	0.078	0.11	0.030	7906749
Total Copper (Cu)	ug/m3	0.0014	N/A	0.0039	0.0019	0.0016	0.0023	0.00062	7888942
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	7906749
Total Iron (Fe)	ug/m3	<0.10	N/A	<0.10	<0.10	<0.10	<0.10	0.10	7888942

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N/A = Not Applicable

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Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SCN762	SCN762	SCN763	SCN764	SCN765	SCN766		
Sampling Date		2022/01/29	2022/01/29	2022/02/10	2022/02/16	2022/02/22	2022/02/28		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP 29-JAN	TSP 29-JAN Lab-Dup	TSP 10-FEB	TSP 16-FEB	TSP 22-FEB	TSP 28-FEB	RDL	QC Batch
Total Lead (Pb)	ug	<0.030	<0.030	0.038	0.038	0.065	0.031	0.030	7906749
Total Lead (Pb)	ug/m3	<0.00062	N/A	0.00079	0.00078	0.0014	0.00064	0.00062	7888942
Total Magnesium (Mg)	ug	1.3	1.2	1.8	1.5	2.0	2.4	1.0	7906749
Total Magnesium (Mg)	ug/m3	0.027	N/A	0.037	0.030	0.041	0.050	0.021	7888942
Total Manganese (Mn)	ug	<0.050	<0.050	0.081	0.099	0.073	0.055	0.050	7906749
Total Manganese (Mn)	ug/m3	<0.0010	N/A	0.0017	0.0021	0.0015	0.0011	0.0010	7888942
Acid Extractable Mercury (Hg)	ug	<0.0025	N/A	<0.0025	<0.0025	<0.0025	<0.0025	0.0025	7909031
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	7906749
Total Molybdenum (Mo)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	7888942
Total Nickel (Ni)	ug	<0.050	<0.050	0.052	<0.050	<0.050	<0.050	0.050	7906749
Total Nickel (Ni)	ug/m3	<0.0010	N/A	0.0011	<0.0010	<0.0010	<0.0010	0.0010	7888942
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	7906749
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	7906749
Total Potassium (K)	ug/m3	<0.10	N/A	<0.10	<0.10	<0.10	<0.10	0.10	7888942
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7906749
Total Selenium (Se)	ug/m3	<0.0021	N/A	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	7888942
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7906749
Total Silver (Ag)	ug/m3	<0.00021	N/A	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	7888942
Total Sodium (Na)	ug	9.1	8.8	10	7.3	8.0	12	5.0	7906749
Total Sodium (Na)	ug/m3	0.19	N/A	0.21	0.15	0.17	0.26	0.10	7888942
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	7906749
Total Strontium (Sr)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	7888942
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7906749
Total Thallium (Tl)	ug/m3	<0.00021	N/A	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	7888942
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	7906749
Total Tin (Sn)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	7888942
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	7906749

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Bureau Veritas Job #: C269786
Report Date: 2022/03/31

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SCN762	SCN762	SCN763	SCN764	SCN765	SCN766		
Sampling Date		2022/01/29	2022/01/29	2022/02/10	2022/02/16	2022/02/22	2022/02/28		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP 29-JAN	TSP 29-JAN Lab-Dup	TSP 10-FEB	TSP 16-FEB	TSP 22-FEB	TSP 28-FEB	RDL	QC Batch
Total Titanium (Ti)	ug/m3	<0.0021	N/A	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	7888942
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	7906749
Total Uranium (U)	ug/m3	<0.00021	N/A	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	7888942
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	7906749
Total Vanadium (V)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	7888942
Total Zinc (Zn)	ug	<0.50	<0.50	0.51	<0.50	<0.50	<0.50	0.50	7906749
Total Zinc (Zn)	ug/m3	<0.010	N/A	0.011	<0.010	<0.010	<0.010	0.010	7888942

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Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SCN767	SCN768		
Sampling Date		2022/03/06	2022/03/12		
COC Number		n/a	n/a		
	UNITS	TSP 6-MAR	TSP 12-MAR	RDL	QC Batch
Metals					
Total Aluminum (Al)	ug	<2.0	<2.0	2.0	7906749
Total Aluminum (Al)	ug/m3	<0.042	<0.042	0.042	7888942
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	7906749
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	0.0010	7888942
Total Arsenic (As)	ug	<0.050	<0.050	0.050	7906749
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	0.0010	7888942
Total Barium (Ba)	ug	<0.050	0.054	0.050	7906749
Total Barium (Ba)	ug/m3	<0.0010	0.0011	0.0010	7888942
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	7906749
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	0.00062	7888942
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	7906749
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	0.0010	7888942
Total Boron (B)	ug	<1.0	<1.0	1.0	7906749
Total Boron (B)	ug/m3	<0.021	<0.021	0.021	7888942
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	7906749
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	0.00021	7888942
Total Calcium (Ca)	ug	<5.0	<5.0	5.0	7906749
Total Calcium (Ca)	ug/m3	<0.10	<0.10	0.10	7888942
Total Chromium (Cr)	ug	0.075	0.067	0.050	7906749
Total Chromium (Cr)	ug/m3	0.0016	0.0014	0.0010	7888942
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	7906749
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	0.00062	7888942
Total Copper (Cu)	ug	0.038	0.033	0.030	7906749
Total Copper (Cu)	ug/m3	0.00079	0.00069	0.00062	7888942
Total Iron (Fe)	ug	<5.0	<5.0	5.0	7906749
Total Iron (Fe)	ug/m3	<0.10	<0.10	0.10	7888942
Total Lead (Pb)	ug	0.066	<0.030	0.030	7906749
Total Lead (Pb)	ug/m3	0.0014	<0.00062	0.00062	7888942

RDL = Reportable Detection Limit
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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SCN767	SCN768		
Sampling Date		2022/03/06	2022/03/12		
COC Number		n/a	n/a		
	UNITS	TSP 6-MAR	TSP 12-MAR	RDL	QC Batch
Total Magnesium (Mg)	ug	<1.0	1.2	1.0	7906749
Total Magnesium (Mg)	ug/m3	<0.021	0.026	0.021	7888942
Total Manganese (Mn)	ug	<0.050	0.073	0.050	7906749
Total Manganese (Mn)	ug/m3	<0.0010	0.0015	0.0010	7888942
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	0.0025	7909031
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	7906749
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	0.00062	7888942
Total Nickel (Ni)	ug	<0.050	<0.050	0.050	7906749
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	0.0010	7888942
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	7906749
Total Potassium (K)	ug	<5.0	<5.0	5.0	7906749
Total Potassium (K)	ug/m3	<0.10	<0.10	0.10	7888942
Total Selenium (Se)	ug	<0.10	<0.10	0.10	7906749
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	0.0021	7888942
Total Silver (Ag)	ug	<0.010	<0.010	0.010	7906749
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	0.00021	7888942
Total Sodium (Na)	ug	<5.0	6.0	5.0	7906749
Total Sodium (Na)	ug/m3	<0.10	0.13	0.10	7888942
Total Strontium (Sr)	ug	<0.050	<0.050	0.050	7906749
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	0.0010	7888942
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	7906749
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	0.00021	7888942
Total Tin (Sn)	ug	<0.030	<0.030	0.030	7906749
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	0.00062	7888942
Total Titanium (Ti)	ug	<0.10	<0.10	0.10	7906749
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	0.0021	7888942
Total Uranium (U)	ug	<0.010	<0.010	0.010	7906749
Total Uranium (U)	ug/m3	<0.00021	<0.00021	0.00021	7888942
Total Vanadium (V)	ug	<0.030	<0.030	0.030	7906749

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QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SCN767	SCN768		
Sampling Date		2022/03/06	2022/03/12		
COC Number		n/a	n/a		
	UNITS	**TSP 6-MAR**	**TSP 12-MAR**	**RDL**	**QC Batch**
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	0.00062	7888942
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	7906749
Total Zinc (Zn)	ug/m3	<0.010	<0.010	0.010	7888942

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Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: SCN569 **Collected:** 2022/02/10
Sample ID: PM10 10-FEB **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN570 **Collected:** 2022/02/16
Sample ID: PM10 16-FEB **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN571 **Collected:** 2022/02/22
Sample ID: PM10 22-FEB **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN572 **Collected:** 2022/02/28
Sample ID: PM10 28-FEB **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN573 **Collected:** 2022/03/06
Sample ID: PM10 6-MAR **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7888945	N/A	2022/03/22	Automated Statchk
Total Particulate	BAL	7895880	N/A	2022/03/21	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: SCN762
Sample ID: TSP 29-JAN
Matrix: Filter
Collected: 2022/01/29
Shipped:
Received: 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7909031	2022/03/29	2022/03/30	Indira HarryPaul
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7888942	2022/03/17	2022/03/17	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7906749	2022/03/28	2022/03/28	Prempal Bhatti
Particulate Calculation	CALC	7900065	N/A	2022/03/29	Automated Statchk
Total Particulate	BAL	7895880	N/A	2022/03/21	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN762 Dup
Sample ID: TSP 29-JAN
Matrix: Filter
Collected: 2022/01/29
Shipped:
Received: 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7906749	2022/03/28	2022/03/28	Prempal Bhatti

Bureau Veritas ID: SCN763
Sample ID: TSP 10-FEB
Matrix: Filter
Collected: 2022/02/10
Shipped:
Received: 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7909031	2022/03/29	2022/03/30	Indira HarryPaul
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7888942	2022/03/17	2022/03/17	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7906749	2022/03/28	2022/03/28	Prempal Bhatti
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN764
Sample ID: TSP 16-FEB
Matrix: Filter
Collected: 2022/02/16
Shipped:
Received: 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7909031	2022/03/29	2022/03/30	Indira HarryPaul
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7888942	2022/03/17	2022/03/17	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7906749	2022/03/28	2022/03/28	Prempal Bhatti
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: SCN765 **Collected:** 2022/02/22
Sample ID: TSP 22-FEB **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7909031	2022/03/29	2022/03/30	Indira HarryPaul
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7888942	2022/03/17	2022/03/17	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7906749	2022/03/28	2022/03/29	Prempal Bhatti
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN766 **Collected:** 2022/02/28
Sample ID: TSP 28-FEB **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7909031	2022/03/29	2022/03/30	Indira HarryPaul
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7888942	2022/03/17	2022/03/17	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7906749	2022/03/28	2022/03/28	Prempal Bhatti
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN767 **Collected:** 2022/03/06
Sample ID: TSP 6-MAR **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7909031	2022/03/29	2022/03/30	Indira HarryPaul
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7888942	2022/03/17	2022/03/17	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7906749	2022/03/28	2022/03/28	Prempal Bhatti
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

Bureau Veritas ID: SCN768 **Collected:** 2022/03/12
Sample ID: TSP 12-MAR **Shipped:**
Matrix: Filter **Received:** 2022/03/16

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7909031	2022/03/29	2022/03/30	Indira HarryPaul
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7888942	2022/03/17	2022/03/17	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7906749	2022/03/28	2022/03/28	Prempal Bhatti
Total Particulate	BAL	7901202	N/A	2022/03/21	Andrea Contreras Arenas
Particulates on Lo-Vol Filters	CALC	7900064	N/A	2022/03/24	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/03/17	Trushna Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7906749	Total Aluminum (Al)	2022/03/28	101 (1)	70 - 130	97	85 - 115	<2.0	ug	NC (3)	20
7906749	Total Antimony (Sb)	2022/03/28	109 (1)	70 - 130	103	85 - 115	<0.050	ug	NC (3)	20
7906749	Total Arsenic (As)	2022/03/28	98 (1)	70 - 130	92	85 - 115	<0.050	ug	NC (3)	20
7906749	Total Barium (Ba)	2022/03/28	105 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20
7906749	Total Beryllium (Be)	2022/03/28	105 (1)	70 - 130	96	85 - 115	<0.030	ug	NC (3)	20
7906749	Total Bismuth (Bi)	2022/03/28	101 (1)	70 - 130	100	85 - 115	<0.050	ug	NC (3)	20
7906749	Total Boron (B)	2022/03/28	101 (1)	70 - 130	95	85 - 115	<1.0	ug	NC (3)	20
7906749	Total Cadmium (Cd)	2022/03/28	99 (1)	70 - 130	96	85 - 115	<0.010	ug	NC (3)	20
7906749	Total Calcium (Ca)	2022/03/28	104 (1)	70 - 130	100	85 - 115	<5.0	ug	NC (3)	20
7906749	Total Chromium (Cr)	2022/03/28	98 (1)	70 - 130	93	85 - 115	<0.050	ug	NC (3)	20
7906749	Total Cobalt (Co)	2022/03/28	100 (1)	70 - 130	90	85 - 115	<0.030	ug	NC (3)	20
7906749	Total Copper (Cu)	2022/03/28	100 (1)	70 - 130	94	85 - 115	<0.030	ug	3.1 (3)	20
7906749	Total Iron (Fe)	2022/03/28	104 (1)	70 - 130	98	85 - 115	<5.0	ug	NC (3)	20
7906749	Total Lead (Pb)	2022/03/28	99 (1)	70 - 130	94	85 - 115	<0.030	ug	NC (3)	20
7906749	Total Magnesium (Mg)	2022/03/28	95 (1)	70 - 130	91	85 - 115	<1.0	ug	11 (3)	20
7906749	Total Manganese (Mn)	2022/03/28	102 (1)	70 - 130	96	85 - 115	<0.050	ug	NC (3)	20
7906749	Total Molybdenum (Mo)	2022/03/28	97 (1)	70 - 130	96	85 - 115	<0.030	ug	NC (3)	20
7906749	Total Nickel (Ni)	2022/03/28	97 (1)	70 - 130	91	85 - 115	<0.050	ug	NC (3)	20
7906749	Total Phosphorus (P)	2022/03/28	104 (1)	70 - 130	110	85 - 115	<5.0	ug	NC (3)	20
7906749	Total Potassium (K)	2022/03/28	99 (1)	70 - 130	93	85 - 115	<5.0	ug	NC (3)	20
7906749	Total Selenium (Se)	2022/03/28	97 (1)	70 - 130	92	85 - 115	<0.10	ug	NC (3)	20
7906749	Total Silver (Ag)	2022/03/28	99 (1)	70 - 130	93	85 - 115	<0.010	ug	NC (3)	20
7906749	Total Sodium (Na)	2022/03/28	100 (1)	70 - 130	96	85 - 115	<5.0	ug	2.9 (3)	20
7906749	Total Strontium (Sr)	2022/03/28	103 (1)	70 - 130	97	85 - 115	<0.050	ug	NC (3)	20
7906749	Total Thallium (Tl)	2022/03/28	98 (1)	70 - 130	97	85 - 115	<0.010	ug	NC (3)	20
7906749	Total Tin (Sn)	2022/03/28	104 (1)	70 - 130	101	85 - 115	<0.030	ug	NC (3)	20
7906749	Total Titanium (Ti)	2022/03/28	98 (1)	70 - 130	96	85 - 115	<0.10	ug	NC (3)	20
7906749	Total Uranium (U)	2022/03/28	99 (1)	70 - 130	96	85 - 115	<0.010	ug	NC (3)	20
7906749	Total Vanadium (V)	2022/03/28	99 (1)	70 - 130	94	85 - 115	<0.030	ug	NC (3)	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	**Parameter**	**Date**	**% Recovery**	**QC Limits**	**% Recovery**	**QC Limits**	**Value**	**UNITS**	**Value (%)**	**QC Limits**
7906749	Total Zinc (Zn)	2022/03/28	96 (1)	70 - 130	90	85 - 115	<0.50	ug	NC (3)	20
7909031	Acid Extractable Mercury (Hg)	2022/03/30			101	90 - 110	<0.0025	ug	1.1 (2)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [SCN762-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [SCN762-01]

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Bureau Veritas Job #: C269786
Report Date: 2022/03/31

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Brenda Moore

Brenda Moore, Team Lead, Inorganic

John Bowman, Supervisor, Metals Group

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

CAM FCD-01302 /3

BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
PM10 10-Feb	24.03	21101516	10-Feb			X		
PM10 16-Feb	24.03	21101517	16-Feb			X		
PM10 22-Feb	24.03	21102155	22-Feb			X		
PM10 28-Feb	24.03	21102159	28-Feb			X		
PM10 6-Mar	24.03	93401700	6-Mar			X		

16-Mar-22 16:39
Gina Baybayan
C269786
URE AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #: OMEMA2002.2021E.100*.5120.573000
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

filters torn after sampling

Client Signature: RF
Affiliation:
Date/Time: 16- March

Received by: DIPIKA SINGH
Affiliation: BV labs
Date/Time: 2022/03/16 16:39

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16/16/16 no ice

CAM FCD-01302 /3

BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON
Phone: 905-568-2929 Fax:
Sampled by: AG

SECTION

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP 29-Jan	48.07	93608564	29-Jan-22		X		X	X
TSP 10-Feb	48.06	21101515	10-Feb-22		X		X	X
TSP 16-Feb	48.03	21102152	16-Feb-22		X		X	X
TSP 22-Feb	48.05	21102156	22-Feb-22		X		X	X
TSP 28-Feb	48.05	21102154	28-Feb-22		X		X	X
TSP 6-Mar	48.05	21102158	6-Mar-22		X		X	X
TSP 12-Mar	48.03	21102157	12-Mar-22		X		X	X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #:
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

filters torn after sampling

Client Signature: RT
Affiliation:
Date/Time: 16-March

Received by: Geo Post DSS 2022/03/16
Affiliation: Bureau Veritas DIPIKA SINGH
Date/Time: 2022/03/16 16:39

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Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: na

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/05/11
Report #: R7120548
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2A6904
Received: 2022/04/21, 15:47

Sample Matrix: Filter
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	5	2022/05/10	2022/05/10	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	5	2022/04/22	2022/04/22	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	5	2022/04/28	2022/04/29	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Total Particulate	5	N/A	2022/04/26	BRL SOP-00109	Method IO-3.1
Particulates on Lo-Vol Filters	5	N/A	2022/04/27		
Particulate Calculation	5	N/A	2022/04/27	BRL SOP-00109	EPA IO-2mod
Total Particulate	5	N/A	2022/04/26	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	10	N/A	2022/04/22		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: na

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/05/11
Report #: R7120548
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2A6904
Received: 2022/04/21, 15:47

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

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Bureau Veritas Job #: C2A6904
Report Date: 2022/05/11

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		SKS280	SKS281	SKS282	SKS283		
Sampling Date		2022/03/18	2022/03/24	2022/03/30	2022/04/05		
COC Number		na	na	na	na		
	UNITS	PM 10 18-MAR-22	PM 10 24 MAR-22 10902105	PM 10 30-MAR-22 10902104	PM 10 5 ,APR-22 10902103	RDL	QC Batch
Particulate	ug/m3	4.8	3.0	5.3	4.2	1.2	7954838
Particulate Weight on Filter	ug	116	73	127	102	30	7961770
Volume	m3	24.03	24.03	24.03	24.03	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		SKS284			SKS381	SKS382		
Sampling Date		2022/04/11			2022/03/18	2022/03/24		
COC Number		na			na	na		
	UNITS	PM 10 11-APR-22 10902102	RDL	QC Batch	TSP 18-MAR-22 21102172	TSP 24-MAR-22 21102173	RDL	QC Batch
Particulate	ug/m3	5.4	1.2	7954838	<6.2	<6.2	6.2	7959411
Particulate Weight on Filter	mg	N/A	N/A	N/A	<0.3	<0.3	0.3	7962624
Particulate Weight on Filter	ug	130	30	7961770	N/A	N/A	N/A	N/A
Volume	m3	24.03	N/A	ONSITE	48.06	48.04	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		SKS383	SKS384	SKS385		
Sampling Date		2022/03/30	2022/04/05	2022/04/11		
COC Number		na	na	na		
	UNITS	TSP 30-MAR-22 21102174	TSP 5-APR-22 22021602	TSP 11-APR-22 22021601	RDL	QC Batch
Particulate	ug/m3	<6.2	<6.2	<6.2	6.2	7959411
Particulate Weight on Filter	mg	<0.3	<0.3	<0.3	0.3	7962624
Volume	m3	48.05	48.05	48.04	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SKS381	SKS382	SKS383		
Sampling Date		2022/03/18	2022/03/24	2022/03/30		
COC Number		na	na	na		
	UNITS	TSP 18-MAR-22 21102172	TSP 24-MAR-22 21102173	TSP 30-MAR-22 21102174	RDL	QC Batch
Metals						
Total Aluminum (Al)	ug	<2.0	<2.0	6.0	2.0	7964431
Total Aluminum (Al)	ug/m3	<0.042	<0.042	0.13	0.042	7954835
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	0.050	7964431
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	7954835
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	0.050	7964431
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	7954835
Total Barium (Ba)	ug	<0.050	0.075	0.16	0.050	7964431
Total Barium (Ba)	ug/m3	<0.0010	0.0016	0.0033	0.0010	7954835
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	0.030	7964431
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	7954835
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	0.050	7964431
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	7954835
Total Boron (B)	ug	<1.0	<1.0	<1.0	1.0	7964431
Total Boron (B)	ug/m3	<0.021	<0.021	<0.021	0.021	7954835
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	0.010	7964431
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	7954835
Total Calcium (Ca)	ug	<5.0	<5.0	5.6	5.0	7964431
Total Calcium (Ca)	ug/m3	<0.10	<0.10	0.12	0.10	7954835
Total Chromium (Cr)	ug	0.078	0.060	0.079	0.050	7964431
Total Chromium (Cr)	ug/m3	0.0016	0.0013	0.0016	0.0010	7954835
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	0.030	7964431
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	7954835
Total Copper (Cu)	ug	<0.030	0.034	0.11	0.030	7964431
Total Copper (Cu)	ug/m3	<0.00062	0.00070	0.0022	0.00062	7954835
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	5.0	7964431
Total Iron (Fe)	ug/m3	<0.10	<0.10	<0.10	0.10	7954835
Total Lead (Pb)	ug	0.041	<0.030	0.034	0.030	7964431
Total Lead (Pb)	ug/m3	0.00085	<0.00062	0.00071	0.00062	7954835
Total Magnesium (Mg)	ug	<1.0	<1.0	1.8	1.0	7964431

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SKS381	SKS382	SKS383		
Sampling Date		2022/03/18	2022/03/24	2022/03/30		
COC Number		na	na	na		
	UNITS	TSP 18-MAR-22 21102172	TSP 24-MAR-22 21102173	TSP 30-MAR-22 21102174	RDL	QC Batch
Total Magnesium (Mg)	ug/m3	<0.021	<0.021	0.038	0.021	7954835
Total Manganese (Mn)	ug	<0.050	<0.050	0.098	0.050	7964431
Total Manganese (Mn)	ug/m3	<0.0010	<0.0010	0.0020	0.0010	7954835
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	0.0025	7985807
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	0.030	7964431
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	7954835
Total Nickel (Ni)	ug	0.11	0.055	0.081	0.050	7964431
Total Nickel (Ni)	ug/m3	0.0023	0.0011	0.0017	0.0010	7954835
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	5.0	7964431
Total Potassium (K)	ug	<5.0	<5.0	<5.0	5.0	7964431
Total Potassium (K)	ug/m3	<0.10	<0.10	<0.10	0.10	7954835
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	0.10	7964431
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	<0.0021	0.0021	7954835
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	0.010	7964431
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	7954835
Total Sodium (Na)	ug	<5.0	<5.0	<5.0	5.0	7964431
Total Sodium (Na)	ug/m3	<0.10	<0.10	<0.10	0.10	7954835
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	0.050	7964431
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	7954835
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	0.010	7964431
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	7954835
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	0.030	7964431
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	7954835
Total Titanium (Ti)	ug	<0.10	<0.10	0.17	0.10	7964431
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	0.0035	0.0021	7954835
Total Uranium (U)	ug	<0.010	<0.010	<0.010	0.010	7964431
Total Uranium (U)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	7954835
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	0.030	7964431
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	7954835
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	0.50	7964431

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2A6904
Report Date: 2022/05/11

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SKS381	SKS382	SKS383		
Sampling Date		2022/03/18	2022/03/24	2022/03/30		
COC Number		na	na	na		
	UNITS	**TSP 18-MAR-22 21102172**	**TSP 24-MAR-22 21102173**	**TSP 30-MAR-22 21102174**	**RDL**	**QC Batch**
Total Zinc (Zn)	ug/m3	<0.010	<0.010	<0.010	0.010	7954835

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SKS384	SKS385		
Sampling Date		2022/04/05	2022/04/11		
COC Number		na	na		
	UNITS	TSP 5-APR-22 22021602	TSP 11-APR-22 22021601	RDL	QC Batch
Metals					
Total Aluminum (Al)	ug	<2.0	<2.0	2.0	7964431
Total Aluminum (Al)	ug/m3	<0.042	<0.042	0.042	7954835
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	7964431
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	0.0010	7954835
Total Arsenic (As)	ug	<0.050	<0.050	0.050	7964431
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	0.0010	7954835
Total Barium (Ba)	ug	0.29	0.11	0.050	7964431
Total Barium (Ba)	ug/m3	0.0060	0.0023	0.0010	7954835
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	7964431
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	0.00062	7954835
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	7964431
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	0.0010	7954835
Total Boron (B)	ug	<1.0	<1.0	1.0	7964431
Total Boron (B)	ug/m3	<0.021	<0.021	0.021	7954835
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	7964431
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	0.00021	7954835
Total Calcium (Ca)	ug	<5.0	6.5	5.0	7964431
Total Calcium (Ca)	ug/m3	<0.10	0.14	0.10	7954835
Total Chromium (Cr)	ug	0.082	0.10	0.050	7964431
Total Chromium (Cr)	ug/m3	0.0017	0.0021	0.0010	7954835
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	7964431
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	0.00062	7954835
Total Copper (Cu)	ug	0.096	0.063	0.030	7964431
Total Copper (Cu)	ug/m3	0.0020	0.0013	0.00062	7954835
Total Iron (Fe)	ug	<5.0	<5.0	5.0	7964431
Total Iron (Fe)	ug/m3	<0.10	<0.10	0.10	7954835
Total Lead (Pb)	ug	0.11	<0.030	0.030	7964431
Total Lead (Pb)	ug/m3	0.0022	<0.00062	0.00062	7954835
Total Magnesium (Mg)	ug	<1.0	1.5	1.0	7964431

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SKS384	SKS385		
Sampling Date		2022/04/05	2022/04/11		
COC Number		na	na		
	UNITS	TSP 5-APR-22 22021602	TSP 11-APR-22 22021601	RDL	QC Batch
Total Magnesium (Mg)	ug/m3	<0.021	0.031	0.021	7954835
Total Manganese (Mn)	ug	0.058	0.093	0.050	7964431
Total Manganese (Mn)	ug/m3	0.0012	0.0019	0.0010	7954835
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	0.0025	7985807
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	7964431
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	0.00062	7954835
Total Nickel (Ni)	ug	0.068	<0.050	0.050	7964431
Total Nickel (Ni)	ug/m3	0.0014	<0.0010	0.0010	7954835
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	7964431
Total Potassium (K)	ug	<5.0	<5.0	5.0	7964431
Total Potassium (K)	ug/m3	<0.10	<0.10	0.10	7954835
Total Selenium (Se)	ug	<0.10	<0.10	0.10	7964431
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	0.0021	7954835
Total Silver (Ag)	ug	<0.010	<0.010	0.010	7964431
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	0.00021	7954835
Total Sodium (Na)	ug	<5.0	<5.0	5.0	7964431
Total Sodium (Na)	ug/m3	<0.10	<0.10	0.10	7954835
Total Strontium (Sr)	ug	<0.050	<0.050	0.050	7964431
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	0.0010	7954835
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	7964431
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	0.00021	7954835
Total Tin (Sn)	ug	<0.030	<0.030	0.030	7964431
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	0.00062	7954835
Total Titanium (Ti)	ug	0.17	<0.10	0.10	7964431
Total Titanium (Ti)	ug/m3	0.0036	<0.0021	0.0021	7954835
Total Uranium (U)	ug	<0.010	<0.010	0.010	7964431
Total Uranium (U)	ug/m3	<0.00021	<0.00021	0.00021	7954835
Total Vanadium (V)	ug	<0.030	<0.030	0.030	7964431
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	0.00062	7954835
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	7964431

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2A6904
Report Date: 2022/05/11

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SKS384	SKS385		
Sampling Date		2022/04/05	2022/04/11		
COC Number		na	na		
	UNITS	**TSP 5-APR-22 22021602**	**TSP 11-APR-22 22021601**	**RDL**	**QC Batch**
Total Zinc (Zn)	ug/m3	<0.010	<0.010	0.010	7954835

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: SKS280 **Collected:** 2022/03/18
Sample ID: PM 10 18-MAR-22 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7954838	N/A	2022/04/27	Automated Statchk
Total Particulate	BAL	7961770	N/A	2022/04/26	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

Bureau Veritas ID: SKS281 **Collected:** 2022/03/24
Sample ID: PM 10 24 MAR-22 10902105 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7954838	N/A	2022/04/27	Automated Statchk
Total Particulate	BAL	7961770	N/A	2022/04/26	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

Bureau Veritas ID: SKS282 **Collected:** 2022/03/30
Sample ID: PM 10 30-MAR-22 10902104 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7954838	N/A	2022/04/27	Automated Statchk
Total Particulate	BAL	7961770	N/A	2022/04/26	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

Bureau Veritas ID: SKS283 **Collected:** 2022/04/05
Sample ID: PM 10 5 ,APR-22 10902103 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7954838	N/A	2022/04/27	Automated Statchk
Total Particulate	BAL	7961770	N/A	2022/04/26	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

Bureau Veritas ID: SKS284 **Collected:** 2022/04/11
Sample ID: PM 10 11-APR-22 10902102 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	7954838	N/A	2022/04/27	Automated Statchk
Total Particulate	BAL	7961770	N/A	2022/04/26	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: SKS381 **Collected:** 2022/03/18
Sample ID: TSP 18-MAR-22 21102172 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7985807	2022/05/10	2022/05/10	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7954835	2022/04/22	2022/04/22	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7964431	2022/04/28	2022/04/29	Prempal Bhatti
Total Particulate	BAL	7962624	N/A	2022/04/26	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	7959411	N/A	2022/04/27	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

Bureau Veritas ID: SKS382 **Collected:** 2022/03/24
Sample ID: TSP 24-MAR-22 21102173 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7985807	2022/05/10	2022/05/10	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7954835	2022/04/22	2022/04/22	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7964431	2022/04/28	2022/04/29	Prempal Bhatti
Total Particulate	BAL	7962624	N/A	2022/04/26	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	7959411	N/A	2022/04/27	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

Bureau Veritas ID: SKS383 **Collected:** 2022/03/30
Sample ID: TSP 30-MAR-22 21102174 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7985807	2022/05/10	2022/05/10	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7954835	2022/04/22	2022/04/22	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7964431	2022/04/28	2022/04/29	Prempal Bhatti
Total Particulate	BAL	7962624	N/A	2022/04/26	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	7959411	N/A	2022/04/27	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

Bureau Veritas ID: SKS384 **Collected:** 2022/04/05
Sample ID: TSP 5-APR-22 22021602 **Shipped:**
Matrix: Filter **Received:** 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7985807	2022/05/10	2022/05/10	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7954835	2022/04/22	2022/04/22	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7964431	2022/04/28	2022/04/29	Prempal Bhatti
Total Particulate	BAL	7962624	N/A	2022/04/26	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	7959411	N/A	2022/04/27	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2A6904
Report Date: 2022/05/11

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: SKS385
Sample ID: TSP 11-APR-22 22021601
Matrix: Filter

Collected: 2022/04/11
Shipped:
Received: 2022/04/21

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	7985807	2022/05/10	2022/05/10	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	7954835	2022/04/22	2022/04/22	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	7964431	2022/04/28	2022/04/29	Prempal Bhatti
Total Particulate	BAL	7962624	N/A	2022/04/26	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	7959411	N/A	2022/04/27	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/04/22	Trushna Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7964431	Total Aluminum (Al)	2022/04/29	97	70 - 130	95	85 - 115	<2.0	ug	1.6 (1)	20
7964431	Total Antimony (Sb)	2022/04/29	102	70 - 130	97	85 - 115	<0.050	ug	4.0 (1)	20
7964431	Total Arsenic (As)	2022/04/29	98	70 - 130	96	85 - 115	<0.050	ug	0.87 (1)	20
7964431	Total Barium (Ba)	2022/04/29	100	70 - 130	98	85 - 115	<0.050	ug	2.4 (1)	20
7964431	Total Beryllium (Be)	2022/04/29	97	70 - 130	94	85 - 115	<0.030	ug	0.018 (1)	20
7964431	Total Bismuth (Bi)	2022/04/29	98	70 - 130	99	85 - 115	<0.050	ug	0.013 (1)	20
7964431	Total Boron (B)	2022/04/29	90	70 - 130	89	85 - 115	<1.0	ug	0.40 (1)	20
7964431	Total Cadmium (Cd)	2022/04/29	97	70 - 130	96	85 - 115	<0.010	ug	NC (1)	20
7964431	Total Calcium (Ca)	2022/04/29	100	70 - 130	97	85 - 115	<5.0	ug	4.2 (1)	20
7964431	Total Chromium (Cr)	2022/04/29	95	70 - 130	93	85 - 115	<0.050	ug	0.14 (1)	20
7964431	Total Cobalt (Co)	2022/04/29	99	70 - 130	96	85 - 115	<0.030	ug	0.37 (1)	20
7964431	Total Copper (Cu)	2022/04/29	100	70 - 130	93	85 - 115	<0.030	ug	1.9 (1)	20
7964431	Total Iron (Fe)	2022/04/29	101	70 - 130	100	85 - 115	<5.0	ug	1.7 (1)	20
7964431	Total Lead (Pb)	2022/04/29	98	70 - 130	97	85 - 115	<0.030	ug	1.8 (1)	20
7964431	Total Magnesium (Mg)	2022/04/29	92	70 - 130	91	85 - 115	<1.0	ug	1.5 (1)	20
7964431	Total Manganese (Mn)	2022/04/29	96	70 - 130	94	85 - 115	<0.050	ug	0.38 (1)	20
7964431	Total Molybdenum (Mo)	2022/04/29	99	70 - 130	95	85 - 115	<0.030	ug	1.7 (1)	20
7964431	Total Nickel (Ni)	2022/04/29	95	70 - 130	94	85 - 115	<0.050	ug	0.59 (1)	20
7964431	Total Phosphorus (P)	2022/04/29	94	70 - 130	97	85 - 115	<5.0	ug	1.8 (1)	20
7964431	Total Potassium (K)	2022/04/29	95	70 - 130	92	85 - 115	<5.0	ug	0.38 (1)	20
7964431	Total Selenium (Se)	2022/04/29	94	70 - 130	93	85 - 115	<0.10	ug	4.0 (1)	20
7964431	Total Silver (Ag)	2022/04/29	99	70 - 130	96	85 - 115	<0.010	ug	1.8 (1)	20
7964431	Total Sodium (Na)	2022/04/29	96	70 - 130	94	85 - 115	<5.0	ug	0.48 (1)	20
7964431	Total Strontium (Sr)	2022/04/29	99	70 - 130	97	85 - 115	<0.050	ug	0.34 (1)	20
7964431	Total Thallium (Tl)	2022/04/29	99	70 - 130	98	85 - 115	<0.010	ug	0.54 (1)	20
7964431	Total Tin (Sn)	2022/04/29	104	70 - 130	99	85 - 115	<0.030	ug	2.4 (1)	20
7964431	Total Titanium (Ti)	2022/04/29	92	70 - 130	90	85 - 115	<0.10	ug	3.6 (1)	20
7964431	Total Uranium (U)	2022/04/29	102	70 - 130	100	85 - 115	<0.010	ug	0.12 (1)	20
7964431	Total Vanadium (V)	2022/04/29	97	70 - 130	95	85 - 115	<0.030	ug	0.068 (1)	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7964431	Total Zinc (Zn)	2022/04/29	92	70 - 130	92	85 - 115	<0.50	ug	0.70 (1)	20
7985807	Acid Extractable Mercury (Hg)	2022/05/10			91	90 - 110	<0.0025	ug	1.6 (1)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Brenda Moore, Team Lead, Inorganic

Frank Mo, B.Sc., Inorganic Lab. Manager

John Bowman, Supervisor, Metals Group

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AIR

BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
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Phone: (905) 817-5700
Fax: (905) 817-5777

CAM FCD-01302 /3

CHAIN OF CUSTODY FORM - AIR

Page 1 of 2

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID			Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
PM10	18-Mar-22		24.03	-	18-Mar-22			X		
PM10	24-Mar-22		24.03	10902105	24-Mar-22			X		
PM10	30-Mar-22		24.03	10902104	30-Mar-22			X		
PM10	5-Apr-22		24.03	10902103	5-Apr-22			X		
PM10	11-Apr-22		24.03	10902102	11-Apr-22			X		

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #: OMEMA2002.2021E.100*.5120.573000
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

filters torn after sampling

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 2022/04/21 15:47

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21-Apr-22 15:47
Gina Baybayan
C2A6904
MUM AIR-RmTmn

Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/06/09
Report #: R7158281
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2E3137
Received: 2022/05/26, 12:09

Sample Matrix: Filter
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	5	2022/06/07	2022/06/08	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	5	2022/05/26	2022/06/02	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	5	2022/06/06	2022/06/08	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Total Particulate	4	N/A	2022/06/01	BRL SOP-00109	Method IO-3.1
Particulates on Lo-Vol Filters	4	N/A	2022/06/02		
Particulate Calculation	6	N/A	2022/06/02	BRL SOP-00109	EPA IO-2mod
Total Particulate	6	N/A	2022/06/01	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	10	N/A	2022/05/26		

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2022/05/30	2022/05/31	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2022/05/30	2022/06/01	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2022/05/30	2022/05/30		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

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Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/06/09
Report #: R7158281
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2E3137
Received: 2022/05/26, 12:09

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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For Service Group specific validation please refer to the Validation Signature Page.

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2E3137
Report Date: 2022/06/09

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		SSM961	SSM962	SSM963	SSM964		
Sampling Date		2022/04/17	2022/04/23	2022/04/29	2022/05/05		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	PM10 17-APR-22	PM10 23-APR-22	PM10 29-APR-22	PM10 5-MAY-22	RDL	QC Batch
Particulate	ug/m3	3.6	4.0	5.4	6.2	1.2	8018816
Particulate Weight on Filter	ug	88 (1)	95 (1)	131	150	30	8029934
Volume	m3	24.03	24.03	24.03	24.03	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Negative result observed

Bureau Veritas ID		SSM965		SSM966			SSM967	SSM968		
Sampling Date		2022/05/11		2022/04/17			2022/04/23	2022/04/29		
COC Number		n/a		n/a			n/a	n/a		
	UNITS	PM10 11-MAY-22	RDL	TSP 17-APR-22	RDL	QC Batch	TSP 23-APR-22	TSP 29-APR-22	RDL	QC Batch
Particulate	ug/m3	<12	12	<6.2	6.2	8018815	7.20	5.41	0.62	8018816
Particulate Weight on Filter	mg	<0.3 (1)	0.3	<0.3 (1)	0.3	8029937				
Particulate Weight on Filter	ug						346	260	30	8029934
Volume	m3	24.03	N/A	48.03	N/A	ONSITE	48.05	48.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Negative result observed

Bureau Veritas ID		SSM969	SSM970		
Sampling Date		2022/05/05	2022/05/11		
COC Number		n/a	n/a		
	UNITS	TSP 5-MAY-22	TSP 11-MAY-22	RDL	QC Batch
Particulate	ug/m3	<6.2	<6.2	6.2	8018815
Particulate Weight on Filter	mg	<0.3 (1)	<0.3 (1)	0.3	8029937
Volume	m3	48.05	48.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Negative result observed

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2E3137
Report Date: 2022/06/09

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SSM966	SSM967	SSM968	SSM969	SSM970		
Sampling Date		2022/04/17	2022/04/23	2022/04/29	2022/05/05	2022/05/11		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP 17-APR-22	TSP 23-APR-22	TSP 29-APR-22	TSP 5-MAY-22	TSP 11-MAY-22	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug/m3	0.45	<0.042	0.051	0.10	0.14	0.042	8018823
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8018823
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8018823
Total Barium (Ba)	ug/m3	<0.0010	<0.0010	<0.0010	0.011	0.012	0.0010	8018823
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8018823
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8018823
Total Boron (B)	ug/m3	<0.021	<0.021	<0.021	<0.021	<0.021	0.021	8018823
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8018823
Total Calcium (Ca)	ug/m3	<0.10	0.17	0.12	0.20	0.38	0.10	8018823
Total Chromium (Cr)	ug/m3	0.0026	0.0014	0.0011	0.0011	<0.0010	0.0010	8018823
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8018823
Total Copper (Cu)	ug/m3	0.0029	0.0021	0.0013	0.0041	0.0024	0.00062	8018823
Total Iron (Fe)	ug/m3	<0.10	<0.10	<0.10	0.14	0.17	0.10	8018823
Total Lead (Pb)	ug/m3	0.0014	0.0022	0.00098	0.0028	0.0019	0.00062	8018823
Total Magnesium (Mg)	ug/m3	0.025	0.033	0.028	0.072	0.10	0.021	8018823
Total Manganese (Mn)	ug/m3	0.0012	0.0018	0.0014	0.0034	0.0057	0.0010	8018823
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8018823
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8018823
Total Potassium (K)	ug/m3	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8018823
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8018823
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8018823
Total Sodium (Na)	ug/m3	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8018823
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	0.0020	0.0010	8018823
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8018823
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	0.00077	0.00062	8018823
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	<0.0021	0.0040	0.0050	0.0021	8018823
Total Uranium (U)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8018823
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8018823
Total Zinc (Zn)	ug/m3	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8018823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Bureau Veritas Job #: C2E3137
Report Date: 2022/06/09

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		SSM971		
Sampling Date		2022/05/04		
COC Number		n/a		
	UNITS	**APRIL DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	8.1	1.0	8021980
Soluble Particulate	mg	5.0	1.4	8021981
Charge/Prep Analysis				
Volume of sample	ml	110	1	8021979

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SSM966	SSM967	SSM968	SSM969	SSM970		
Sampling Date		2022/04/17	2022/04/23	2022/04/29	2022/05/05	2022/05/11		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP 17-APR-22	TSP 23-APR-22	TSP 29-APR-22	TSP 5-MAY-22	TSP 11-MAY-22	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug	22	<2.0	2.5	4.8	6.6	2.0	8034924
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Barium (Ba)	ug	<0.050	<0.050	<0.050	0.53	0.56	0.050	8034924
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	8034924
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8034924
Total Calcium (Ca)	ug	<5.0	8.1	5.8	9.8	18	5.0	8034924
Total Chromium (Cr)	ug	0.12	0.069	0.054	0.053	<0.050	0.050	8034924
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Copper (Cu)	ug	0.14	0.099	0.063	0.20	0.12	0.030	8034924
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	6.6	8.0	5.0	8034924
Total Lead (Pb)	ug	0.069	0.11	0.047	0.14	0.090	0.030	8034924
Total Magnesium (Mg)	ug	1.2	1.6	1.4	3.4	5.0	1.0	8034924
Total Manganese (Mn)	ug	0.059	0.085	0.068	0.16	0.27	0.050	8034924
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0025	8037240
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8034924
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8034924
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8034924
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8034924
Total Sodium (Na)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8034924
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	<0.050	0.094	0.050	8034924
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8034924
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	0.037	0.030	8034924
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	0.19	0.24	0.10	8034924
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8034924
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	8034924

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8021980	JNA	Spiked Blank	Insoluble Particulate	2022/05/31		97	%	85 - 115
8021980	JNA	Method Blank	Insoluble Particulate	2022/05/31	<1.0		mg	
8021981	JNA	Spiked Blank	Soluble Particulate	2022/06/01		100	%	85 - 115
8021981	JNA	Method Blank	Soluble Particulate	2022/06/01	<0.20		mg	
8034924	ADA	Matrix Spike [SSM967-01]	Total Aluminum (Al)	2022/06/08		99	%	70 - 130
			Total Antimony (Sb)	2022/06/08		99	%	70 - 130
			Total Arsenic (As)	2022/06/08		99	%	70 - 130
			Total Barium (Ba)	2022/06/08		99	%	70 - 130
			Total Beryllium (Be)	2022/06/08		94	%	70 - 130
			Total Bismuth (Bi)	2022/06/08		101	%	70 - 130
			Total Boron (B)	2022/06/08		92	%	70 - 130
			Total Cadmium (Cd)	2022/06/08		98	%	70 - 130
			Total Calcium (Ca)	2022/06/08		98	%	70 - 130
			Total Chromium (Cr)	2022/06/08		94	%	70 - 130
			Total Cobalt (Co)	2022/06/08		101	%	70 - 130
			Total Copper (Cu)	2022/06/08		97	%	70 - 130
			Total Iron (Fe)	2022/06/08		100	%	70 - 130
			Total Lead (Pb)	2022/06/08		98	%	70 - 130
			Total Magnesium (Mg)	2022/06/08		97	%	70 - 130
			Total Manganese (Mn)	2022/06/08		98	%	70 - 130
			Total Molybdenum (Mo)	2022/06/08		96	%	70 - 130
			Total Nickel (Ni)	2022/06/08		98	%	70 - 130
			Total Phosphorus (P)	2022/06/08		100	%	70 - 130
			Total Potassium (K)	2022/06/08		100	%	70 - 130
			Total Selenium (Se)	2022/06/08		97	%	70 - 130
			Total Silver (Ag)	2022/06/08		104	%	70 - 130
			Total Sodium (Na)	2022/06/08		100	%	70 - 130
			Total Strontium (Sr)	2022/06/08		97	%	70 - 130
			Total Thallium (Tl)	2022/06/08		101	%	70 - 130
			Total Tin (Sn)	2022/06/08		100	%	70 - 130
			Total Titanium (Ti)	2022/06/08		98	%	70 - 130
			Total Uranium (U)	2022/06/08		97	%	70 - 130
			Total Vanadium (V)	2022/06/08		94	%	70 - 130
			Total Zinc (Zn)	2022/06/08		94	%	70 - 130
8034924	ADA	RPD [SSM967-01]	Total Aluminum (Al)	2022/06/08	5.0		%	20
			Total Antimony (Sb)	2022/06/08	0.90		%	20
			Total Arsenic (As)	2022/06/08	1.1		%	20
			Total Barium (Ba)	2022/06/08	2.2		%	20
			Total Beryllium (Be)	2022/06/08	3.0		%	20
			Total Bismuth (Bi)	2022/06/08	0.67		%	20
			Total Boron (B)	2022/06/08	0.84		%	20
			Total Cadmium (Cd)	2022/06/08	0.14		%	20
			Total Calcium (Ca)	2022/06/08	2.1		%	20
			Total Chromium (Cr)	2022/06/08	0.032		%	20
			Total Cobalt (Co)	2022/06/08	0.47		%	20
			Total Copper (Cu)	2022/06/08	4.9		%	20
			Total Iron (Fe)	2022/06/08	0.62		%	20
			Total Lead (Pb)	2022/06/08	0.19		%	20
			Total Magnesium (Mg)	2022/06/08	0.088		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Manganese (Mn)	2022/06/08	0.39		%	20
			Total Molybdenum (Mo)	2022/06/08	0.91		%	20
			Total Nickel (Ni)	2022/06/08	1.7		%	20
			Total Phosphorus (P)	2022/06/08	2.2		%	20
			Total Potassium (K)	2022/06/08	0.33		%	20
			Total Selenium (Se)	2022/06/08	0.20		%	20
			Total Silver (Ag)	2022/06/08	0.37		%	20
			Total Sodium (Na)	2022/06/08	0.15		%	20
			Total Strontium (Sr)	2022/06/08	0.95		%	20
			Total Thallium (Tl)	2022/06/08	2.3		%	20
			Total Tin (Sn)	2022/06/08	0.75		%	20
			Total Titanium (Ti)	2022/06/08	0.88		%	20
			Total Uranium (U)	2022/06/08	2.3		%	20
			Total Vanadium (V)	2022/06/08	0.60		%	20
			Total Zinc (Zn)	2022/06/08	0.90		%	20
			Total Aluminum (Al)	2022/06/08	NC		%	20
			Total Antimony (Sb)	2022/06/08	NC		%	20
			Total Arsenic (As)	2022/06/08	NC		%	20
			Total Barium (Ba)	2022/06/08	NC		%	20
			Total Beryllium (Be)	2022/06/08	NC		%	20
			Total Bismuth (Bi)	2022/06/08	NC		%	20
			Total Boron (B)	2022/06/08	NC		%	20
			Total Cadmium (Cd)	2022/06/08	NC		%	20
			Total Calcium (Ca)	2022/06/08	14		%	20
			Total Chromium (Cr)	2022/06/08	4.4		%	20
			Total Cobalt (Co)	2022/06/08	NC		%	20
			Total Copper (Cu)	2022/06/08	3.6		%	20
			Total Iron (Fe)	2022/06/08	NC		%	20
			Total Lead (Pb)	2022/06/08	0.58		%	20
			Total Magnesium (Mg)	2022/06/08	1.1		%	20
			Total Manganese (Mn)	2022/06/08	8.6		%	20
			Total Molybdenum (Mo)	2022/06/08	NC		%	20
			Total Nickel (Ni)	2022/06/08	NC		%	20
			Total Phosphorus (P)	2022/06/08	NC		%	20
			Total Potassium (K)	2022/06/08	NC		%	20
			Total Selenium (Se)	2022/06/08	NC		%	20
			Total Silver (Ag)	2022/06/08	NC		%	20
			Total Sodium (Na)	2022/06/08	NC		%	20
			Total Strontium (Sr)	2022/06/08	NC		%	20
			Total Thallium (Tl)	2022/06/08	NC		%	20
			Total Tin (Sn)	2022/06/08	NC		%	20
			Total Titanium (Ti)	2022/06/08	NC		%	20
			Total Uranium (U)	2022/06/08	NC		%	20
			Total Vanadium (V)	2022/06/08	NC		%	20
			Total Zinc (Zn)	2022/06/08	NC		%	20
8034924	ADA	Spiked Blank	Total Aluminum (Al)	2022/06/08		98	%	85 - 115
			Total Antimony (Sb)	2022/06/08		93	%	85 - 115
			Total Arsenic (As)	2022/06/08		97	%	85 - 115
			Total Barium (Ba)	2022/06/08		99	%	85 - 115

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Beryllium (Be)	2022/06/08		92	%	85 - 115
			Total Bismuth (Bi)	2022/06/08		98	%	85 - 115
			Total Boron (B)	2022/06/08		93	%	85 - 115
			Total Cadmium (Cd)	2022/06/08		97	%	85 - 115
			Total Calcium (Ca)	2022/06/08		101	%	85 - 115
			Total Chromium (Cr)	2022/06/08		93	%	85 - 115
			Total Cobalt (Co)	2022/06/08		99	%	85 - 115
			Total Copper (Cu)	2022/06/08		97	%	85 - 115
			Total Iron (Fe)	2022/06/08		101	%	85 - 115
			Total Lead (Pb)	2022/06/08		98	%	85 - 115
			Total Magnesium (Mg)	2022/06/08		98	%	85 - 115
			Total Manganese (Mn)	2022/06/08		96	%	85 - 115
			Total Molybdenum (Mo)	2022/06/08		92	%	85 - 115
			Total Nickel (Ni)	2022/06/08		98	%	85 - 115
			Total Phosphorus (P)	2022/06/08		105	%	85 - 115
			Total Potassium (K)	2022/06/08		99	%	85 - 115
			Total Selenium (Se)	2022/06/08		98	%	85 - 115
			Total Silver (Ag)	2022/06/08		101	%	85 - 115
			Total Sodium (Na)	2022/06/08		100	%	85 - 115
			Total Strontium (Sr)	2022/06/08		95	%	85 - 115
			Total Thallium (Tl)	2022/06/08		97	%	85 - 115
			Total Tin (Sn)	2022/06/08		98	%	85 - 115
			Total Titanium (Ti)	2022/06/08		93	%	85 - 115
			Total Uranium (U)	2022/06/08		98	%	85 - 115
			Total Vanadium (V)	2022/06/08		93	%	85 - 115
			Total Zinc (Zn)	2022/06/08		94	%	85 - 115
8034924	ADA	RPD	Total Aluminum (Al)	2022/06/08	1.8		%	20
			Total Antimony (Sb)	2022/06/08	3.2		%	20
			Total Arsenic (As)	2022/06/08	0.085		%	20
			Total Barium (Ba)	2022/06/08	2.0		%	20
			Total Beryllium (Be)	2022/06/08	1.2		%	20
			Total Bismuth (Bi)	2022/06/08	0.18		%	20
			Total Boron (B)	2022/06/08	1.0		%	20
			Total Cadmium (Cd)	2022/06/08	0.71		%	20
			Total Calcium (Ca)	2022/06/08	4.5		%	20
			Total Chromium (Cr)	2022/06/08	0.33		%	20
			Total Cobalt (Co)	2022/06/08	0.99		%	20
			Total Copper (Cu)	2022/06/08	3.3		%	20
			Total Iron (Fe)	2022/06/08	3.5		%	20
			Total Lead (Pb)	2022/06/08	1.6		%	20
			Total Magnesium (Mg)	2022/06/08	0.44		%	20
			Total Manganese (Mn)	2022/06/08	0.45		%	20
			Total Molybdenum (Mo)	2022/06/08	1.1		%	20
			Total Nickel (Ni)	2022/06/08	0.29		%	20
			Total Phosphorus (P)	2022/06/08	2.1		%	20
			Total Potassium (K)	2022/06/08	3.0		%	20
			Total Selenium (Se)	2022/06/08	2.7		%	20
			Total Silver (Ag)	2022/06/08	1.5		%	20
			Total Sodium (Na)	2022/06/08	2.0		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Strontium (Sr)	2022/06/08	1.3		%	20
			Total Thallium (Tl)	2022/06/08	0.93		%	20
			Total Tin (Sn)	2022/06/08	1.3		%	20
			Total Titanium (Ti)	2022/06/08	0.25		%	20
			Total Uranium (U)	2022/06/08	1.5		%	20
			Total Vanadium (V)	2022/06/08	0.37		%	20
			Total Zinc (Zn)	2022/06/08	0.37		%	20
8034924	ADA	Method Blank	Total Aluminum (Al)	2022/06/08	<2.0		ug	
			Total Antimony (Sb)	2022/06/08	<0.050		ug	
			Total Arsenic (As)	2022/06/08	<0.050		ug	
			Total Barium (Ba)	2022/06/08	<0.050		ug	
			Total Beryllium (Be)	2022/06/08	<0.030		ug	
			Total Bismuth (Bi)	2022/06/08	<0.050		ug	
			Total Boron (B)	2022/06/08	<1.0		ug	
			Total Cadmium (Cd)	2022/06/08	<0.010		ug	
			Total Calcium (Ca)	2022/06/08	<5.0		ug	
			Total Chromium (Cr)	2022/06/08	<0.050		ug	
			Total Cobalt (Co)	2022/06/08	<0.030		ug	
			Total Copper (Cu)	2022/06/08	<0.030		ug	
			Total Iron (Fe)	2022/06/08	<5.0		ug	
			Total Lead (Pb)	2022/06/08	<0.030		ug	
			Total Magnesium (Mg)	2022/06/08	<1.0		ug	
			Total Manganese (Mn)	2022/06/08	<0.050		ug	
			Total Molybdenum (Mo)	2022/06/08	<0.030		ug	
			Total Nickel (Ni)	2022/06/08	<0.050		ug	
			Total Phosphorus (P)	2022/06/08	<5.0		ug	
			Total Potassium (K)	2022/06/08	<5.0		ug	
			Total Selenium (Se)	2022/06/08	<0.10		ug	
			Total Silver (Ag)	2022/06/08	<0.010		ug	
			Total Sodium (Na)	2022/06/08	<5.0		ug	
			Total Strontium (Sr)	2022/06/08	<0.050		ug	
			Total Thallium (Tl)	2022/06/08	<0.010		ug	
			Total Tin (Sn)	2022/06/08	<0.030		ug	
			Total Titanium (Ti)	2022/06/08	<0.10		ug	
			Total Uranium (U)	2022/06/08	<0.010		ug	
			Total Vanadium (V)	2022/06/08	<0.030		ug	
			Total Zinc (Zn)	2022/06/08	<0.50		ug	
8037240	GR1	Spiked Blank	Acid Extractable Mercury (Hg)	2022/06/08		96	%	90 - 110
8037240	GR1	RPD	Acid Extractable Mercury (Hg)	2022/06/08	0.42		%	20
8037240	GR1	Method Blank	Acid Extractable Mercury (Hg)	2022/06/08	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2E3137
Report Date: 2022/06/09

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Brenda Moore, Team Lead, Inorganic

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/06/09
Report #: R7158281
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2E3137
Received: 2022/05/26, 12:09

Sample Matrix: Filter
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	5	2022/06/07	2022/06/08	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	5	2022/05/26	2022/06/02	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	5	2022/06/06	2022/06/08	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Total Particulate	4	N/A	2022/06/01	BRL SOP-00109	Method IO-3.1
Particulates on Lo-Vol Filters	4	N/A	2022/06/02		
Particulate Calculation	6	N/A	2022/06/02	BRL SOP-00109	EPA IO-2mod
Total Particulate	6	N/A	2022/06/01	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	10	N/A	2022/05/26		

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Insoluble Part. in Dustfall (D1739mod)	1	2022/05/30	2022/05/31	BRL SOP-00121	ASTM D1739 m
Soluble Part. in Dustfall (D1739mod)	1	2022/05/30	2022/06/01	BRL SOP-00121	ASTM D1739 m
Volume of Sample Received	1	2022/05/30	2022/05/30		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report.

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Your P.O. #: SEE SITE LOCATION
Your Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville, ON
CANADA L6H 6X7

Report Date: 2022/06/09
Report #: R7158281
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2E3137
Received: 2022/05/26, 12:09

Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
==========
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For Service Group specific validation please refer to the Validation Signature Page.

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2E3137
Report Date: 2022/06/09

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		SSM961	SSM962	SSM963	SSM964		
Sampling Date		2022/04/17	2022/04/23	2022/04/29	2022/05/05		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	PM10 17-APR-22	PM10 23-APR-22	PM10 29-APR-22	PM10 5-MAY-22	RDL	QC Batch
Particulate	ug/m3	3.6	4.0	5.4	6.2	1.2	8018816
Particulate Weight on Filter	ug	88 (1)	95 (1)	131	150	30	8029934
Volume	m3	24.03	24.03	24.03	24.03	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Negative result observed

Bureau Veritas ID		SSM965		SSM966			SSM967	SSM968		
Sampling Date		2022/05/11		2022/04/17			2022/04/23	2022/04/29		
COC Number		n/a		n/a			n/a	n/a		
	UNITS	PM10 11-MAY-22	RDL	TSP 17-APR-22	RDL	QC Batch	TSP 23-APR-22	TSP 29-APR-22	RDL	QC Batch
Particulate	ug/m3	<12	12	<6.2	6.2	8018815	7.20	5.41	0.62	8018816
Particulate Weight on Filter	mg	<0.3 (1)	0.3	<0.3 (1)	0.3	8029937	N/A	N/A	N/A	N/A
Particulate Weight on Filter	ug	N/A	N/A	N/A	N/A	N/A	346	260	30	8029934
Volume	m3	24.03	N/A	48.03	N/A	ONSITE	48.05	48.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Negative result observed

Bureau Veritas ID		SSM969	SSM970		
Sampling Date		2022/05/05	2022/05/11		
COC Number		n/a	n/a		
	UNITS	TSP 5-MAY-22	TSP 11-MAY-22	RDL	QC Batch
Particulate	ug/m3	<6.2	<6.2	6.2	8018815
Particulate Weight on Filter	mg	<0.3 (1)	<0.3 (1)	0.3	8029937
Volume	m3	48.05	48.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Negative result observed

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ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SSM966	SSM967	SSM967	SSM968	SSM969		
Sampling Date		2022/04/17	2022/04/23	2022/04/23	2022/04/29	2022/05/05		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP 17-APR-22	TSP 23-APR-22	TSP 23-APR-22 Lab-Dup	TSP 29-APR-22	TSP 5-MAY-22	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug	22	<2.0	<2.0	2.5	4.8	2.0	8034924
Total Aluminum (Al)	ug/m3	0.45	<0.042	N/A	0.051	0.10	0.042	8018823
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	N/A	<0.0010	<0.0010	0.0010	8018823
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	N/A	<0.0010	<0.0010	0.0010	8018823
Total Barium (Ba)	ug	<0.050	<0.050	<0.050	<0.050	0.53	0.050	8034924
Total Barium (Ba)	ug/m3	<0.0010	<0.0010	N/A	<0.0010	0.011	0.0010	8018823
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	N/A	<0.00062	<0.00062	0.00062	8018823
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	N/A	<0.0010	<0.0010	0.0010	8018823
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	8034924
Total Boron (B)	ug/m3	<0.021	<0.021	N/A	<0.021	<0.021	0.021	8018823
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8034924
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	N/A	<0.00021	<0.00021	0.00021	8018823
Total Calcium (Ca)	ug	<5.0	8.1	7.1	5.8	9.8	5.0	8034924
Total Calcium (Ca)	ug/m3	<0.10	0.17	N/A	0.12	0.20	0.10	8018823
Total Chromium (Cr)	ug	0.12	0.069	0.072	0.054	0.053	0.050	8034924
Total Chromium (Cr)	ug/m3	0.0026	0.0014	N/A	0.0011	0.0011	0.0010	8018823
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	N/A	<0.00062	<0.00062	0.00062	8018823
Total Copper (Cu)	ug	0.14	0.099	0.095	0.063	0.20	0.030	8034924
Total Copper (Cu)	ug/m3	0.0029	0.0021	N/A	0.0013	0.0041	0.00062	8018823
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	<5.0	6.6	5.0	8034924
Total Iron (Fe)	ug/m3	<0.10	<0.10	N/A	<0.10	0.14	0.10	8018823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SSM966	SSM967	SSM967	SSM968	SSM969		
Sampling Date		2022/04/17	2022/04/23	2022/04/23	2022/04/29	2022/05/05		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP 17-APR-22	TSP 23-APR-22	TSP 23-APR-22 Lab-Dup	TSP 29-APR-22	TSP 5-MAY-22	RDL	QC Batch
Total Lead (Pb)	ug	0.069	0.11	0.11	0.047	0.14	0.030	8034924
Total Lead (Pb)	ug/m3	0.0014	0.0022	N/A	0.00098	0.0028	0.00062	8018823
Total Magnesium (Mg)	ug	1.2	1.6	1.6	1.4	3.4	1.0	8034924
Total Magnesium (Mg)	ug/m3	0.025	0.033	N/A	0.028	0.072	0.021	8018823
Total Manganese (Mn)	ug	0.059	0.085	0.078	0.068	0.16	0.050	8034924
Total Manganese (Mn)	ug/m3	0.0012	0.0018	N/A	0.0014	0.0034	0.0010	8018823
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	N/A	<0.0025	<0.0025	0.0025	8037240
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	N/A	<0.00062	<0.00062	0.00062	8018823
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	N/A	<0.0010	<0.0010	0.0010	8018823
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8034924
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8034924
Total Potassium (K)	ug/m3	<0.10	<0.10	N/A	<0.10	<0.10	0.10	8018823
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8034924
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	N/A	<0.0021	<0.0021	0.0021	8018823
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8034924
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	N/A	<0.00021	<0.00021	0.00021	8018823
Total Sodium (Na)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8034924
Total Sodium (Na)	ug/m3	<0.10	<0.10	N/A	<0.10	<0.10	0.10	8018823
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8034924
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	N/A	<0.0010	<0.0010	0.0010	8018823
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8034924
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	N/A	<0.00021	<0.00021	0.00021	8018823
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	N/A	<0.00062	<0.00062	0.00062	8018823
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	<0.10	0.19	0.10	8034924

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas Job #: C2E3137
Report Date: 2022/06/09

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SSM966	SSM967	SSM967	SSM968	SSM969		
Sampling Date		2022/04/17	2022/04/23	2022/04/23	2022/04/29	2022/05/05		
COC Number		n/a	n/a	n/a	n/a	n/a		
	UNITS	**TSP 17-APR-22**	**TSP 23-APR-22**	**TSP 23-APR-22 Lab-Dup**	**TSP 29-APR-22**	**TSP 5-MAY-22**	**RDL**	**QC Batch**
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	N/A	<0.0021	0.0040	0.0021	8018823
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8034924
Total Uranium (U)	ug/m3	<0.00021	<0.00021	N/A	<0.00021	<0.00021	0.00021	8018823
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8034924
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	N/A	<0.00062	<0.00062	0.00062	8018823
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	8034924
Total Zinc (Zn)	ug/m3	<0.010	<0.010	N/A	<0.010	<0.010	0.010	8018823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SSM970		
Sampling Date		2022/05/11		
COC Number		n/a		
	UNITS	**TSP 11-MAY-22**	**RDL**	**QC Batch**
Metals				
Total Aluminum (Al)	ug	6.6	2.0	8034924
Total Aluminum (Al)	ug/m3	0.14	0.042	8018823
Total Antimony (Sb)	ug	<0.050	0.050	8034924
Total Antimony (Sb)	ug/m3	<0.0010	0.0010	8018823
Total Arsenic (As)	ug	<0.050	0.050	8034924
Total Arsenic (As)	ug/m3	<0.0010	0.0010	8018823
Total Barium (Ba)	ug	0.56	0.050	8034924
Total Barium (Ba)	ug/m3	0.012	0.0010	8018823
Total Beryllium (Be)	ug	<0.030	0.030	8034924
Total Beryllium (Be)	ug/m3	<0.00062	0.00062	8018823
Total Bismuth (Bi)	ug	<0.050	0.050	8034924
Total Bismuth (Bi)	ug/m3	<0.0010	0.0010	8018823
Total Boron (B)	ug	<1.0	1.0	8034924
Total Boron (B)	ug/m3	<0.021	0.021	8018823
Total Cadmium (Cd)	ug	<0.010	0.010	8034924
Total Cadmium (Cd)	ug/m3	<0.00021	0.00021	8018823
Total Calcium (Ca)	ug	18	5.0	8034924
Total Calcium (Ca)	ug/m3	0.38	0.10	8018823
Total Chromium (Cr)	ug	<0.050	0.050	8034924
Total Chromium (Cr)	ug/m3	<0.0010	0.0010	8018823
Total Cobalt (Co)	ug	<0.030	0.030	8034924
Total Cobalt (Co)	ug/m3	<0.00062	0.00062	8018823
Total Copper (Cu)	ug	0.12	0.030	8034924
Total Copper (Cu)	ug/m3	0.0024	0.00062	8018823
Total Iron (Fe)	ug	8.0	5.0	8034924
Total Iron (Fe)	ug/m3	0.17	0.10	8018823
Total Lead (Pb)	ug	0.090	0.030	8034924
Total Lead (Pb)	ug/m3	0.0019	0.00062	8018823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SSM970		
Sampling Date		2022/05/11		
COC Number		n/a		
	UNITS	**TSP 11-MAY-22**	**RDL**	**QC Batch**
Total Magnesium (Mg)	ug	5.0	1.0	8034924
Total Magnesium (Mg)	ug/m3	0.10	0.021	8018823
Total Manganese (Mn)	ug	0.27	0.050	8034924
Total Manganese (Mn)	ug/m3	0.0057	0.0010	8018823
Acid Extractable Mercury (Hg)	ug	<0.0025	0.0025	8037240
Total Molybdenum (Mo)	ug	<0.030	0.030	8034924
Total Molybdenum (Mo)	ug/m3	<0.00062	0.00062	8018823
Total Nickel (Ni)	ug	<0.050	0.050	8034924
Total Nickel (Ni)	ug/m3	<0.0010	0.0010	8018823
Total Phosphorus (P)	ug	<5.0	5.0	8034924
Total Potassium (K)	ug	<5.0	5.0	8034924
Total Potassium (K)	ug/m3	<0.10	0.10	8018823
Total Selenium (Se)	ug	<0.10	0.10	8034924
Total Selenium (Se)	ug/m3	<0.0021	0.0021	8018823
Total Silver (Ag)	ug	<0.010	0.010	8034924
Total Silver (Ag)	ug/m3	<0.00021	0.00021	8018823
Total Sodium (Na)	ug	<5.0	5.0	8034924
Total Sodium (Na)	ug/m3	<0.10	0.10	8018823
Total Strontium (Sr)	ug	0.094	0.050	8034924
Total Strontium (Sr)	ug/m3	0.0020	0.0010	8018823
Total Thallium (Tl)	ug	<0.010	0.010	8034924
Total Thallium (Tl)	ug/m3	<0.00021	0.00021	8018823
Total Tin (Sn)	ug	0.037	0.030	8034924
Total Tin (Sn)	ug/m3	0.00077	0.00062	8018823
Total Titanium (Ti)	ug	0.24	0.10	8034924
Total Titanium (Ti)	ug/m3	0.0050	0.0021	8018823
Total Uranium (U)	ug	<0.010	0.010	8034924
Total Uranium (U)	ug/m3	<0.00021	0.00021	8018823
Total Vanadium (V)	ug	<0.030	0.030	8034924

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		SSM970		
Sampling Date		2022/05/11		
COC Number		n/a		
	UNITS	**TSP 11-MAY-22**	**RDL**	**QC Batch**
Total Vanadium (V)	ug/m3	<0.00062	0.00062	8018823
Total Zinc (Zn)	ug	<0.50	0.50	8034924
Total Zinc (Zn)	ug/m3	<0.010	0.010	8018823

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas Job #: C2E3137
Report Date: 2022/06/09

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		SSM971		
Sampling Date		2022/05/04		
COC Number		n/a		
	UNITS	**APRIL DUSTFALL**	**RDL**	**QC Batch**
Insoluble Particulate	mg	8.1	1.0	8021980
Soluble Particulate	mg	5.0	1.4	8021981
Charge/Prep Analysis				
Volume of sample	ml	110	1	8021979

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TEST SUMMARY

Bureau Veritas ID: SSM961 **Collected:** 2022/04/17
Sample ID: PM10 17-APR-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8018816	N/A	2022/06/02	Automated Statchk
Total Particulate	BAL	8029934	N/A	2022/06/01	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Bureau Veritas ID: SSM962 **Collected:** 2022/04/23
Sample ID: PM10 23-APR-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8018816	N/A	2022/06/02	Automated Statchk
Total Particulate	BAL	8029934	N/A	2022/06/01	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Bureau Veritas ID: SSM963 **Collected:** 2022/04/29
Sample ID: PM10 29-APR-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8018816	N/A	2022/06/02	Automated Statchk
Total Particulate	BAL	8029934	N/A	2022/06/01	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Bureau Veritas ID: SSM964 **Collected:** 2022/05/05
Sample ID: PM10 5-MAY-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8018816	N/A	2022/06/02	Automated Statchk
Total Particulate	BAL	8029934	N/A	2022/06/01	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Bureau Veritas ID: SSM965 **Collected:** 2022/05/11
Sample ID: PM10 11-MAY-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Particulate	BAL	8029937	N/A	2022/06/01	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	8018815	N/A	2022/06/02	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: SSM966 **Collected:** 2022/04/17
Sample ID: TSP 17-APR-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8037240	2022/06/07	2022/06/08	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8018823	2022/06/02	2022/06/02	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8034924	2022/06/06	2022/06/08	Arefa Dabhad
Total Particulate	BAL	8029937	N/A	2022/06/01	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	8018815	N/A	2022/06/02	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Bureau Veritas ID: SSM967 **Collected:** 2022/04/23
Sample ID: TSP 23-APR-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8037240	2022/06/07	2022/06/08	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8018823	2022/06/02	2022/06/02	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8034924	2022/06/06	2022/06/08	Arefa Dabhad
Particulate Calculation	CALC	8018816	N/A	2022/06/02	Automated Statchk
Total Particulate	BAL	8029934	N/A	2022/06/01	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Bureau Veritas ID: SSM967 Dup **Collected:** 2022/04/23
Sample ID: TSP 23-APR-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8034924	2022/06/06	2022/06/08	Arefa Dabhad

Bureau Veritas ID: SSM968 **Collected:** 2022/04/29
Sample ID: TSP 29-APR-22 **Shipped:**
Matrix: Filter **Received:** 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8037240	2022/06/07	2022/06/08	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8018823	2022/06/02	2022/06/02	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8034924	2022/06/06	2022/06/08	Arefa Dabhad
Particulate Calculation	CALC	8018816	N/A	2022/06/02	Automated Statchk
Total Particulate	BAL	8029934	N/A	2022/06/01	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2E3137
Report Date: 2022/06/09

Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited
Client Project #: OMEMA2002.2021E.100*.5120.5730
Site Location: OMEMA2002.2021E.100*.5120.573000
Your P.O. #: SEE SITE LOCATION
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: SSM969
Sample ID: TSP 5-MAY-22
Matrix: Filter
Collected: 2022/05/05
Shipped:
Received: 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8037240	2022/06/07	2022/06/08	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8018823	2022/06/02	2022/06/02	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8034924	2022/06/06	2022/06/08	Arefa Dabhad
Total Particulate	BAL	8029937	N/A	2022/06/01	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	8018815	N/A	2022/06/02	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Bureau Veritas ID: SSM970
Sample ID: TSP 11-MAY-22
Matrix: Filter
Collected: 2022/05/11
Shipped:
Received: 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8037240	2022/06/07	2022/06/08	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8018823	2022/06/02	2022/06/02	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8034924	2022/06/06	2022/06/08	Arefa Dabhad
Total Particulate	BAL	8029937	N/A	2022/06/01	Nancy Dhir
Particulates on Lo-Vol Filters	CALC	8018815	N/A	2022/06/02	Automated Statchk
Air Volume from LoVol Sampling		ONSITE	N/A	2022/05/26	Trushna Patel

Bureau Veritas ID: SSM971
Sample ID: APRIL DUSTFALL
Matrix: Water
Collected: 2022/05/04
Shipped:
Received: 2022/05/26

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Insoluble Part. in Dustfall (D1739mod)	BAL	8021980	2022/05/30	2022/05/31	Joseph-Noel Andres
Soluble Part. in Dustfall (D1739mod)	BAL	8021981	2022/05/30	2022/06/01	Joseph-Noel Andres
Volume of Sample Received		8021979	2022/05/30	2022/05/30	Joseph-Noel Andres

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8021980	Insoluble Particulate	2022/05/31			97	85 - 115	<1.0	mg		
8021981	Soluble Particulate	2022/06/01			100	85 - 115	<0.20	mg		
8034924	Total Aluminum (Al)	2022/06/08	99 (1)	70 - 130	98	85 - 115	<2.0	ug	NC (3)	20
8034924	Total Antimony (Sb)	2022/06/08	99 (1)	70 - 130	93	85 - 115	<0.050	ug	NC (3)	20
8034924	Total Arsenic (As)	2022/06/08	99 (1)	70 - 130	97	85 - 115	<0.050	ug	NC (3)	20
8034924	Total Barium (Ba)	2022/06/08	99 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20
8034924	Total Beryllium (Be)	2022/06/08	94 (1)	70 - 130	92	85 - 115	<0.030	ug	NC (3)	20
8034924	Total Bismuth (Bi)	2022/06/08	101 (1)	70 - 130	98	85 - 115	<0.050	ug	NC (3)	20
8034924	Total Boron (B)	2022/06/08	92 (1)	70 - 130	93	85 - 115	<1.0	ug	NC (3)	20
8034924	Total Cadmium (Cd)	2022/06/08	98 (1)	70 - 130	97	85 - 115	<0.010	ug	NC (3)	20
8034924	Total Calcium (Ca)	2022/06/08	98 (1)	70 - 130	101	85 - 115	<5.0	ug	14 (3)	20
8034924	Total Chromium (Cr)	2022/06/08	94 (1)	70 - 130	93	85 - 115	<0.050	ug	4.4 (3)	20
8034924	Total Cobalt (Co)	2022/06/08	101 (1)	70 - 130	99	85 - 115	<0.030	ug	NC (3)	20
8034924	Total Copper (Cu)	2022/06/08	97 (1)	70 - 130	97	85 - 115	<0.030	ug	3.6 (3)	20
8034924	Total Iron (Fe)	2022/06/08	100 (1)	70 - 130	101	85 - 115	<5.0	ug	NC (3)	20
8034924	Total Lead (Pb)	2022/06/08	98 (1)	70 - 130	98	85 - 115	<0.030	ug	0.58 (3)	20
8034924	Total Magnesium (Mg)	2022/06/08	97 (1)	70 - 130	98	85 - 115	<1.0	ug	1.1 (3)	20
8034924	Total Manganese (Mn)	2022/06/08	98 (1)	70 - 130	96	85 - 115	<0.050	ug	8.6 (3)	20
8034924	Total Molybdenum (Mo)	2022/06/08	96 (1)	70 - 130	92	85 - 115	<0.030	ug	NC (3)	20
8034924	Total Nickel (Ni)	2022/06/08	98 (1)	70 - 130	98	85 - 115	<0.050	ug	NC (3)	20
8034924	Total Phosphorus (P)	2022/06/08	100 (1)	70 - 130	105	85 - 115	<5.0	ug	NC (3)	20
8034924	Total Potassium (K)	2022/06/08	100 (1)	70 - 130	99	85 - 115	<5.0	ug	NC (3)	20
8034924	Total Selenium (Se)	2022/06/08	97 (1)	70 - 130	98	85 - 115	<0.10	ug	NC (3)	20
8034924	Total Silver (Ag)	2022/06/08	104 (1)	70 - 130	101	85 - 115	<0.010	ug	NC (3)	20
8034924	Total Sodium (Na)	2022/06/08	100 (1)	70 - 130	100	85 - 115	<5.0	ug	NC (3)	20
8034924	Total Strontium (Sr)	2022/06/08	97 (1)	70 - 130	95	85 - 115	<0.050	ug	NC (3)	20
8034924	Total Thallium (Tl)	2022/06/08	101 (1)	70 - 130	97	85 - 115	<0.010	ug	NC (3)	20
8034924	Total Tin (Sn)	2022/06/08	100 (1)	70 - 130	98	85 - 115	<0.030	ug	NC (3)	20
8034924	Total Titanium (Ti)	2022/06/08	98 (1)	70 - 130	93	85 - 115	<0.10	ug	NC (3)	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8034924	Total Uranium (U)	2022/06/08	97 (1)	70 - 130	98	85 - 115	<0.010	ug	NC (3)	20
8034924	Total Vanadium (V)	2022/06/08	94 (1)	70 - 130	93	85 - 115	<0.030	ug	NC (3)	20
8034924	Total Zinc (Zn)	2022/06/08	94 (1)	70 - 130	94	85 - 115	<0.50	ug	NC (3)	20
8037240	Acid Extractable Mercury (Hg)	2022/06/08			96	90 - 110	<0.0025	ug	0.42 (2)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [SSM967-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [SSM967-01]

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Brenda Moore, Team Lead, Inorganic

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AIR

CAM FCD-01302 /3

BUREAU VERITAS

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www.bvlabs.com

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Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON
Phone: 905-568-2929 Fax:

SECTION

Sampled by: AG

ANALYSIS REQUESTED

26-May-22 12:09
Gina Baybayan
C2E3137
RIM AIR-RmTmp

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
PM10	17-Apr-22	Teflon	24.03	93602321	17-Apr-22			X		
PM10	23-Apr-22	Teflon	24.03	93602323	23-Apr-22			X		
PM10	29-Apr-22	Teflon	24.03	93602325	29-Apr-22			X		
PM10	5-May-22	Teflon	24.03	93602324	5-May-22			X		
PM10	11-May-22	Quartz	24.03	22021816	11-May-22			X		

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #: OMEMA2002.2021E.100*.5120.573000
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

filters torn after sampling

Client Signature:
Affiliation:
Date/Time: 26-May 12:07

Received by:
Affiliation:
Date/Time: 26MAY26 1209

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Fax: (905) 817-5777

CAM FCD-01302 /3

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON
Phone: 905-568-2929 Fax:
Sampled by: AG

SECTION

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP	17-Apr-22	Quartz	48.03	21102175	17-Apr-22		X		X	X
TSP	23-Apr-22	Teflon	48.05	93602322	23-Apr-22		X		X	X
TSP	29-Apr-22	Teflon	48.05	93602326	29-Apr-22		X		X	X
TSP	5-May-22	Quartz	48.05	22021811	5-May-22		X		X	X
TSP	11-May-22	Quartz	48.05	22021815	11-May-22		X		X	X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #:
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

filters torn after sampling

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 1709

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AIR

CAM FCD-01302/3

Page 2 of 3

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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Dustfall*
April Dustfall			April 4 - May 4					X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*.5120.573000
Name:
PO #: OMEMA2002.2021E.100*.5120.573000
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 12/09

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Your C.O.C. #: N/A

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/08/19
Report #: R7260389
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2L3111
Received: 2022/07/28, 16:03

Sample Matrix: Filter
Samples Received: 17

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	11	2022/08/12	2022/08/15	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	11	2022/07/29	2022/08/11	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	11	2022/08/12	2022/08/15	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Total Particulate	2	N/A	2022/08/11	BRL SOP-00109	Method IO-3.1
Particulates on Lo-Vol Filters	2	N/A	2022/08/11		
Particulate Calculation	10	N/A	2022/08/11	BRL SOP-00109	EPA IO-2mod
Total Particulate	10	N/A	2022/08/09	BRL SOP-00109	Mthd IO-3-1
Subcontracting from AT-AMB to BV Novi (1)	5	N/A	N/A		Subcontracting
Air Volume from LoVol Sampling	12	N/A	2022/07/29		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) This test was performed by Bureau Veritas (Novi), 22345 Roethal Dr. , Novi, MI, 48375

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
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Bureau Veritas Job #: C2L3111
Report Date: 2022/08/19

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		THP591	THP592	THP593	THP594	THP595	
Sampling Date		2022/05/23	2022/05/29	2022/06/04	2022/07/04	2022/07/10	
COC Number		N/A	N/A	N/A	N/A	N/A	
	UNITS	PY041322018	PY041322013	PY041322012	PY041322011	PY041322017	QC Batch
Subcontracted Analysis							
Subcontract Parameter	N/A	ATTACHED	ATTACHED	ATTACHED	ATTACHED	ATTACHED	8176313

QC Batch = Quality Control Batch

Bureau Veritas ID		THP596			THP597		THP598			THP599		
Sampling Date		2022/07/16			2022/05/17		2022/05/23			2022/05/29		
COC Number		N/A			N/A		N/A			N/A		
	UNITS	W12500217	RDL	QC Batch	22021813	QC Batch	22021814	RDL	QC Batch	W12500526	RDL	QC Batch
Particulate	ug/m3	12.2	1.2	8139726	<6.2	8139724	<6.2	6.2	8139725	16.1	0.62	8139726
Particulate Weight on Filter	mg				<0.3	8161009	<0.3 (1)	0.3	8161009			
Particulate Weight on Filter	ug	293	30	8160962						775	30	8160962
Volume	m3	24.03	N/A	ONSITE	48.08	ONSITE	48.04	N/A	ONSITE	48.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Negative weight observed as the filter is found to have frayed edges.

Bureau Veritas ID		THP600	THP601	THP602	THP603	THP604	THP605	THP606		
Sampling Date		2022/06/04	2022/06/10	2022/06/16	2022/06/22	2022/06/28	2022/07/04	2022/07/10		
COC Number		N/A	N/A	N/A	N/A	N/A	N/A	N/A		
	UNITS	W12500528	W12500527	W12500530	W12500531	W12500532	W12500216	W12500222	RDL	QC Batch
Particulate	ug/m3	6.23	6.66	13.7	10.1	10.3	6.51	5.11	0.62	8139726
Particulate Weight on Filter	ug	300	320	657	484	494	313	246	30	8160962
Volume	m3	48.06	48.06	48.05	48.05	48.04	48.04	48.04	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C2L3111
Report Date: 2022/08/19

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		THP607		
Sampling Date		2022/07/16		
COC Number		N/A		
	UNITS	**W12500218**	**RDL**	**QC Batch**
Particulate	ug/m3	14.9	0.62	8139726
Particulate Weight on Filter	ug	715	30	8160962
Volume	m3	48.04	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2L3111
Report Date: 2022/08/19

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		THP597	THP598	THP599	THP600	THP601	THP602		
Sampling Date		2022/05/17	2022/05/23	2022/05/29	2022/06/04	2022/06/10	2022/06/16		
COC Number		N/A	N/A	N/A	N/A	N/A	N/A		
	UNITS	**22021813**	**22021814**	**W12500526**	**W12500528**	**W12500527**	**W12500530**	**RDL**	**QC Batch**
Metals									
Total Aluminum (Al)	ug/m3	<0.042	<0.042	0.16	<0.042	<0.042	0.054	0.042	8139722
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Barium (Ba)	ug/m3	0.012	0.011	0.0017	<0.0010	<0.0010	0.0012	0.0010	8139722
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Boron (B)	ug/m3	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	0.021	8139722
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8139722
Total Calcium (Ca)	ug/m3	0.12	0.12	0.38	<0.10	<0.10	0.15	0.10	8139722
Total Chromium (Cr)	ug/m3	<0.0010	0.0011	0.0011	0.0021	<0.0010	<0.0010	0.0010	8139722
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Copper (Cu)	ug/m3	0.00062	0.0020	0.0010	<0.00062	<0.00062	0.00085	0.00062	8139722
Total Iron (Fe)	ug/m3	<0.10	<0.10	0.26	<0.10	<0.10	<0.10	0.10	8139722
Total Lead (Pb)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Magnesium (Mg)	ug/m3	0.034	0.036	0.16	<0.021	<0.021	0.048	0.021	8139722
Total Manganese (Mn)	ug/m3	0.0016	0.0021	0.0074	<0.0010	<0.0010	0.0035	0.0010	8139722
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Potassium (K)	ug/m3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8139722
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8139722
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8139722
Total Sodium (Na)	ug/m3	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8139722
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8139722
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	0.0090	<0.0021	<0.0021	<0.0021	0.0021	8139722
Total Uranium (U)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8139722
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Zinc (Zn)	ug/m3	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8139722

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ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		THP603	THP604	THP605	THP606	THP607		
Sampling Date		2022/06/22	2022/06/28	2022/07/04	2022/07/10	2022/07/16		
COC Number		N/A	N/A	N/A	N/A	N/A		
	UNITS	W12500531	W12500532	W12500216	W12500222	W12500218	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug/m3	0.067	0.32	<0.042	<0.042	<0.042	0.042	8139722
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Barium (Ba)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Boron (B)	ug/m3	<0.021	<0.021	<0.021	<0.021	<0.021	0.021	8139722
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8139722
Total Calcium (Ca)	ug/m3	0.20	0.19	<0.10	<0.10	0.13	0.10	8139722
Total Chromium (Cr)	ug/m3	0.0020	0.0011	0.0024	0.0025	<0.0010	0.0010	8139722
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Copper (Cu)	ug/m3	<0.00062	0.0015	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Iron (Fe)	ug/m3	<0.10	0.10	<0.10	<0.10	<0.10	0.10	8139722
Total Lead (Pb)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Magnesium (Mg)	ug/m3	0.071	0.078	0.026	0.028	0.042	0.021	8139722
Total Manganese (Mn)	ug/m3	0.0032	0.0052	0.0013	0.0023	0.0033	0.0010	8139722
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Potassium (K)	ug/m3	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8139722
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8139722
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8139722
Total Sodium (Na)	ug/m3	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8139722
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8139722
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8139722
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Titanium (Ti)	ug/m3	0.0041	0.0041	<0.0021	<0.0021	<0.0021	0.0021	8139722
Total Uranium (U)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8139722
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8139722
Total Zinc (Zn)	ug/m3	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8139722

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		THP597	THP598	THP599	THP600	THP601	THP602		
Sampling Date		2022/05/17	2022/05/23	2022/05/29	2022/06/04	2022/06/10	2022/06/16		
COC Number		N/A	N/A	N/A	N/A	N/A	N/A		
	UNITS	22021813	22021814	W12500526	W12500528	W12500527	W12500530	RDL	QC Batch
Metals									
Total Aluminum (Al)	ug	<2.0	<2.0	7.5	<2.0	<2.0	2.6	2.0	8162436
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Barium (Ba)	ug	0.57	0.54	0.081	<0.050	<0.050	0.060	0.050	8162436
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	8162436
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8162436
Total Calcium (Ca)	ug	5.8	5.9	18	<5.0	<5.0	7.3	5.0	8162436
Total Chromium (Cr)	ug	<0.050	0.051	0.053	0.10	<0.050	<0.050	0.050	8162436
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Copper (Cu)	ug	0.030	0.096	0.050	<0.030	<0.030	0.041	0.030	8162436
Total Iron (Fe)	ug	<5.0	<5.0	12	<5.0	<5.0	<5.0	5.0	8162436
Total Lead (Pb)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Magnesium (Mg)	ug	1.7	1.7	7.7	<1.0	<1.0	2.3	1.0	8162436
Total Manganese (Mn)	ug	0.076	0.10	0.35	<0.050	<0.050	0.17	0.050	8162436
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0025	8162709
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8162436
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8162436
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8162436
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8162436
Total Sodium (Na)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8162436
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8162436
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Titanium (Ti)	ug	<0.10	<0.10	0.43	<0.10	<0.10	<0.10	0.10	8162436
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8162436
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	8162436

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ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		THP603	THP604	THP605	THP606	THP607		
Sampling Date		2022/06/22	2022/06/28	2022/07/04	2022/07/10	2022/07/16		
COC Number		N/A	N/A	N/A	N/A	N/A		
	UNITS	W12500531	W12500532	W12500216	W12500222	W12500218	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug	3.2	15	<2.0	<2.0	<2.0	2.0	8162436
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Barium (Ba)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	8162436
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8162436
Total Calcium (Ca)	ug	9.8	9.2	<5.0	<5.0	6.2	5.0	8162436
Total Chromium (Cr)	ug	0.097	0.052	0.11	0.12	<0.050	0.050	8162436
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Copper (Cu)	ug	<0.030	0.070	<0.030	<0.030	<0.030	0.030	8162436
Total Iron (Fe)	ug	<5.0	5.0	<5.0	<5.0	<5.0	5.0	8162436
Total Lead (Pb)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Magnesium (Mg)	ug	3.4	3.7	1.2	1.3	2.0	1.0	8162436
Total Manganese (Mn)	ug	0.15	0.25	0.062	0.11	0.16	0.050	8162436
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0025	8162709
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8162436
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8162436
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8162436
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8162436
Total Sodium (Na)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8162436
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8162436
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8162436
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Titanium (Ti)	ug	0.20	0.20	<0.10	<0.10	<0.10	0.10	8162436
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8162436
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8162436
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	8162436

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8162436	PBA	Matrix Spike [THP597-01]	Total Aluminum (Al)	2022/08/15		98	%	70 - 130
			Total Antimony (Sb)	2022/08/15		99	%	70 - 130
			Total Arsenic (As)	2022/08/15		96	%	70 - 130
			Total Barium (Ba)	2022/08/15		99	%	70 - 130
			Total Beryllium (Be)	2022/08/15		99	%	70 - 130
			Total Bismuth (Bi)	2022/08/15		102	%	70 - 130
			Total Boron (B)	2022/08/15		98	%	70 - 130
			Total Cadmium (Cd)	2022/08/15		95	%	70 - 130
			Total Calcium (Ca)	2022/08/15		97	%	70 - 130
			Total Chromium (Cr)	2022/08/15		94	%	70 - 130
			Total Cobalt (Co)	2022/08/15		98	%	70 - 130
			Total Copper (Cu)	2022/08/15		99	%	70 - 130
			Total Iron (Fe)	2022/08/15		101	%	70 - 130
			Total Lead (Pb)	2022/08/15		100	%	70 - 130
			Total Magnesium (Mg)	2022/08/15		96	%	70 - 130
			Total Manganese (Mn)	2022/08/15		98	%	70 - 130
			Total Molybdenum (Mo)	2022/08/15		98	%	70 - 130
			Total Nickel (Ni)	2022/08/15		97	%	70 - 130
			Total Phosphorus (P)	2022/08/15		92	%	70 - 130
			Total Potassium (K)	2022/08/15		97	%	70 - 130
			Total Selenium (Se)	2022/08/15		94	%	70 - 130
			Total Silver (Ag)	2022/08/15		102	%	70 - 130
			Total Sodium (Na)	2022/08/15		97	%	70 - 130
			Total Strontium (Sr)	2022/08/15		97	%	70 - 130
			Total Thallium (Tl)	2022/08/15		97	%	70 - 130
			Total Tin (Sn)	2022/08/15		99	%	70 - 130
			Total Titanium (Ti)	2022/08/15		94	%	70 - 130
			Total Uranium (U)	2022/08/15		98	%	70 - 130
			Total Vanadium (V)	2022/08/15		95	%	70 - 130
			Total Zinc (Zn)	2022/08/15		94	%	70 - 130
8162436	PBA	RPD [THP597-01]	Total Aluminum (Al)	2022/08/15	8.7		%	20
			Total Antimony (Sb)	2022/08/15	1.3		%	20
			Total Arsenic (As)	2022/08/15	0.14		%	20
			Total Barium (Ba)	2022/08/15	1.6		%	20
			Total Beryllium (Be)	2022/08/15	2.5		%	20
			Total Bismuth (Bi)	2022/08/15	4.2		%	20
			Total Boron (B)	2022/08/15	4.6		%	20
			Total Cadmium (Cd)	2022/08/15	1.9		%	20
			Total Calcium (Ca)	2022/08/15	6.5		%	20
			Total Chromium (Cr)	2022/08/15	0.45		%	20
			Total Cobalt (Co)	2022/08/15	1.5		%	20
			Total Copper (Cu)	2022/08/15	1.4		%	20
			Total Iron (Fe)	2022/08/15	1.7		%	20
			Total Lead (Pb)	2022/08/15	3.1		%	20
			Total Magnesium (Mg)	2022/08/15	1.1		%	20
			Total Manganese (Mn)	2022/08/15	0.42		%	20
			Total Molybdenum (Mo)	2022/08/15	2.4		%	20
			Total Nickel (Ni)	2022/08/15	0.48		%	20
			Total Phosphorus (P)	2022/08/15	0.76		%	20
			Total Potassium (K)	2022/08/15	0.35		%	20
			Total Selenium (Se)	2022/08/15	5.5		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Silver (Ag)	2022/08/15	2.5		%	20
			Total Sodium (Na)	2022/08/15	0.74		%	20
			Total Strontium (Sr)	2022/08/15	0.70		%	20
			Total Thallium (Tl)	2022/08/15	0.31		%	20
			Total Tin (Sn)	2022/08/15	1.3		%	20
			Total Titanium (Ti)	2022/08/15	5.3		%	20
			Total Uranium (U)	2022/08/15	0.49		%	20
			Total Vanadium (V)	2022/08/15	0.10		%	20
			Total Zinc (Zn)	2022/08/15	0.23		%	20
			Total Aluminum (Al)	2022/08/15	NC		%	20
			Total Antimony (Sb)	2022/08/15	NC		%	20
			Total Arsenic (As)	2022/08/15	NC		%	20
			Total Barium (Ba)	2022/08/15	1.0		%	20
			Total Beryllium (Be)	2022/08/15	NC		%	20
			Total Bismuth (Bi)	2022/08/15	NC		%	20
			Total Boron (B)	2022/08/15	NC		%	20
			Total Cadmium (Cd)	2022/08/15	NC		%	20
			Total Calcium (Ca)	2022/08/15	1.2		%	20
			Total Chromium (Cr)	2022/08/15	1.5		%	20
			Total Cobalt (Co)	2022/08/15	NC		%	20
			Total Copper (Cu)	2022/08/15	0.073		%	20
			Total Iron (Fe)	2022/08/15	NC		%	20
			Total Lead (Pb)	2022/08/15	NC		%	20
			Total Magnesium (Mg)	2022/08/15	3.6		%	20
			Total Manganese (Mn)	2022/08/15	3.9		%	20
			Total Molybdenum (Mo)	2022/08/15	NC		%	20
			Total Nickel (Ni)	2022/08/15	NC		%	20
			Total Phosphorus (P)	2022/08/15	NC		%	20
			Total Potassium (K)	2022/08/15	NC		%	20
			Total Selenium (Se)	2022/08/15	NC		%	20
			Total Silver (Ag)	2022/08/15	NC		%	20
			Total Sodium (Na)	2022/08/15	NC		%	20
			Total Strontium (Sr)	2022/08/15	NC		%	20
			Total Thallium (Tl)	2022/08/15	NC		%	20
			Total Tin (Sn)	2022/08/15	NC		%	20
			Total Titanium (Ti)	2022/08/15	NC		%	20
			Total Uranium (U)	2022/08/15	NC		%	20
			Total Vanadium (V)	2022/08/15	NC		%	20
			Total Zinc (Zn)	2022/08/15	NC		%	20
8162436	PBA	Spiked Blank	Total Aluminum (Al)	2022/08/15		105	%	85 - 115
			Total Antimony (Sb)	2022/08/15		91	%	85 - 115
			Total Arsenic (As)	2022/08/15		95	%	85 - 115
			Total Barium (Ba)	2022/08/15		97	%	85 - 115
			Total Beryllium (Be)	2022/08/15		95	%	85 - 115
			Total Bismuth (Bi)	2022/08/15		96	%	85 - 115
			Total Boron (B)	2022/08/15		96	%	85 - 115
			Total Cadmium (Cd)	2022/08/15		91	%	85 - 115
			Total Calcium (Ca)	2022/08/15		102	%	85 - 115
			Total Chromium (Cr)	2022/08/15		94	%	85 - 115
			Total Cobalt (Co)	2022/08/15		98	%	85 - 115
			Total Copper (Cu)	2022/08/15		97	%	85 - 115

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Iron (Fe)	2022/08/15		99	%	85 - 115
			Total Lead (Pb)	2022/08/15		92	%	85 - 115
			Total Magnesium (Mg)	2022/08/15		101	%	85 - 115
			Total Manganese (Mn)	2022/08/15		97	%	85 - 115
			Total Molybdenum (Mo)	2022/08/15		94	%	85 - 115
			Total Nickel (Ni)	2022/08/15		95	%	85 - 115
			Total Phosphorus (P)	2022/08/15		101	%	85 - 115
			Total Potassium (K)	2022/08/15		100	%	85 - 115
			Total Selenium (Se)	2022/08/15		91	%	85 - 115
			Total Silver (Ag)	2022/08/15		98	%	85 - 115
			Total Sodium (Na)	2022/08/15		102	%	85 - 115
			Total Strontium (Sr)	2022/08/15		95	%	85 - 115
			Total Thallium (Tl)	2022/08/15		94	%	85 - 115
			Total Tin (Sn)	2022/08/15		94	%	85 - 115
			Total Titanium (Ti)	2022/08/15		93	%	85 - 115
			Total Uranium (U)	2022/08/15		93	%	85 - 115
			Total Vanadium (V)	2022/08/15		95	%	85 - 115
			Total Zinc (Zn)	2022/08/15		93	%	85 - 115
8162436	PBA	RPD	Total Aluminum (Al)	2022/08/15	4.8		%	20
			Total Antimony (Sb)	2022/08/15	4.1		%	20
			Total Arsenic (As)	2022/08/15	0.81		%	20
			Total Barium (Ba)	2022/08/15	0.68		%	20
			Total Beryllium (Be)	2022/08/15	2.6		%	20
			Total Bismuth (Bi)	2022/08/15	0.69		%	20
			Total Boron (B)	2022/08/15	3.7		%	20
			Total Cadmium (Cd)	2022/08/15	1.5		%	20
			Total Calcium (Ca)	2022/08/15	2.9		%	20
			Total Chromium (Cr)	2022/08/15	0.58		%	20
			Total Cobalt (Co)	2022/08/15	0.59		%	20
			Total Copper (Cu)	2022/08/15	0.96		%	20
			Total Iron (Fe)	2022/08/15	1.5		%	20
			Total Lead (Pb)	2022/08/15	1.8		%	20
			Total Magnesium (Mg)	2022/08/15	1.8		%	20
			Total Manganese (Mn)	2022/08/15	0.64		%	20
			Total Molybdenum (Mo)	2022/08/15	1.4		%	20
			Total Nickel (Ni)	2022/08/15	0.43		%	20
			Total Phosphorus (P)	2022/08/15	3.1		%	20
			Total Potassium (K)	2022/08/15	2.1		%	20
			Total Selenium (Se)	2022/08/15	0.48		%	20
			Total Silver (Ag)	2022/08/15	1.4		%	20
			Total Sodium (Na)	2022/08/15	2.0		%	20
			Total Strontium (Sr)	2022/08/15	0.75		%	20
			Total Thallium (Tl)	2022/08/15	1.7		%	20
			Total Tin (Sn)	2022/08/15	1.0		%	20
			Total Titanium (Ti)	2022/08/15	2.1		%	20
			Total Uranium (U)	2022/08/15	0.97		%	20
			Total Vanadium (V)	2022/08/15	0.50		%	20
			Total Zinc (Zn)	2022/08/15	0.67		%	20
8162436	PBA	Method Blank	Total Aluminum (Al)	2022/08/15	<2.0		ug	
			Total Antimony (Sb)	2022/08/15	<0.050		ug	
			Total Arsenic (As)	2022/08/15	<0.050		ug	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Barium (Ba)	2022/08/15	<0.050		ug	
			Total Beryllium (Be)	2022/08/15	<0.030		ug	
			Total Bismuth (Bi)	2022/08/15	<0.050		ug	
			Total Boron (B)	2022/08/15	<1.0		ug	
			Total Cadmium (Cd)	2022/08/15	<0.010		ug	
			Total Calcium (Ca)	2022/08/15	<5.0		ug	
			Total Chromium (Cr)	2022/08/15	<0.050		ug	
			Total Cobalt (Co)	2022/08/15	<0.030		ug	
			Total Copper (Cu)	2022/08/15	<0.030		ug	
			Total Iron (Fe)	2022/08/15	<5.0		ug	
			Total Lead (Pb)	2022/08/15	<0.030		ug	
			Total Magnesium (Mg)	2022/08/15	<1.0		ug	
			Total Manganese (Mn)	2022/08/15	<0.050		ug	
			Total Molybdenum (Mo)	2022/08/15	<0.030		ug	
			Total Nickel (Ni)	2022/08/15	<0.050		ug	
			Total Phosphorus (P)	2022/08/15	<5.0		ug	
			Total Potassium (K)	2022/08/15	<5.0		ug	
			Total Selenium (Se)	2022/08/15	<0.10		ug	
			Total Silver (Ag)	2022/08/15	<0.010		ug	
			Total Sodium (Na)	2022/08/15	<5.0		ug	
			Total Strontium (Sr)	2022/08/15	<0.050		ug	
			Total Thallium (Tl)	2022/08/15	<0.010		ug	
			Total Tin (Sn)	2022/08/15	<0.030		ug	
			Total Titanium (Ti)	2022/08/15	<0.10		ug	
			Total Uranium (U)	2022/08/15	<0.010		ug	
			Total Vanadium (V)	2022/08/15	<0.030		ug	
			Total Zinc (Zn)	2022/08/15	<0.50		ug	
8162709	TLG	Spiked Blank	Acid Extractable Mercury (Hg)	2022/08/15		96	%	90 - 110
8162709	TLG	RPD	Acid Extractable Mercury (Hg)	2022/08/15	0.21		%	20
8162709	TLG	Method Blank	Acid Extractable Mercury (Hg)	2022/08/15	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Jade Browne, Project Manager Assistant - Air

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/08/18
Report #: R7259221
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2N0222
Received: 2022/08/15, 13:40

Sample Matrix: Filter
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Particulate Calculation	3	N/A	2022/08/18	BRL SOP-00109	EPA IO-2mod
Total Particulate	3	N/A	2022/08/17	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	3	N/A	2022/08/15		

Remarks:

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All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/08/18
Report #: R7259221
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2N0222
Received: 2022/08/15, 13:40

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
==========
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Bureau Veritas Job #: C2N0222
Report Date: 2022/08/18

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		TLF922	TLF923	TLF924		
Sampling Date		2022/07/22	2022/07/28	2022/08/03		
COC Number		n/a	n/a	n/a		
	UNITS	**PM10 - 22-JUL-22**	**PM10 - 28-JUL-22**	**PM10 - 03-AUG-22**	**RDL**	**QC Batch**
Particulate	ug/m3	10.7	7.6	6.3	1.2	8166649
Particulate Weight on Filter	ug	256	184	153	30	8174085
Volume	m3	24.03	24.03	24.03	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2N0222
Report Date: 2022/08/18

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TLF922
Sample ID: PM10 - 22-JUL-22
Matrix: Filter

Collected: 2022/07/22
Shipped:
Received: 2022/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8166649	N/A	2022/08/18	Automated Statchk
Total Particulate	BAL	8174085	N/A	2022/08/17	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/08/15	Prabhdeep Kaur

Bureau Veritas ID: TLF923
Sample ID: PM10 - 28-JUL-22
Matrix: Filter

Collected: 2022/07/28
Shipped:
Received: 2022/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8166649	N/A	2022/08/18	Automated Statchk
Total Particulate	BAL	8174085	N/A	2022/08/17	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/08/15	Prabhdeep Kaur

Bureau Veritas ID: TLF924
Sample ID: PM10 - 03-AUG-22
Matrix: Filter

Collected: 2022/08/03
Shipped:
Received: 2022/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8166649	N/A	2022/08/18	Automated Statchk
Total Particulate	BAL	8174085	N/A	2022/08/17	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/08/15	Prabhdeep Kaur

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

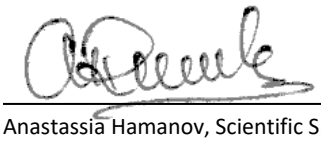
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Bureau Veritas Job #: C2N0222
Report Date: 2022/08/18

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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BUREAU VERITAS

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	Silica by NIOSH 7500	PM10	Metals	Dustfall*
PM10	22-Jul-22	Teflon	24.03	W12500223	22-Jul-22			X		
PM10	28-Jul-22	Teflon	24.03	W12500225	28-Jul-22			X		
PM10	03-Aug-22	Teflon	24.03	20202886	03-Aug-22			X		

15-Aug-22 13:40
Gina Baybayan
C2N0222
SBS AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 2022/08/15 13:40

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/08/26
Report #: R7270622
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2N0244
Received: 2022/08/15, 13:40

Sample Matrix: Filter
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	3	2022/08/23	2022/08/25	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	3	2022/08/15	2022/08/18	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	3	2022/08/22	2022/08/24	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	3	N/A	2022/08/18	BRL SOP-00109	EPA IO-2mod
Total Particulate	3	N/A	2022/08/17	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	3	N/A	2022/08/15		

Remarks:

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Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/08/26
Report #: R7270622
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2N0244
Received: 2022/08/15, 13:40

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
==========
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Bureau Veritas Job #: C2N0244
Report Date: 2022/08/26

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		TLG051	TLG052	TLG053		
Sampling Date		2022/07/22	2022/07/28	2022/08/03		
COC Number		n/a	n/a	n/a		
	UNITS	**TSP- 22-JUL-22**	**TSP- 28-JUL-22**	**TSP- 03-AUG-22**	**RDL**	**QC Batch**
Particulate	ug/m3	9.05	5.53	6.63	0.62	8166649
Particulate Weight on Filter	ug	435	266	319	30	8174085
Volume	m3	48.04	48.04	48.04	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TLG051	TLG051	TLG052	TLG053		
Sampling Date		2022/07/22	2022/07/22	2022/07/28	2022/08/03		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	TSP- 22-JUL-22	TSP-22-JUL-22 Lab-Dup	TSP- 28-JUL-22	TSP- 03-AUG-22	RDL	QC Batch
Metals							
Total Aluminum (Al)	ug	<2.0	<2.0	<2.0	<2.0	2.0	8179813
Total Aluminum (Al)	ug/m3	<0.042	N/A	<0.042	<0.042	0.042	8166461
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8179813
Total Antimony (Sb)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	0.0010	8166461
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8179813
Total Arsenic (As)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	0.0010	8166461
Total Barium (Ba)	ug	<0.050	<0.050	0.064	<0.050	0.050	8179813
Total Barium (Ba)	ug/m3	<0.0010	N/A	0.0013	<0.0010	0.0010	8166461
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8179813
Total Beryllium (Be)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	0.00062	8166461
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8179813
Total Bismuth (Bi)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	0.0010	8166461
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	1.0	8179813
Total Boron (B)	ug/m3	<0.021	N/A	<0.021	<0.021	0.021	8166461
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	0.010	8179813
Total Cadmium (Cd)	ug/m3	<0.00021	N/A	<0.00021	<0.00021	0.00021	8166461
Total Calcium (Ca)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8179813
Total Calcium (Ca)	ug/m3	<0.10	N/A	<0.10	<0.10	0.10	8166461
Total Chromium (Cr)	ug	0.099	0.095	<0.050	<0.050	0.050	8179813
Total Chromium (Cr)	ug/m3	0.0021	N/A	<0.0010	<0.0010	0.0010	8166461
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8179813
Total Cobalt (Co)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	0.00062	8166461
Total Copper (Cu)	ug	<0.030	<0.030	<0.030	0.062	0.030	8179813
Total Copper (Cu)	ug/m3	<0.00062	N/A	<0.00062	0.0013	0.00062	8166461
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8179813
Total Iron (Fe)	ug/m3	<0.10	N/A	<0.10	<0.10	0.10	8166461
Total Lead (Pb)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8179813

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TLG051	TLG051	TLG052	TLG053		
Sampling Date		2022/07/22	2022/07/22	2022/07/28	2022/08/03		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	TSP- 22-JUL-22	TSP-22-JUL-22 Lab-Dup	TSP- 28-JUL-22	TSP- 03-AUG-22	RDL	QC Batch
Total Lead (Pb)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	0.00062	8166461
Total Magnesium (Mg)	ug	1.5	1.4	<1.0	<1.0	1.0	8179813
Total Magnesium (Mg)	ug/m3	0.032	N/A	<0.021	<0.021	0.021	8166461
Total Manganese (Mn)	ug	0.079	0.084	<0.050	0.054	0.050	8179813
Total Manganese (Mn)	ug/m3	0.0016	N/A	<0.0010	0.0011	0.0010	8166461
Acid Extractable Mercury (Hg)	ug	<0.0025	N/A	<0.0025	<0.0025	0.0025	8181738
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8179813
Total Molybdenum (Mo)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	0.00062	8166461
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8179813
Total Nickel (Ni)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	0.0010	8166461
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8179813
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8179813
Total Potassium (K)	ug/m3	<0.10	N/A	<0.10	<0.10	0.10	8166461
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	0.10	8179813
Total Selenium (Se)	ug/m3	<0.0021	N/A	<0.0021	<0.0021	0.0021	8166461
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	0.010	8179813
Total Silver (Ag)	ug/m3	<0.00021	N/A	<0.00021	<0.00021	0.00021	8166461
Total Sodium (Na)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8179813
Total Sodium (Na)	ug/m3	<0.10	N/A	<0.10	<0.10	0.10	8166461
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8179813
Total Strontium (Sr)	ug/m3	<0.0010	N/A	<0.0010	<0.0010	0.0010	8166461
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	0.010	8179813
Total Thallium (Tl)	ug/m3	<0.00021	N/A	<0.00021	<0.00021	0.00021	8166461
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8179813
Total Tin (Sn)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	0.00062	8166461
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	<0.10	0.10	8179813
Total Titanium (Ti)	ug/m3	<0.0021	N/A	<0.0021	<0.0021	0.0021	8166461
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	0.010	8179813

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TLG051	TLG051	TLG052	TLG053		
Sampling Date		2022/07/22	2022/07/22	2022/07/28	2022/08/03		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	TSP- 22-JUL-22	TSP- 22-JUL-22 Lab-Dup	TSP- 28-JUL-22	TSP- 03-AUG-22	RDL	QC Batch
Total Uranium (U)	ug/m3	<0.00021	N/A	<0.00021	<0.00021	0.00021	8166461
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8179813
Total Vanadium (V)	ug/m3	<0.00062	N/A	<0.00062	<0.00062	0.00062	8166461
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	<0.50	0.50	8179813
Total Zinc (Zn)	ug/m3	<0.010	N/A	<0.010	<0.010	0.010	8166461

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2N0244
Report Date: 2022/08/26

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TLG051 **Collected:** 2022/07/22
Sample ID: TSP- 22-JUL-22 **Shipped:**
Matrix: Filter **Received:** 2022/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8181738	2022/08/23	2022/08/25	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8166461	2022/08/18	2022/08/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8179813	2022/08/22	2022/08/24	Prempal Bhatti
Particulate Calculation	CALC	8166649	N/A	2022/08/18	Automated Statchk
Total Particulate	BAL	8174085	N/A	2022/08/17	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/08/15	Prabhdeep Kaur

Bureau Veritas ID: TLG051 Dup **Collected:** 2022/07/22
Sample ID: TSP- 22-JUL-22 **Shipped:**
Matrix: Filter **Received:** 2022/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8179813	2022/08/22	2022/08/24	Prempal Bhatti

Bureau Veritas ID: TLG052 **Collected:** 2022/07/28
Sample ID: TSP- 28-JUL-22 **Shipped:**
Matrix: Filter **Received:** 2022/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8181738	2022/08/23	2022/08/25	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8166461	2022/08/18	2022/08/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8179813	2022/08/22	2022/08/24	Prempal Bhatti
Particulate Calculation	CALC	8166649	N/A	2022/08/18	Automated Statchk
Total Particulate	BAL	8174085	N/A	2022/08/17	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/08/15	Prabhdeep Kaur

Bureau Veritas ID: TLG053 **Collected:** 2022/08/03
Sample ID: TSP- 03-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/08/15

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8181738	2022/08/23	2022/08/25	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8166461	2022/08/18	2022/08/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8179813	2022/08/22	2022/08/24	Prempal Bhatti
Particulate Calculation	CALC	8166649	N/A	2022/08/18	Automated Statchk
Total Particulate	BAL	8174085	N/A	2022/08/17	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/08/15	Prabhdeep Kaur

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8179813	Total Aluminum (Al)	2022/08/24	90 (1)	70 - 130	97	85 - 115	<2.0	ug	NC (3)	20
8179813	Total Antimony (Sb)	2022/08/24	92 (1)	70 - 130	96	85 - 115	<0.050	ug	NC (3)	20
8179813	Total Arsenic (As)	2022/08/24	87 (1)	70 - 130	95	85 - 115	<0.050	ug	NC (3)	20
8179813	Total Barium (Ba)	2022/08/24	89 (1)	70 - 130	96	85 - 115	<0.050	ug	NC (3)	20
8179813	Total Beryllium (Be)	2022/08/24	88 (1)	70 - 130	100	85 - 115	<0.030	ug	NC (3)	20
8179813	Total Bismuth (Bi)	2022/08/24	97 (1)	70 - 130	104	85 - 115	<0.050	ug	NC (3)	20
8179813	Total Boron (B)	2022/08/24	86 (1)	70 - 130	95	85 - 115	<1.0	ug	NC (3)	20
8179813	Total Cadmium (Cd)	2022/08/24	89 (1)	70 - 130	97	85 - 115	<0.010	ug	NC (3)	20
8179813	Total Calcium (Ca)	2022/08/24	92 (1)	70 - 130	99	85 - 115	<5.0	ug	NC (3)	20
8179813	Total Chromium (Cr)	2022/08/24	87 (1)	70 - 130	96	85 - 115	<0.050	ug	4.4 (3)	20
8179813	Total Cobalt (Co)	2022/08/24	91 (1)	70 - 130	98	85 - 115	<0.030	ug	NC (3)	20
8179813	Total Copper (Cu)	2022/08/24	87 (1)	70 - 130	94	85 - 115	<0.030	ug	NC (3)	20
8179813	Total Iron (Fe)	2022/08/24	94 (1)	70 - 130	102	85 - 115	<5.0	ug	NC (3)	20
8179813	Total Lead (Pb)	2022/08/24	91 (1)	70 - 130	98	85 - 115	<0.030	ug	NC (3)	20
8179813	Total Magnesium (Mg)	2022/08/24	90 (1)	70 - 130	101	85 - 115	<1.0	ug	10 (3)	20
8179813	Total Manganese (Mn)	2022/08/24	90 (1)	70 - 130	99	85 - 115	<0.050	ug	6.9 (3)	20
8179813	Total Molybdenum (Mo)	2022/08/24	89 (1)	70 - 130	96	85 - 115	<0.030	ug	NC (3)	20
8179813	Total Nickel (Ni)	2022/08/24	89 (1)	70 - 130	97	85 - 115	<0.050	ug	NC (3)	20
8179813	Total Phosphorus (P)	2022/08/24	89 (1)	70 - 130	111	85 - 115	<5.0	ug	NC (3)	20
8179813	Total Potassium (K)	2022/08/24	89 (1)	70 - 130	98	85 - 115	<5.0	ug	NC (3)	20
8179813	Total Selenium (Se)	2022/08/24	88 (1)	70 - 130	92	85 - 115	<0.10	ug	NC (3)	20
8179813	Total Silver (Ag)	2022/08/24	91 (1)	70 - 130	96	85 - 115	<0.010	ug	NC (3)	20
8179813	Total Sodium (Na)	2022/08/24	93 (1)	70 - 130	105	85 - 115	<5.0	ug	NC (3)	20
8179813	Total Strontium (Sr)	2022/08/24	90 (1)	70 - 130	100	85 - 115	<0.050	ug	NC (3)	20
8179813	Total Thallium (Tl)	2022/08/24	94 (1)	70 - 130	101	85 - 115	<0.010	ug	NC (3)	20
8179813	Total Tin (Sn)	2022/08/24	92 (1)	70 - 130	98	85 - 115	<0.030	ug	NC (3)	20
8179813	Total Titanium (Ti)	2022/08/24	87 (1)	70 - 130	92	85 - 115	<0.10	ug	NC (3)	20
8179813	Total Uranium (U)	2022/08/24	95 (1)	70 - 130	102	85 - 115	<0.010	ug	NC (3)	20
8179813	Total Vanadium (V)	2022/08/24	87 (1)	70 - 130	96	85 - 115	<0.030	ug	NC (3)	20
8179813	Total Zinc (Zn)	2022/08/24	85 (1)	70 - 130	94	85 - 115	<0.50	ug	NC (3)	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8181738	Acid Extractable Mercury (Hg)	2022/08/25			90	90 - 110	<0.0025	ug	1.1 (2)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [TLG051-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [TLG051-01]

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Bureau Veritas Job #: C2N0244
Report Date: 2022/08/26

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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BUREAU VERITAS

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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP	22-Jul-22	Teflon	48.04	W12500219	22-Jul-22		X		X	X
TSP	28-Jul-22	Teflon	48.04	W12500224	28-Jul-22		X		X	X
TSP	03-Aug-22	Teflon	48.04	20202885	03-Aug-22		X		X	X

15-Aug-22 13:40
Gina Baybayan
C2N0244
SBS AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: 2-24/08/15 13:40

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/13
Report #: R7340021
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2R4321
Received: 2022/09/22, 14:27

Sample Matrix: Filter
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	5	2022/10/05	2022/10/05	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	5	2022/09/23	2022/09/29	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	5	2022/10/04	2022/10/05	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	10	N/A	2022/09/29	BRL SOP-00109	EPA IO-2mod
Total Particulate	10	N/A	2022/09/28	BRL SOP-00109	Mthd IO-3-1
Subcontracting from AT-AMB to BV Novi (1)	4	N/A	N/A		Subcontracting
Air Volume from LoVol Sampling	10	N/A	2022/09/23		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/13
Report #: R7340021
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2R4321
Received: 2022/09/22, 14:27
(1) This test was performed by Bureau Veritas (Novi), 22345 Roethal Dr. , Novi, MI, 48375

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
==========
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Job #: C2R4321
Report Date: 2022/10/13

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		TUR785		TUR786	TUR787	TUR788		
Sampling Date		2022/08/09		2022/08/15	2022/08/21	2022/08/27		
COC Number		n/a		n/a	n/a	n/a		
	UNITS	PM10 09-AUG-22	RDL	PM10 15-AUG-22	PM10 21-AUG-22	PM10 27-AUG-22	RDL	QC Batch
Particulate	ug/m3	11.6	1.3	7.4	3.6	10.7	1.2	8244194
Particulate Weight on Filter	ug	276	30	178	87	258	30	8255171
Volume	m3	23.85	N/A	24.03	24.04	24.04	N/A	ONSITE
Subcontracted Analysis								
Subcontract Parameter	N/A	N/A	N/A	ATTACHED	ATTACHED	ATTACHED	N/A	8281817

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		TUR789		TUR790		TUR791	TUR792	TUR793		
Sampling Date		2022/09/02		2022/08/09		2022/08/15	2022/08/21	2022/08/27		
COC Number		n/a		n/a		n/a	n/a	n/a		
	UNITS	PM10 02-SEP-22	RDL	TSP 09-AUG-22	RDL	TSP 15-AUG-22	TSP 21-AUG-22	TSP 27-AUG-22	RDL	QC Batch
Particulate	ug/m3	13.1	1.2	10.9	0.63	9.54	6.48	11.2	0.62	8244194
Particulate Weight on Filter	ug	316	30	521	30	459	312	538	30	8255171
Volume	m3	24.04	N/A	47.80	N/A	48.04	48.04	48.05	N/A	ONSITE
Subcontracted Analysis										
Subcontract Parameter	N/A	ATTACHED	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8281817

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Bureau Veritas Job #: C2R4321
Report Date: 2022/10/13

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		TUR794		
Sampling Date		2022/09/02		
COC Number		n/a		
	UNITS	**TSP 02-SEP-22**	**RDL**	**QC Batch**
Particulate	ug/m3	9.22	0.62	8244194
Particulate Weight on Filter	ug	443	30	8255171
Volume	m3	48.04	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2R4321
Report Date: 2022/10/13

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TUR790	TUR790		TUR791	TUR792		
Sampling Date		2022/08/09	2022/08/09		2022/08/15	2022/08/21		
COC Number		n/a	n/a		n/a	n/a		
	UNITS	TSP 09-AUG-22	TSP 09-AUG-22 Lab-Dup	RDL	TSP 15-AUG-22	TSP 21-AUG-22	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug	4.6	4.5	2.0	2.7	<2.0	2.0	8262770
Total Aluminum (Al)	ug/m3	0.096	N/A	0.042	0.055	<0.042	0.042	8244192
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	<0.050	<0.050	0.050	8262770
Total Antimony (Sb)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	0.0010	8244192
Total Arsenic (As)	ug	<0.050	<0.050	0.050	<0.050	<0.050	0.050	8262770
Total Arsenic (As)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	0.0010	8244192
Total Barium (Ba)	ug	<0.050	<0.050	0.050	<0.050	0.089	0.050	8262770
Total Barium (Ba)	ug/m3	<0.0010	N/A	0.0010	<0.0010	0.0019	0.0010	8244192
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	<0.030	<0.030	0.030	8262770
Total Beryllium (Be)	ug/m3	<0.00063	N/A	0.00063	<0.00062	<0.00062	0.00062	8244192
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	<0.050	<0.050	0.050	8262770
Total Bismuth (Bi)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	0.0010	8244192
Total Boron (B)	ug	<1.0	<1.0	1.0	<1.0	<1.0	1.0	8262770
Total Boron (B)	ug/m3	<0.021	N/A	0.021	<0.021	<0.021	0.021	8244192
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	<0.010	<0.010	0.010	8262770
Total Cadmium (Cd)	ug/m3	<0.00021	N/A	0.00021	<0.00021	<0.00021	0.00021	8244192
Total Calcium (Ca)	ug	11	11	5.0	6.2	<5.0	5.0	8262770
Total Calcium (Ca)	ug/m3	0.22	N/A	0.10	0.13	<0.10	0.10	8244192
Total Chromium (Cr)	ug	0.073	0.075	0.050	0.080	<0.050	0.050	8262770
Total Chromium (Cr)	ug/m3	0.0015	N/A	0.0010	0.0017	<0.0010	0.0010	8244192
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	<0.030	<0.030	0.030	8262770
Total Cobalt (Co)	ug/m3	<0.00063	N/A	0.00063	<0.00062	<0.00062	0.00062	8244192
Total Copper (Cu)	ug	0.034	0.036	0.030	0.044	<0.030	0.030	8262770
Total Copper (Cu)	ug/m3	0.00071	N/A	0.00063	0.00091	<0.00062	0.00062	8244192
Total Iron (Fe)	ug	7.7	7.8	5.0	<5.0	<5.0	5.0	8262770
Total Iron (Fe)	ug/m3	0.16	N/A	0.10	<0.10	<0.10	0.10	8244192
Total Lead (Pb)	ug	<0.030	<0.030	0.030	0.038	<0.030	0.030	8262770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2R4321
Report Date: 2022/10/13

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TUR790	TUR790		TUR791	TUR792		
Sampling Date		2022/08/09	2022/08/09		2022/08/15	2022/08/21		
COC Number		n/a	n/a		n/a	n/a		
	UNITS	TSP 09-AUG-22	TSP 09-AUG-22 Lab-Dup	RDL	TSP 15-AUG-22	TSP 21-AUG-22	RDL	QC Batch
Total Lead (Pb)	ug/m3	<0.00063	N/A	0.00063	0.00080	<0.00062	0.00062	8244192
Total Magnesium (Mg)	ug	4.7	5.0	1.0	2.7	<1.0	1.0	8262770
Total Magnesium (Mg)	ug/m3	0.098	N/A	0.021	0.055	<0.021	0.021	8244192
Total Manganese (Mn)	ug	0.17	0.18	0.050	0.10	<0.050	0.050	8262770
Total Manganese (Mn)	ug/m3	0.0036	N/A	0.0010	0.0021	<0.0010	0.0010	8244192
Acid Extractable Mercury (Hg)	ug	<0.0025	N/A	0.0025	<0.0025	<0.0025	0.0025	8265631
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	<0.030	<0.030	0.030	8262770
Total Molybdenum (Mo)	ug/m3	<0.00063	N/A	0.00063	<0.00062	<0.00062	0.00062	8244192
Total Nickel (Ni)	ug	<0.050	<0.050	0.050	<0.050	<0.050	0.050	8262770
Total Nickel (Ni)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	0.0010	8244192
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	<5.0	<5.0	5.0	8262770
Total Potassium (K)	ug	<5.0	<5.0	5.0	<5.0	<5.0	5.0	8262770
Total Potassium (K)	ug/m3	<0.10	N/A	0.10	<0.10	<0.10	0.10	8244192
Total Selenium (Se)	ug	<0.10	<0.10	0.10	<0.10	<0.10	0.10	8262770
Total Selenium (Se)	ug/m3	<0.0021	N/A	0.0021	<0.0021	<0.0021	0.0021	8244192
Total Silver (Ag)	ug	<0.010	<0.010	0.010	<0.010	<0.010	0.010	8262770
Total Silver (Ag)	ug/m3	<0.00021	N/A	0.00021	<0.00021	<0.00021	0.00021	8244192
Total Sodium (Na)	ug	<5.0	<5.0	5.0	<5.0	<5.0	5.0	8262770
Total Sodium (Na)	ug/m3	<0.10	N/A	0.10	<0.10	<0.10	0.10	8244192
Total Strontium (Sr)	ug	<0.050	<0.050	0.050	<0.050	<0.050	0.050	8262770
Total Strontium (Sr)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	0.0010	8244192
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	<0.010	<0.010	0.010	8262770
Total Thallium (Tl)	ug/m3	<0.00021	N/A	0.00021	<0.00021	<0.00021	0.00021	8244192
Total Tin (Sn)	ug	<0.030	<0.030	0.030	<0.030	<0.030	0.030	8262770
Total Tin (Sn)	ug/m3	<0.00063	N/A	0.00063	<0.00062	<0.00062	0.00062	8244192
Total Titanium (Ti)	ug	0.29	0.30	0.10	0.15	<0.10	0.10	8262770
Total Titanium (Ti)	ug/m3	0.0061	N/A	0.0021	0.0032	<0.0021	0.0021	8244192
Total Uranium (U)	ug	<0.010	<0.010	0.010	<0.010	<0.010	0.010	8262770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2R4321
Report Date: 2022/10/13

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TUR790	TUR790		TUR791	TUR792		
Sampling Date		2022/08/09	2022/08/09		2022/08/15	2022/08/21		
COC Number		n/a	n/a		n/a	n/a		
	UNITS	**TSP 09-AUG-22**	**TSP 09-AUG-22 Lab-Dup**	**RDL**	**TSP 15-AUG-22**	**TSP 21-AUG-22**	**RDL**	**QC Batch**
Total Uranium (U)	ug/m3	<0.00021	N/A	0.00021	<0.00021	<0.00021	0.00021	8244192
Total Vanadium (V)	ug	<0.030	<0.030	0.030	<0.030	<0.030	0.030	8262770
Total Vanadium (V)	ug/m3	<0.00063	N/A	0.00063	<0.00062	<0.00062	0.00062	8244192
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	<0.50	<0.50	0.50	8262770
Total Zinc (Zn)	ug/m3	<0.010	N/A	0.010	<0.010	<0.010	0.010	8244192

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TUR793	TUR794		
Sampling Date		2022/08/27	2022/09/02		
COC Number		n/a	n/a		
	UNITS	TSP 27-AUG-22	TSP 02-SEP-22	RDL	QC Batch
Metals					
Total Aluminum (Al)	ug	<2.0	<2.0	2.0	8262770
Total Aluminum (Al)	ug/m3	<0.042	<0.042	0.042	8244192
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	8262770
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	0.0010	8244192
Total Arsenic (As)	ug	<0.050	<0.050	0.050	8262770
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	0.0010	8244192
Total Barium (Ba)	ug	0.11	<0.050	0.050	8262770
Total Barium (Ba)	ug/m3	0.0022	<0.0010	0.0010	8244192
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	8262770
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	0.00062	8244192
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	8262770
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	0.0010	8244192
Total Boron (B)	ug	<1.0	<1.0	1.0	8262770
Total Boron (B)	ug/m3	<0.021	<0.021	0.021	8244192
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	8262770
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	0.00021	8244192
Total Calcium (Ca)	ug	6.3	13	5.0	8262770
Total Calcium (Ca)	ug/m3	0.13	0.28	0.10	8244192
Total Chromium (Cr)	ug	<0.050	<0.050	0.050	8262770
Total Chromium (Cr)	ug/m3	<0.0010	<0.0010	0.0010	8244192
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	8262770
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	0.00062	8244192
Total Copper (Cu)	ug	0.044	0.031	0.030	8262770
Total Copper (Cu)	ug/m3	0.00091	0.00065	0.00062	8244192
Total Iron (Fe)	ug	<5.0	<5.0	5.0	8262770
Total Iron (Fe)	ug/m3	<0.10	<0.10	0.10	8244192
Total Lead (Pb)	ug	0.031	<0.030	0.030	8262770
Total Lead (Pb)	ug/m3	0.00064	<0.00062	0.00062	8244192
Total Magnesium (Mg)	ug	2.1	2.3	1.0	8262770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TUR793	TUR794		
Sampling Date		2022/08/27	2022/09/02		
COC Number		n/a	n/a		
	UNITS	TSP 27-AUG-22	TSP 02-SEP-22	RDL	QC Batch
Total Magnesium (Mg)	ug/m3	0.044	0.048	0.021	8244192
Total Manganese (Mn)	ug	0.094	0.15	0.050	8262770
Total Manganese (Mn)	ug/m3	0.0020	0.0030	0.0010	8244192
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	0.0025	8265631
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	8262770
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	0.00062	8244192
Total Nickel (Ni)	ug	<0.050	<0.050	0.050	8262770
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	0.0010	8244192
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	8262770
Total Potassium (K)	ug	<5.0	<5.0	5.0	8262770
Total Potassium (K)	ug/m3	<0.10	<0.10	0.10	8244192
Total Selenium (Se)	ug	<0.10	<0.10	0.10	8262770
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	0.0021	8244192
Total Silver (Ag)	ug	<0.010	<0.010	0.010	8262770
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	0.00021	8244192
Total Sodium (Na)	ug	<5.0	<5.0	5.0	8262770
Total Sodium (Na)	ug/m3	<0.10	<0.10	0.10	8244192
Total Strontium (Sr)	ug	<0.050	<0.050	0.050	8262770
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	0.0010	8244192
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	8262770
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	0.00021	8244192
Total Tin (Sn)	ug	<0.030	<0.030	0.030	8262770
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	0.00062	8244192
Total Titanium (Ti)	ug	0.13	<0.10	0.10	8262770
Total Titanium (Ti)	ug/m3	0.0027	<0.0021	0.0021	8244192
Total Uranium (U)	ug	<0.010	<0.010	0.010	8262770
Total Uranium (U)	ug/m3	<0.00021	<0.00021	0.00021	8244192
Total Vanadium (V)	ug	<0.030	<0.030	0.030	8262770
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	0.00062	8244192
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	8262770

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2R4321
Report Date: 2022/10/13

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TUR793	TUR794		
Sampling Date		2022/08/27	2022/09/02		
COC Number		n/a	n/a		
	UNITS	**TSP 27-AUG-22**	**TSP 02-SEP-22**	**RDL**	**QC Batch**
Total Zinc (Zn)	ug/m3	<0.010	<0.010	0.010	8244192

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: TUR785 **Collected:** 2022/08/09
Sample ID: PM10 09-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

Bureau Veritas ID: TUR786 **Collected:** 2022/08/15
Sample ID: PM10 15-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Subcontracting from AT-AMB to BV Novi		8281817	N/A		Marinela Sim
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

Bureau Veritas ID: TUR787 **Collected:** 2022/08/21
Sample ID: PM10 21-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Subcontracting from AT-AMB to BV Novi		8281817	N/A		Marinela Sim
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

Bureau Veritas ID: TUR788 **Collected:** 2022/08/27
Sample ID: PM10 27-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Subcontracting from AT-AMB to BV Novi		8281817	N/A		Marinela Sim
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

Bureau Veritas ID: TUR789 **Collected:** 2022/09/02
Sample ID: PM10 02-SEP-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Subcontracting from AT-AMB to BV Novi		8281817	N/A		Marinela Sim
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TUR790 **Collected:** 2022/08/09
Sample ID: TSP 09-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8265631	2022/10/05	2022/10/05	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8244192	2022/09/29	2022/09/29	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8262770	2022/10/04	2022/10/05	Nan Raykha
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

Bureau Veritas ID: TUR790 Dup **Collected:** 2022/08/09
Sample ID: TSP 09-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8262770	2022/10/04	2022/10/05	Nan Raykha

Bureau Veritas ID: TUR791 **Collected:** 2022/08/15
Sample ID: TSP 15-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8265631	2022/10/05	2022/10/05	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8244192	2022/09/29	2022/09/29	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8262770	2022/10/04	2022/10/05	Nan Raykha
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

Bureau Veritas ID: TUR792 **Collected:** 2022/08/21
Sample ID: TSP 21-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8265631	2022/10/05	2022/10/05	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8244192	2022/09/29	2022/09/29	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8262770	2022/10/04	2022/10/05	Nan Raykha
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

Bureau Veritas ID: TUR793 **Collected:** 2022/08/27
Sample ID: TSP 27-AUG-22 **Shipped:**
Matrix: Filter **Received:** 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8265631	2022/10/05	2022/10/05	Thuy Linh Nguyen

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2R4321
Report Date: 2022/10/13

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TUR793
Sample ID: TSP 27-AUG-22
Matrix: Filter

Collected: 2022/08/27
Shipped:
Received: 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8244192	2022/09/29	2022/09/29	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8262770	2022/10/04	2022/10/05	Nan Raykha
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

Bureau Veritas ID: TUR794
Sample ID: TSP 02-SEP-22
Matrix: Filter

Collected: 2022/09/02
Shipped:
Received: 2022/09/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8265631	2022/10/05	2022/10/05	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8244192	2022/09/29	2022/09/29	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8262770	2022/10/04	2022/10/05	Nan Raykha
Particulate Calculation	CALC	8244194	N/A	2022/09/29	Automated Statchk
Total Particulate	BAL	8255171	N/A	2022/09/28	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/09/23	Prabhdeep Kaur

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Total Metals on Small Filter (6020Bmod): Post digestion duplicate and spike were done on sample TUR790.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8262770	Total Aluminum (Al)	2022/10/05	96 (1)	70 - 130	102	85 - 115	<2.0	ug	2.8 (3)	20
8262770	Total Antimony (Sb)	2022/10/05	99 (1)	70 - 130	98	85 - 115	<0.050	ug	NC (3)	20
8262770	Total Arsenic (As)	2022/10/05	98 (1)	70 - 130	100	85 - 115	<0.050	ug	NC (3)	20
8262770	Total Barium (Ba)	2022/10/05	96 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20
8262770	Total Beryllium (Be)	2022/10/05	100 (1)	70 - 130	103	85 - 115	<0.030	ug	NC (3)	20
8262770	Total Bismuth (Bi)	2022/10/05	99 (1)	70 - 130	100	85 - 115	<0.050	ug	NC (3)	20
8262770	Total Boron (B)	2022/10/05	99 (1)	70 - 130	100	85 - 115	<1.0	ug	NC (3)	20
8262770	Total Cadmium (Cd)	2022/10/05	97 (1)	70 - 130	100	85 - 115	<0.010	ug	NC (3)	20
8262770	Total Calcium (Ca)	2022/10/05	96 (1)	70 - 130	100	85 - 115	<5.0	ug	2.0 (3)	20
8262770	Total Chromium (Cr)	2022/10/05	98 (1)	70 - 130	102	85 - 115	<0.050	ug	2.6 (3)	20
8262770	Total Cobalt (Co)	2022/10/05	102 (1)	70 - 130	101	85 - 115	<0.030	ug	NC (3)	20
8262770	Total Copper (Cu)	2022/10/05	100 (1)	70 - 130	103	85 - 115	<0.030	ug	6.8 (3)	20
8262770	Total Iron (Fe)	2022/10/05	100 (1)	70 - 130	103	85 - 115	<5.0	ug	1.4 (3)	20
8262770	Total Lead (Pb)	2022/10/05	100 (1)	70 - 130	100	85 - 115	<0.030	ug	NC (3)	20
8262770	Total Magnesium (Mg)	2022/10/05	98 (1)	70 - 130	99	85 - 115	<1.0	ug	7.6 (3)	20
8262770	Total Manganese (Mn)	2022/10/05	98 (1)	70 - 130	100	85 - 115	<0.050	ug	4.6 (3)	20
8262770	Total Molybdenum (Mo)	2022/10/05	102 (1)	70 - 130	102	85 - 115	<0.030	ug	NC (3)	20
8262770	Total Nickel (Ni)	2022/10/05	98 (1)	70 - 130	101	85 - 115	<0.050	ug	NC (3)	20
8262770	Total Phosphorus (P)	2022/10/05	101 (1)	70 - 130	111	85 - 115	<5.0	ug	NC (3)	20
8262770	Total Potassium (K)	2022/10/05	103 (1)	70 - 130	107	85 - 115	<5.0	ug	NC (3)	20
8262770	Total Selenium (Se)	2022/10/05	95 (1)	70 - 130	98	85 - 115	<0.10	ug	NC (3)	20
8262770	Total Silver (Ag)	2022/10/05	102 (1)	70 - 130	103	85 - 115	<0.010	ug	NC (3)	20
8262770	Total Sodium (Na)	2022/10/05	100 (1)	70 - 130	101	85 - 115	<5.0	ug	NC (3)	20
8262770	Total Strontium (Sr)	2022/10/05	97 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20
8262770	Total Thallium (Tl)	2022/10/05	100 (1)	70 - 130	100	85 - 115	<0.010	ug	NC (3)	20
8262770	Total Tin (Sn)	2022/10/05	99 (1)	70 - 130	99	85 - 115	<0.030	ug	NC (3)	20
8262770	Total Titanium (Ti)	2022/10/05	96 (1)	70 - 130	97	85 - 115	<0.10	ug	4.1 (3)	20
8262770	Total Uranium (U)	2022/10/05	99 (1)	70 - 130	100	85 - 115	<0.010	ug	NC (3)	20
8262770	Total Vanadium (V)	2022/10/05	99 (1)	70 - 130	101	85 - 115	<0.030	ug	NC (3)	20
8262770	Total Zinc (Zn)	2022/10/05	95 (1)	70 - 130	97	85 - 115	<0.50	ug	NC (3)	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8265631	Acid Extractable Mercury (Hg)	2022/10/05			95	90 - 110	<0.0025	ug	1.3 (2)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [TUR790-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [TUR790-01]

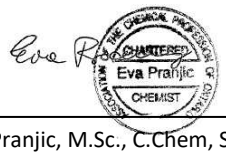
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Bureau Veritas Job #: C2R4321
Report Date: 2022/10/13

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist



Marinela Sim, Project Manager

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

AIR

1/3

CAM FCD-01302 /3

BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON
Phone: 905-568-2929 Fax:
Sampled by: AG

SECTION

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	Silica by NIOSH 7500	PM10	Metals	Dustfall*
PM10	09-Aug-22	Teflon	23.85	20202891	09-Aug-22		X	X		
PM10	15-Aug-22	Teflon	24.03	22072503	15-Aug-22		X	X		
PM10	21-Aug-22	Teflon	24.04	22061405	21-Aug-22		X	X		
PM10	27-Aug-22	Teflon	24.04	22061404	27-Aug-22		X	X		
PM10	02-Sep-22	Teflon	24.04	22061401	02-Sep-22		X	X		

22-Sep-22 14:27
Gina Baybayan
C2R4321
KTN AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

Client Signature:
Affiliation:
Date/Time: 22-Sep-22 2:25

Received by:
Affiliation:
Date/Time: 2022/09/22 1425

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

AIR

2/3

CAM FCD-01302 /3

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wood
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON
Phone: 905-568-2929 Fax:
Sampled by: AG

SECTION

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP	09-Aug-22		47.8	20202887	09-Aug-22		x		x	x
TSP	15-Aug-22		48.04	W12500522	15-Aug-22		x		x	x
TSP	21-Aug-22		48.04	W12500537	21-Aug-22		x		x	x
TSP	27-Aug-22		48.05	W12500523	27-Aug-22		x		x	x
TSP	02-Sep-22		48.04	W12500524	02-Sep-22		x		x	x

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

Client Signature:
Affiliation:
Date/Time:

Received by:
Affiliation:
Date/Time: NOV 9/22 1427

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/28
Report #: R7363176
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2T6714
Received: 2022/10/12, 16:28

Sample Matrix: Filter
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	2	2022/10/21	2022/10/28	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	2	2022/10/13	2022/10/20	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	2	2022/10/21	2022/10/21	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	2	N/A	2022/10/20	BRL SOP-00109	EPA IO-2mod
Total Particulate	2	N/A	2022/10/19	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	2	N/A	2022/10/13		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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CERTIFICATE OF ANALYSIS

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Received: 2022/10/12, 16:28

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2T6714
Report Date: 2022/10/28

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		TZJ878		TZJ879		
Sampling Date		2022/09/14		2022/09/26		
COC Number		n/a		n/a		
	UNITS	**TSP 12500525**	**RDL**	**TSP 20202894**	**RDL**	**QC Batch**
Particulate	ug/m3	3.83	0.62	5.86	0.68	8281987
Particulate Weight on Filter	ug	184	30	259	30	8294953
Volume	m3	48.04	N/A	44.22	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TZJ878	TZJ878		TZJ879		
Sampling Date		2022/09/14	2022/09/14		2022/09/26		
COC Number		n/a	n/a		n/a		
	UNITS	TSP 12500525	TSP 12500525 Lab-Dup	RDL	TSP 20202894	RDL	QC Batch
Metals							
Total Aluminum (Al)	ug	<2.0	<2.0	2.0	<2.0	2.0	8297337
Total Aluminum (Al)	ug/m3	<0.042	N/A	0.042	<0.045	0.045	8283570
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	<0.050	0.050	8297337
Total Antimony (Sb)	ug/m3	<0.0010	N/A	0.0010	<0.0011	0.0011	8283570
Total Arsenic (As)	ug	<0.050	<0.050	0.050	<0.050	0.050	8297337
Total Arsenic (As)	ug/m3	<0.0010	N/A	0.0010	<0.0011	0.0011	8283570
Total Barium (Ba)	ug	<0.050	<0.050	0.050	0.087	0.050	8297337
Total Barium (Ba)	ug/m3	<0.0010	N/A	0.0010	0.0020	0.0011	8283570
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	<0.030	0.030	8297337
Total Beryllium (Be)	ug/m3	<0.00062	N/A	0.00062	<0.00068	0.00068	8283570
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	<0.050	0.050	8297337
Total Bismuth (Bi)	ug/m3	<0.0010	N/A	0.0010	<0.0011	0.0011	8283570
Total Boron (B)	ug	<1.0	<1.0	1.0	<1.0	1.0	8297337
Total Boron (B)	ug/m3	<0.021	N/A	0.021	<0.023	0.023	8283570
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	<0.010	0.010	8297337
Total Cadmium (Cd)	ug/m3	<0.00021	N/A	0.00021	<0.00023	0.00023	8283570
Total Calcium (Ca)	ug	<5.0	<5.0	5.0	6.0	5.0	8297337
Total Calcium (Ca)	ug/m3	<0.10	N/A	0.10	0.13	0.11	8283570
Total Chromium (Cr)	ug	0.063	0.051	0.050	<0.050	0.050	8297337
Total Chromium (Cr)	ug/m3	0.0013	N/A	0.0010	<0.0011	0.0011	8283570
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	<0.030	0.030	8297337
Total Cobalt (Co)	ug/m3	<0.00062	N/A	0.00062	<0.00068	0.00068	8283570
Total Copper (Cu)	ug	0.031	<0.030	0.030	<0.030	0.030	8297337
Total Copper (Cu)	ug/m3	0.00065	N/A	0.00062	<0.00068	0.00068	8283570
Total Iron (Fe)	ug	<5.0	<5.0	5.0	<5.0	5.0	8297337
Total Iron (Fe)	ug/m3	<0.10	N/A	0.10	<0.11	0.11	8283570
Total Lead (Pb)	ug	<0.030	<0.030	0.030	<0.030	0.030	8297337

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TZJ878	TZJ878		TZJ879		
Sampling Date		2022/09/14	2022/09/14		2022/09/26		
COC Number		n/a	n/a		n/a		
	UNITS	TSP 12500525	TSP 12500525 Lab-Dup	RDL	TSP 20202894	RDL	QC Batch
Total Lead (Pb)	ug/m3	<0.00062	N/A	0.00062	<0.00068	0.00068	8283570
Total Magnesium (Mg)	ug	<1.0	<1.0	1.0	1.6	1.0	8297337
Total Magnesium (Mg)	ug/m3	<0.021	N/A	0.021	0.037	0.023	8283570
Total Manganese (Mn)	ug	<0.050	<0.050	0.050	0.052	0.050	8297337
Total Manganese (Mn)	ug/m3	<0.0010	N/A	0.0010	0.0012	0.0011	8283570
Acid Extractable Mercury (Hg)	ug	<0.0025	N/A	0.0025	<0.0025	0.0025	8297979
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	<0.030	0.030	8297337
Total Molybdenum (Mo)	ug/m3	<0.00062	N/A	0.00062	<0.00068	0.00068	8283570
Total Nickel (Ni)	ug	<0.050	<0.050	0.050	<0.050	0.050	8297337
Total Nickel (Ni)	ug/m3	<0.0010	N/A	0.0010	<0.0011	0.0011	8283570
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	<5.0	5.0	8297337
Total Potassium (K)	ug	<5.0	<5.0	5.0	<5.0	5.0	8297337
Total Potassium (K)	ug/m3	<0.10	N/A	0.10	<0.11	0.11	8283570
Total Selenium (Se)	ug	<0.10	<0.10	0.10	<0.10	0.10	8297337
Total Selenium (Se)	ug/m3	<0.0021	N/A	0.0021	<0.0023	0.0023	8283570
Total Silver (Ag)	ug	<0.010	<0.010	0.010	<0.010	0.010	8297337
Total Silver (Ag)	ug/m3	<0.00021	N/A	0.00021	<0.00023	0.00023	8283570
Total Sodium (Na)	ug	<5.0	<5.0	5.0	<5.0	5.0	8297337
Total Sodium (Na)	ug/m3	<0.10	N/A	0.10	<0.11	0.11	8283570
Total Strontium (Sr)	ug	<0.050	<0.050	0.050	<0.050	0.050	8297337
Total Strontium (Sr)	ug/m3	<0.0010	N/A	0.0010	<0.0011	0.0011	8283570
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	<0.010	0.010	8297337
Total Thallium (Tl)	ug/m3	<0.00021	N/A	0.00021	<0.00023	0.00023	8283570
Total Tin (Sn)	ug	<0.030	<0.030	0.030	<0.030	0.030	8297337
Total Tin (Sn)	ug/m3	<0.00062	N/A	0.00062	<0.00068	0.00068	8283570
Total Titanium (Ti)	ug	<0.10	<0.10	0.10	<0.10	0.10	8297337
Total Titanium (Ti)	ug/m3	<0.0021	N/A	0.0021	<0.0023	0.0023	8283570
Total Uranium (U)	ug	<0.010	<0.010	0.010	<0.010	0.010	8297337

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2T6714
Report Date: 2022/10/28

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		TZJ878	TZJ878		TZJ879		
Sampling Date		2022/09/14	2022/09/14		2022/09/26		
COC Number		n/a	n/a		n/a		
	UNITS	**TSP 12500525**	**TSP 12500525 Lab-Dup**	**RDL**	**TSP 20202894**	**RDL**	**QC Batch**
Total Uranium (U)	ug/m3	<0.00021	N/A	0.00021	<0.00023	0.00023	8283570
Total Vanadium (V)	ug	<0.030	<0.030	0.030	<0.030	0.030	8297337
Total Vanadium (V)	ug/m3	<0.00062	N/A	0.00062	<0.00068	0.00068	8283570
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	<0.50	0.50	8297337
Total Zinc (Zn)	ug/m3	<0.010	N/A	0.010	<0.011	0.011	8283570

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2T6714
Report Date: 2022/10/28

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TZJ878
Sample ID: TSP 12500525
Matrix: Filter

Collected: 2022/09/14
Shipped:
Received: 2022/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8297979	2022/10/21	2022/10/28	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8283570	2022/10/20	2022/10/20	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8297337	2022/10/21	2022/10/21	Prempal Bhatti
Particulate Calculation	CALC	8281987	N/A	2022/10/20	Automated Statchk
Total Particulate	BAL	8294953	N/A	2022/10/19	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/10/13	Prabhdeep Kaur

Bureau Veritas ID: TZJ878 Dup
Sample ID: TSP 12500525
Matrix: Filter

Collected: 2022/09/14
Shipped:
Received: 2022/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8297337	2022/10/21	2022/10/21	Prempal Bhatti

Bureau Veritas ID: TZJ879
Sample ID: TSP 20202894
Matrix: Filter

Collected: 2022/09/26
Shipped:
Received: 2022/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8297979	2022/10/21	2022/10/28	Thuy Linh Nguyen
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8283570	2022/10/20	2022/10/20	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8297337	2022/10/21	2022/10/21	Prempal Bhatti
Particulate Calculation	CALC	8281987	N/A	2022/10/20	Automated Statchk
Total Particulate	BAL	8294953	N/A	2022/10/19	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2022/10/13	Prabhdeep Kaur

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2T6714
Report Date: 2022/10/28

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8297337	Total Aluminum (Al)	2022/10/21	95 (1)	70 - 130	94	85 - 115	<2.0	ug	NC (3)	20
8297337	Total Antimony (Sb)	2022/10/21	100 (1)	70 - 130	95	85 - 115	<0.050	ug	NC (3)	20
8297337	Total Arsenic (As)	2022/10/21	94 (1)	70 - 130	92	85 - 115	<0.050	ug	NC (3)	20
8297337	Total Barium (Ba)	2022/10/21	96 (1)	70 - 130	92	85 - 115	<0.050	ug	NC (3)	20
8297337	Total Beryllium (Be)	2022/10/21	94 (1)	70 - 130	93	85 - 115	<0.030	ug	NC (3)	20
8297337	Total Bismuth (Bi)	2022/10/21	98 (1)	70 - 130	97	85 - 115	<0.050	ug	NC (3)	20
8297337	Total Boron (B)	2022/10/21	93 (1)	70 - 130	90	85 - 115	<1.0	ug	NC (3)	20
8297337	Total Cadmium (Cd)	2022/10/21	95 (1)	70 - 130	94	85 - 115	<0.010	ug	NC (3)	20
8297337	Total Calcium (Ca)	2022/10/21	94 (1)	70 - 130	93	85 - 115	<5.0	ug	NC (3)	20
8297337	Total Chromium (Cr)	2022/10/21	95 (1)	70 - 130	91	85 - 115	<0.050	ug	NC (3)	20
8297337	Total Cobalt (Co)	2022/10/21	96 (1)	70 - 130	93	85 - 115	<0.030	ug	NC (3)	20
8297337	Total Copper (Cu)	2022/10/21	95 (1)	70 - 130	93	85 - 115	<0.030	ug	4.4 (3)	20
8297337	Total Iron (Fe)	2022/10/21	99 (1)	70 - 130	96	85 - 115	<5.0	ug	NC (3)	20
8297337	Total Lead (Pb)	2022/10/21	98 (1)	70 - 130	98	85 - 115	<0.030	ug	NC (3)	20
8297337	Total Magnesium (Mg)	2022/10/21	95 (1)	70 - 130	92	85 - 115	<1.0	ug	NC (3)	20
8297337	Total Manganese (Mn)	2022/10/21	97 (1)	70 - 130	93	85 - 115	<0.050	ug	NC (3)	20
8297337	Total Molybdenum (Mo)	2022/10/21	99 (1)	70 - 130	97	85 - 115	<0.030	ug	NC (3)	20
8297337	Total Nickel (Ni)	2022/10/21	95 (1)	70 - 130	92	85 - 115	<0.050	ug	NC (3)	20
8297337	Total Phosphorus (P)	2022/10/21	89 (1)	70 - 130	98	85 - 115	<5.0	ug	NC (3)	20
8297337	Total Potassium (K)	2022/10/21	97 (1)	70 - 130	93	85 - 115	<5.0	ug	NC (3)	20
8297337	Total Selenium (Se)	2022/10/21	93 (1)	70 - 130	92	85 - 115	<0.10	ug	NC (3)	20
8297337	Total Silver (Ag)	2022/10/21	99 (1)	70 - 130	96	85 - 115	<0.010	ug	NC (3)	20
8297337	Total Sodium (Na)	2022/10/21	97 (1)	70 - 130	94	85 - 115	<5.0	ug	NC (3)	20
8297337	Total Strontium (Sr)	2022/10/21	97 (1)	70 - 130	94	85 - 115	<0.050	ug	NC (3)	20
8297337	Total Thallium (Tl)	2022/10/21	99 (1)	70 - 130	98	85 - 115	<0.010	ug	NC (3)	20
8297337	Total Tin (Sn)	2022/10/21	100 (1)	70 - 130	98	85 - 115	<0.030	ug	NC (3)	20
8297337	Total Titanium (Ti)	2022/10/21	92 (1)	70 - 130	90	85 - 115	<0.10	ug	NC (3)	20
8297337	Total Uranium (U)	2022/10/21	100 (1)	70 - 130	102	85 - 115	<0.010	ug	NC (3)	20
8297337	Total Vanadium (V)	2022/10/21	96 (1)	70 - 130	92	85 - 115	<0.030	ug	NC (3)	20
8297337	Total Zinc (Zn)	2022/10/21	91 (1)	70 - 130	89	85 - 115	<0.50	ug	NC (3)	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8297979	Acid Extractable Mercury (Hg)	2022/10/28			103	90 - 110	<0.0025	ug	0.78 (2)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [TZJ878-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [TZJ878-01]

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Bureau Veritas Job #: C2T6714
Report Date: 2022/10/28

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/~~Wood~~ WSP EHI
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP	14-Sep-22		48.04	M12500525	14-Sep-22		x		x	x
TSP	26-Sep-22		44.22	20202894	26-Sep-22		x		x	x

12-Oct-22 16:28
Gina Baybayan
C2T6714
URE AIR-RmTmp

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

Client Signature: [signature]
Affiliation: WSP
Date/Time: 12-Oct 2022

Received by: [signature]
Affiliation:
Date/Time: 12/Oct/22 1628

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: N/A

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/11/30
Report #: R7411065
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2X8031
Received: 2022/11/17, 14:07

Sample Matrix: Filter
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	5	2022/11/25	2022/11/29	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	5	2022/11/17	2022/11/24	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	5	2022/11/24	2022/11/28	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	5	N/A	2022/11/24	BRL SOP-00109	EPA IO-2mod
Total Particulate	5	N/A	2022/11/23	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	5	N/A	2022/11/17		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas Job #: C2X8031
Report Date: 2022/11/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		UII738		UII739		UII740		UII741	UII742		
Sampling Date		2022/10/02		2022/10/08		2022/10/14		2022/10/20	2022/10/26		
COC Number		N/A		N/A		N/A		N/A	N/A		
	UNITS	**20202896**	**RDL**	**20202895**	**RDL**	**20204387**	**RDL**	**20202892**	**20204385**	**RDL**	**QC Batch**
Particulate	ug/m3	10.9	0.95	2.63	0.62	8.67	0.77	14.4	1.44	0.62	8352470
Particulate Weight on Filter	ug	343	30	127	30	336	30	694	69	30	8364903
Volume	m3	31.43	N/A	48.05	N/A	38.75	N/A	48.04	48.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2X8031
Report Date: 2022/11/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UII738		UII739		UII740		UII741		
Sampling Date		2022/10/02		2022/10/08		2022/10/14		2022/10/20		
COC Number		N/A		N/A		N/A		N/A		
	UNITS	**20202896**	**RDL**	**20202895**	**RDL**	**20204387**	**RDL**	**20202892**	**RDL**	**QC Batch**
Metals										
Total Aluminum (Al)	ug/m3	<0.064	0.064	<0.042	0.042	<0.052	0.052	0.079	0.042	8352392
Total Antimony (Sb)	ug/m3	<0.0016	0.0016	<0.0010	0.0010	<0.0013	0.0013	<0.0010	0.0010	8352392
Total Arsenic (As)	ug/m3	<0.0016	0.0016	<0.0010	0.0010	<0.0013	0.0013	<0.0010	0.0010	8352392
Total Barium (Ba)	ug/m3	0.0031	0.0016	<0.0010	0.0010	0.0014	0.0013	0.0033	0.0010	8352392
Total Beryllium (Be)	ug/m3	<0.00095	0.00095	<0.00062	0.00062	<0.00077	0.00077	<0.00062	0.00062	8352392
Total Bismuth (Bi)	ug/m3	<0.0016	0.0016	<0.0010	0.0010	<0.0013	0.0013	<0.0010	0.0010	8352392
Total Boron (B)	ug/m3	<0.032	0.032	<0.021	0.021	<0.026	0.026	<0.021	0.021	8352392
Total Cadmium (Cd)	ug/m3	<0.00032	0.00032	<0.00021	0.00021	<0.00026	0.00026	<0.00021	0.00021	8352392
Total Calcium (Ca)	ug/m3	0.41	0.16	<0.10	0.10	0.25	0.13	0.90	0.10	8352392
Total Chromium (Cr)	ug/m3	0.0020	0.0016	0.0022	0.0010	<0.0013	0.0013	0.0033	0.0010	8352392
Total Cobalt (Co)	ug/m3	<0.00095	0.00095	<0.00062	0.00062	<0.00077	0.00077	<0.00062	0.00062	8352392
Total Copper (Cu)	ug/m3	0.0010	0.00095	<0.00062	0.00062	<0.00077	0.00077	0.00081	0.00062	8352392
Total Iron (Fe)	ug/m3	<0.16	0.16	<0.10	0.10	<0.13	0.13	0.19	0.10	8352392
Total Lead (Pb)	ug/m3	0.0011	0.00095	<0.00062	0.00062	<0.00077	0.00077	0.00088	0.00062	8352392
Total Magnesium (Mg)	ug/m3	0.076	0.032	<0.021	0.021	0.047	0.026	0.18	0.021	8352392
Total Manganese (Mn)	ug/m3	0.0028	0.0016	<0.0010	0.0010	0.0039	0.0013	0.014	0.0010	8352392
Total Molybdenum (Mo)	ug/m3	<0.00095	0.00095	<0.00062	0.00062	<0.00077	0.00077	<0.00062	0.00062	8352392
Total Nickel (Ni)	ug/m3	<0.0016	0.0016	<0.0010	0.0010	<0.0013	0.0013	<0.0010	0.0010	8352392
Total Potassium (K)	ug/m3	<0.16	0.16	<0.10	0.10	<0.13	0.13	0.12	0.10	8352392
Total Selenium (Se)	ug/m3	<0.0032	0.0032	<0.0021	0.0021	<0.0026	0.0026	<0.0021	0.0021	8352392
Total Silver (Ag)	ug/m3	<0.00032	0.00032	<0.00021	0.00021	<0.00026	0.00026	<0.00021	0.00021	8352392
Total Sodium (Na)	ug/m3	<0.16	0.16	<0.10	0.10	0.13	0.13	<0.10	0.10	8352392
Total Strontium (Sr)	ug/m3	<0.0016	0.0016	<0.0010	0.0010	<0.0013	0.0013	0.0011	0.0010	8352392
Total Thallium (Tl)	ug/m3	<0.00032	0.00032	<0.00021	0.00021	<0.00026	0.00026	<0.00021	0.00021	8352392
Total Tin (Sn)	ug/m3	<0.00095	0.00095	<0.00062	0.00062	<0.00077	0.00077	<0.00062	0.00062	8352392
Total Titanium (Ti)	ug/m3	<0.0032	0.0032	<0.0021	0.0021	<0.0026	0.0026	0.0036	0.0021	8352392
Total Uranium (U)	ug/m3	<0.00032	0.00032	<0.00021	0.00021	<0.00026	0.00026	<0.00021	0.00021	8352392
Total Vanadium (V)	ug/m3	<0.00095	0.00095	<0.00062	0.00062	<0.00077	0.00077	<0.00062	0.00062	8352392
Total Zinc (Zn)	ug/m3	<0.016	0.016	<0.010	0.010	<0.013	0.013	<0.010	0.010	8352392

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UII742		
Sampling Date		2022/10/26		
COC Number		N/A		
	UNITS	**20204385**	**RDL**	**QC Batch**
Metals				
Total Aluminum (Al)	ug/m3	<0.042	0.042	8352392
Total Antimony (Sb)	ug/m3	<0.0010	0.0010	8352392
Total Arsenic (As)	ug/m3	<0.0010	0.0010	8352392
Total Barium (Ba)	ug/m3	<0.0010	0.0010	8352392
Total Beryllium (Be)	ug/m3	<0.00062	0.00062	8352392
Total Bismuth (Bi)	ug/m3	<0.0010	0.0010	8352392
Total Boron (B)	ug/m3	<0.021	0.021	8352392
Total Cadmium (Cd)	ug/m3	<0.00021	0.00021	8352392
Total Calcium (Ca)	ug/m3	<0.10	0.10	8352392
Total Chromium (Cr)	ug/m3	0.0029	0.0010	8352392
Total Cobalt (Co)	ug/m3	<0.00062	0.00062	8352392
Total Copper (Cu)	ug/m3	0.00066	0.00062	8352392
Total Iron (Fe)	ug/m3	<0.10	0.10	8352392
Total Lead (Pb)	ug/m3	<0.00062	0.00062	8352392
Total Magnesium (Mg)	ug/m3	<0.021	0.021	8352392
Total Manganese (Mn)	ug/m3	<0.0010	0.0010	8352392
Total Molybdenum (Mo)	ug/m3	<0.00062	0.00062	8352392
Total Nickel (Ni)	ug/m3	<0.0010	0.0010	8352392
Total Potassium (K)	ug/m3	<0.10	0.10	8352392
Total Selenium (Se)	ug/m3	<0.0021	0.0021	8352392
Total Silver (Ag)	ug/m3	<0.00021	0.00021	8352392
Total Sodium (Na)	ug/m3	<0.10	0.10	8352392
Total Strontium (Sr)	ug/m3	<0.0010	0.0010	8352392
Total Thallium (Tl)	ug/m3	<0.00021	0.00021	8352392
Total Tin (Sn)	ug/m3	<0.00062	0.00062	8352392
Total Titanium (Ti)	ug/m3	<0.0021	0.0021	8352392
Total Uranium (U)	ug/m3	<0.00021	0.00021	8352392
Total Vanadium (V)	ug/m3	<0.00062	0.00062	8352392
Total Zinc (Zn)	ug/m3	<0.010	0.010	8352392

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UII738	UII739	UII740	UII741	UII742		
Sampling Date		2022/10/02	2022/10/08	2022/10/14	2022/10/20	2022/10/26		
COC Number		N/A	N/A	N/A	N/A	N/A		
	UNITS	20202896	20202895	20204387	20202892	20204385	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug	<2.0	<2.0	<2.0	3.8	<2.0	2.0	8364950
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8364950
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8364950
Total Barium (Ba)	ug	0.098	<0.050	0.053	0.16	<0.050	0.050	8364950
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8364950
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8364950
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	8364950
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8364950
Total Calcium (Ca)	ug	13	<5.0	9.6	43	<5.0	5.0	8364950
Total Chromium (Cr)	ug	0.063	0.10	<0.050	0.16	0.14	0.050	8364950
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8364950
Total Copper (Cu)	ug	0.031	<0.030	<0.030	0.039	0.032	0.030	8364950
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	9.0	<5.0	5.0	8364950
Total Lead (Pb)	ug	0.034	<0.030	<0.030	0.042	<0.030	0.030	8364950
Total Magnesium (Mg)	ug	2.4	<1.0	1.8	8.5	<1.0	1.0	8364950
Total Manganese (Mn)	ug	0.087	<0.050	0.15	0.69	<0.050	0.050	8364950
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0025	8367325
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8364950
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8364950
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8364950
Total Potassium (K)	ug	<5.0	<5.0	<5.0	5.8	<5.0	5.0	8364950
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8364950
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8364950
Total Sodium (Na)	ug	<5.0	<5.0	5.1	<5.0	<5.0	5.0	8364950
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	0.051	<0.050	0.050	8364950
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8364950
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8364950
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	0.17	<0.10	0.10	8364950
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8364950
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8364950
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	8364950

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8364950	PBA	Matrix Spike [UII738-01]	Total Aluminum (Al)	2022/11/28		100	%	70 - 130
			Total Antimony (Sb)	2022/11/28		105	%	70 - 130
			Total Arsenic (As)	2022/11/28		97	%	70 - 130
			Total Barium (Ba)	2022/11/28		103	%	70 - 130
			Total Beryllium (Be)	2022/11/28		97	%	70 - 130
			Total Bismuth (Bi)	2022/11/28		98	%	70 - 130
			Total Boron (B)	2022/11/28		98	%	70 - 130
			Total Cadmium (Cd)	2022/11/28		96	%	70 - 130
			Total Calcium (Ca)	2022/11/28		102	%	70 - 130
			Total Chromium (Cr)	2022/11/28		99	%	70 - 130
			Total Cobalt (Co)	2022/11/28		102	%	70 - 130
			Total Copper (Cu)	2022/11/28		103	%	70 - 130
			Total Iron (Fe)	2022/11/28		104	%	70 - 130
			Total Lead (Pb)	2022/11/28		97	%	70 - 130
			Total Magnesium (Mg)	2022/11/28		99	%	70 - 130
			Total Manganese (Mn)	2022/11/28		101	%	70 - 130
			Total Molybdenum (Mo)	2022/11/28		101	%	70 - 130
			Total Nickel (Ni)	2022/11/28		99	%	70 - 130
			Total Phosphorus (P)	2022/11/28		103	%	70 - 130
			Total Potassium (K)	2022/11/28		102	%	70 - 130
			Total Selenium (Se)	2022/11/28		94	%	70 - 130
			Total Silver (Ag)	2022/11/28		100	%	70 - 130
			Total Sodium (Na)	2022/11/28		102	%	70 - 130
			Total Strontium (Sr)	2022/11/28		100	%	70 - 130
			Total Thallium (Tl)	2022/11/28		99	%	70 - 130
			Total Tin (Sn)	2022/11/28		101	%	70 - 130
			Total Titanium (Ti)	2022/11/28		96	%	70 - 130
			Total Uranium (U)	2022/11/28		97	%	70 - 130
			Total Vanadium (V)	2022/11/28		101	%	70 - 130
			Total Zinc (Zn)	2022/11/28		93	%	70 - 130
8364950	PBA	RPD [UII738-01]	Total Aluminum (Al)	2022/11/28	0.49		%	20
			Total Antimony (Sb)	2022/11/28	0.70		%	20
			Total Arsenic (As)	2022/11/28	1.6		%	20
			Total Barium (Ba)	2022/11/28	2.1		%	20
			Total Beryllium (Be)	2022/11/28	0.060		%	20
			Total Bismuth (Bi)	2022/11/28	0.82		%	20
			Total Boron (B)	2022/11/28	1.0		%	20
			Total Cadmium (Cd)	2022/11/28	1.8		%	20
			Total Calcium (Ca)	2022/11/28	1.1		%	20
			Total Chromium (Cr)	2022/11/28	2.0		%	20
			Total Cobalt (Co)	2022/11/28	1.4		%	20
			Total Copper (Cu)	2022/11/28	0.87		%	20
			Total Iron (Fe)	2022/11/28	2.1		%	20
			Total Lead (Pb)	2022/11/28	1.2		%	20
			Total Magnesium (Mg)	2022/11/28	0.57		%	20
			Total Manganese (Mn)	2022/11/28	2.0		%	20
			Total Molybdenum (Mo)	2022/11/28	2.7		%	20
			Total Nickel (Ni)	2022/11/28	1.6		%	20
			Total Phosphorus (P)	2022/11/28	0.38		%	20
			Total Potassium (K)	2022/11/28	2.0		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Selenium (Se)	2022/11/28	1.4		%	20
			Total Silver (Ag)	2022/11/28	2.4		%	20
			Total Sodium (Na)	2022/11/28	0.56		%	20
			Total Strontium (Sr)	2022/11/28	2.3		%	20
			Total Thallium (Tl)	2022/11/28	0.30		%	20
			Total Tin (Sn)	2022/11/28	3.8		%	20
			Total Titanium (Ti)	2022/11/28	2.1		%	20
			Total Uranium (U)	2022/11/28	1.5		%	20
			Total Vanadium (V)	2022/11/28	1.9		%	20
			Total Zinc (Zn)	2022/11/28	1.5		%	20
			Total Aluminum (Al)	2022/11/28	NC		%	20
			Total Antimony (Sb)	2022/11/28	NC		%	20
			Total Arsenic (As)	2022/11/28	NC		%	20
			Total Barium (Ba)	2022/11/28	5.8		%	20
			Total Beryllium (Be)	2022/11/28	NC		%	20
			Total Bismuth (Bi)	2022/11/28	NC		%	20
			Total Boron (B)	2022/11/28	NC		%	20
			Total Cadmium (Cd)	2022/11/28	NC		%	20
			Total Calcium (Ca)	2022/11/28	2.4		%	20
			Total Chromium (Cr)	2022/11/28	0.62		%	20
			Total Cobalt (Co)	2022/11/28	NC		%	20
			Total Copper (Cu)	2022/11/28	12		%	20
			Total Iron (Fe)	2022/11/28	NC		%	20
			Total Lead (Pb)	2022/11/28	1.2		%	20
			Total Magnesium (Mg)	2022/11/28	1.7		%	20
			Total Manganese (Mn)	2022/11/28	1.4		%	20
			Total Molybdenum (Mo)	2022/11/28	NC		%	20
			Total Nickel (Ni)	2022/11/28	NC		%	20
			Total Phosphorus (P)	2022/11/28	NC		%	20
			Total Potassium (K)	2022/11/28	NC		%	20
			Total Selenium (Se)	2022/11/28	NC		%	20
			Total Silver (Ag)	2022/11/28	NC		%	20
			Total Sodium (Na)	2022/11/28	NC		%	20
			Total Strontium (Sr)	2022/11/28	NC		%	20
			Total Thallium (Tl)	2022/11/28	NC		%	20
			Total Tin (Sn)	2022/11/28	NC		%	20
			Total Titanium (Ti)	2022/11/28	NC		%	20
			Total Uranium (U)	2022/11/28	NC		%	20
			Total Vanadium (V)	2022/11/28	NC		%	20
			Total Zinc (Zn)	2022/11/28	NC		%	20
8364950	PBA	Spiked Blank	Total Aluminum (Al)	2022/11/28		104	%	85 - 115
			Total Antimony (Sb)	2022/11/28		102	%	85 - 115
			Total Arsenic (As)	2022/11/28		99	%	85 - 115
			Total Barium (Ba)	2022/11/28		105	%	85 - 115
			Total Beryllium (Be)	2022/11/28		100	%	85 - 115
			Total Bismuth (Bi)	2022/11/28		100	%	85 - 115
			Total Boron (B)	2022/11/28		99	%	85 - 115
			Total Cadmium (Cd)	2022/11/28		98	%	85 - 115
			Total Calcium (Ca)	2022/11/28		106	%	85 - 115
			Total Chromium (Cr)	2022/11/28		102	%	85 - 115

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Cobalt (Co)	2022/11/28		104	%	85 - 115
			Total Copper (Cu)	2022/11/28		104	%	85 - 115
			Total Iron (Fe)	2022/11/28		107	%	85 - 115
			Total Lead (Pb)	2022/11/28		99	%	85 - 115
			Total Magnesium (Mg)	2022/11/28		102	%	85 - 115
			Total Manganese (Mn)	2022/11/28		103	%	85 - 115
			Total Molybdenum (Mo)	2022/11/28		103	%	85 - 115
			Total Nickel (Ni)	2022/11/28		101	%	85 - 115
			Total Phosphorus (P)	2022/11/28		115	%	85 - 115
			Total Potassium (K)	2022/11/28		105	%	85 - 115
			Total Selenium (Se)	2022/11/28		96	%	85 - 115
			Total Silver (Ag)	2022/11/28		99	%	85 - 115
			Total Sodium (Na)	2022/11/28		105	%	85 - 115
			Total Strontium (Sr)	2022/11/28		103	%	85 - 115
			Total Thallium (Tl)	2022/11/28		100	%	85 - 115
			Total Tin (Sn)	2022/11/28		103	%	85 - 115
			Total Titanium (Ti)	2022/11/28		97	%	85 - 115
			Total Uranium (U)	2022/11/28		100	%	85 - 115
			Total Vanadium (V)	2022/11/28		103	%	85 - 115
			Total Zinc (Zn)	2022/11/28		96	%	85 - 115
8364950	PBA	RPD	Total Aluminum (Al)	2022/11/28	0.42		%	20
			Total Antimony (Sb)	2022/11/28	0.73		%	20
			Total Arsenic (As)	2022/11/28	0.26		%	20
			Total Barium (Ba)	2022/11/28	0.99		%	20
			Total Beryllium (Be)	2022/11/28	0.019		%	20
			Total Bismuth (Bi)	2022/11/28	0.82		%	20
			Total Boron (B)	2022/11/28	1.9		%	20
			Total Cadmium (Cd)	2022/11/28	1.3		%	20
			Total Calcium (Ca)	2022/11/28	0.39		%	20
			Total Chromium (Cr)	2022/11/28	0.64		%	20
			Total Cobalt (Co)	2022/11/28	0.93		%	20
			Total Copper (Cu)	2022/11/28	1.7		%	20
			Total Iron (Fe)	2022/11/28	0.38		%	20
			Total Lead (Pb)	2022/11/28	0.21		%	20
			Total Magnesium (Mg)	2022/11/28	0.57		%	20
			Total Manganese (Mn)	2022/11/28	0.81		%	20
			Total Molybdenum (Mo)	2022/11/28	0.89		%	20
			Total Nickel (Ni)	2022/11/28	1.0		%	20
			Total Phosphorus (P)	2022/11/28	0.19		%	20
			Total Potassium (K)	2022/11/28	0.25		%	20
			Total Selenium (Se)	2022/11/28	0.31		%	20
			Total Silver (Ag)	2022/11/28	2.2		%	20
			Total Sodium (Na)	2022/11/28	0.19		%	20
			Total Strontium (Sr)	2022/11/28	1.2		%	20
			Total Thallium (Tl)	2022/11/28	1.1		%	20
			Total Tin (Sn)	2022/11/28	0.82		%	20
			Total Titanium (Ti)	2022/11/28	1.1		%	20
			Total Uranium (U)	2022/11/28	0.55		%	20
			Total Vanadium (V)	2022/11/28	0.15		%	20
			Total Zinc (Zn)	2022/11/28	0.12		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8364950	PBA	Method Blank	Total Aluminum (Al)	2022/11/29	<2.0		ug	
			Total Antimony (Sb)	2022/11/29	<0.050		ug	
			Total Arsenic (As)	2022/11/29	<0.050		ug	
			Total Barium (Ba)	2022/11/29	<0.050		ug	
			Total Beryllium (Be)	2022/11/29	<0.030		ug	
			Total Bismuth (Bi)	2022/11/29	<0.050		ug	
			Total Boron (B)	2022/11/29	<1.0		ug	
			Total Cadmium (Cd)	2022/11/29	<0.010		ug	
			Total Calcium (Ca)	2022/11/29	<5.0		ug	
			Total Chromium (Cr)	2022/11/29	<0.050		ug	
			Total Cobalt (Co)	2022/11/29	<0.030		ug	
			Total Copper (Cu)	2022/11/29	<0.030		ug	
			Total Iron (Fe)	2022/11/29	<5.0		ug	
			Total Lead (Pb)	2022/11/29	<0.030		ug	
			Total Magnesium (Mg)	2022/11/29	<1.0		ug	
			Total Manganese (Mn)	2022/11/29	<0.050		ug	
			Total Molybdenum (Mo)	2022/11/29	<0.030		ug	
			Total Nickel (Ni)	2022/11/29	<0.050		ug	
			Total Phosphorus (P)	2022/11/29	<5.0		ug	
			Total Potassium (K)	2022/11/29	<5.0		ug	
			Total Selenium (Se)	2022/11/29	<0.10		ug	
			Total Silver (Ag)	2022/11/29	<0.010		ug	
			Total Sodium (Na)	2022/11/29	<5.0		ug	
			Total Strontium (Sr)	2022/11/29	<0.050		ug	
			Total Thallium (Tl)	2022/11/29	<0.010		ug	
			Total Tin (Sn)	2022/11/29	<0.030		ug	
			Total Titanium (Ti)	2022/11/29	<0.10		ug	
			Total Uranium (U)	2022/11/29	<0.010		ug	
			Total Vanadium (V)	2022/11/29	<0.030		ug	
			Total Zinc (Zn)	2022/11/29	<0.50		ug	
8367325	JGC	Spiked Blank	Acid Extractable Mercury (Hg)	2022/11/29		93	%	90 - 110
8367325	JGC	RPD	Acid Extractable Mercury (Hg)	2022/11/29	1.7		%	20
8367325	JGC	Method Blank	Acid Extractable Mercury (Hg)	2022/11/29	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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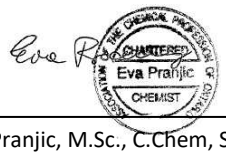
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2X8031
Report Date: 2022/11/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/01/04
Report #: R7453854
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2AF305
Received: 2022/12/13, 11:58

Sample Matrix: Filter
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	2	2022/12/28	2022/12/29	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	2	2022/12/13	2022/12/19	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	2	2022/12/21	2023/01/04	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	7	N/A	2022/12/19	BRL SOP-00109	EPA IO-2mod
Total Particulate	7	N/A	2022/12/16	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	7	N/A	2022/12/13		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C2AF305
Report Date: 2023/01/04

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		UOM434	UOM435		UOM409		UOM410		
Sampling Date		2022/11/01	2022/11/30		2022/11/06		2022/11/12		
COC Number		n/a	n/a		n/a		n/a		
	UNITS	TSP 01-NOV-22	TSP 30-NOV-22	RDL	PM10 06-NOV-22	RDL	PM10 12-NOV-22	RDL	QC Batch
Particulate	ug/m3	8.67	3.71	0.62	7.0	1.4	2.4	1.2	8401909
Particulate Weight on Filter	ug	417	178	30	148	30	59	30	8412061
Volume	m3	48.04	48.04	N/A	21.07	N/A	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		UOM411	UOM412	UOM413		
Sampling Date		2022/11/18	2022/11/24	2022/11/30		
COC Number		n/a	n/a	n/a		
	UNITS	PM10 18-NOV-22	PM10 24-NOV-22	PM10 30-NOV-22	RDL	QC Batch
Particulate	ug/m3	4.6	8.7	2.2	1.2	8401909
Particulate Weight on Filter	ug	112	210	52	30	8412061
Volume	m3	24.08	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UOM434	UOM435		
Sampling Date		2022/11/01	2022/11/30		
COC Number		n/a	n/a		
	UNITS	TSP 01-NOV-22	TSP 30-NOV-22	RDL	QC Batch
Metals					
Total Aluminum (Al)	ug/m3	0.063	<0.042	0.042	8401908
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	0.0010	8401908
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	0.0010	8401908
Total Barium (Ba)	ug/m3	0.0025	<0.0010	0.0010	8401908
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	0.00062	8401908
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	0.0010	8401908
Total Boron (B)	ug/m3	<0.021	<0.021	0.021	8401908
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	0.00021	8401908
Total Calcium (Ca)	ug/m3	0.31	<0.10	0.10	8401908
Total Chromium (Cr)	ug/m3	0.0016	0.0026	0.0010	8401908
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	0.00062	8401908
Total Copper (Cu)	ug/m3	0.0029	0.00092	0.00062	8401908
Total Iron (Fe)	ug/m3	<0.10	<0.10	0.10	8401908
Total Lead (Pb)	ug/m3	0.0020	<0.00062	0.00062	8401908
Total Magnesium (Mg)	ug/m3	0.066	0.023	0.021	8401908
Total Manganese (Mn)	ug/m3	0.0035	0.0012	0.0010	8401908
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	0.00062	8401908
Total Nickel (Ni)	ug/m3	0.0011	<0.0010	0.0010	8401908
Total Potassium (K)	ug/m3	<0.10	<0.10	0.10	8401908
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	0.0021	8401908
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	0.00021	8401908
Total Sodium (Na)	ug/m3	<0.10	<0.10	0.10	8401908
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	0.0010	8401908
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	0.00021	8401908
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	0.00062	8401908
Total Titanium (Ti)	ug/m3	0.0036	<0.0021	0.0021	8401908
Total Uranium (U)	ug/m3	<0.00021	<0.00021	0.00021	8401908
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	0.00062	8401908
Total Zinc (Zn)	ug/m3	<0.010	<0.010	0.010	8401908

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2AF305
Report Date: 2023/01/04

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UOM434	UOM435		
Sampling Date		2022/11/01	2022/11/30		
COC Number		n/a	n/a		
	UNITS	TSP 01-NOV-22	TSP 30-NOV-22	RDL	QC Batch
Metals					
Total Aluminum (Al)	ug	3.0	<2.0	2.0	8413652
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	8413652
Total Arsenic (As)	ug	<0.050	<0.050	0.050	8413652
Total Barium (Ba)	ug	0.12	<0.050	0.050	8413652
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	8413652
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	8413652
Total Boron (B)	ug	<1.0	<1.0	1.0	8413652
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	8413652
Total Calcium (Ca)	ug	15	<5.0	5.0	8413652
Total Chromium (Cr)	ug	0.076	0.13	0.050	8413652
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	8413652
Total Copper (Cu)	ug	0.14	0.044	0.030	8413652
Total Iron (Fe)	ug	<5.0	<5.0	5.0	8413652
Total Lead (Pb)	ug	0.094	<0.030	0.030	8413652
Total Magnesium (Mg)	ug	3.2	1.1	1.0	8413652
Total Manganese (Mn)	ug	0.17	0.058	0.050	8413652
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	0.0025	8423605
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	8413652
Total Nickel (Ni)	ug	0.051	<0.050	0.050	8413652
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	8413652
Total Potassium (K)	ug	<5.0	<5.0	5.0	8413652
Total Selenium (Se)	ug	<0.10	<0.10	0.10	8413652
Total Silver (Ag)	ug	<0.010	<0.010	0.010	8413652
Total Sodium (Na)	ug	<5.0	<5.0	5.0	8413652
Total Strontium (Sr)	ug	<0.050	<0.050	0.050	8413652
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	8413652
Total Tin (Sn)	ug	<0.030	<0.030	0.030	8413652
Total Titanium (Ti)	ug	0.17	<0.10	0.10	8413652
Total Uranium (U)	ug	<0.010	<0.010	0.010	8413652
Total Vanadium (V)	ug	<0.030	<0.030	0.030	8413652
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	8413652

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2AF305
Report Date: 2023/01/04

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8413652	PBA	Matrix Spike [UOM434-01]	Total Aluminum (Al)	2023/01/04		102	%	70 - 130
			Total Antimony (Sb)	2023/01/04		103	%	70 - 130
			Total Arsenic (As)	2023/01/04		97	%	70 - 130
			Total Barium (Ba)	2023/01/04		101	%	70 - 130
			Total Beryllium (Be)	2023/01/04		101	%	70 - 130
			Total Bismuth (Bi)	2023/01/04		97	%	70 - 130
			Total Boron (B)	2023/01/04		103	%	70 - 130
			Total Cadmium (Cd)	2023/01/04		95	%	70 - 130
			Total Calcium (Ca)	2023/01/04		103	%	70 - 130
			Total Chromium (Cr)	2023/01/04		99	%	70 - 130
			Total Cobalt (Co)	2023/01/04		99	%	70 - 130
			Total Copper (Cu)	2023/01/04		101	%	70 - 130
			Total Iron (Fe)	2023/01/04		101	%	70 - 130
			Total Lead (Pb)	2023/01/04		98	%	70 - 130
			Total Magnesium (Mg)	2023/01/04		100	%	70 - 130
			Total Manganese (Mn)	2023/01/04		101	%	70 - 130
			Total Molybdenum (Mo)	2023/01/04		101	%	70 - 130
			Total Nickel (Ni)	2023/01/04		98	%	70 - 130
			Total Phosphorus (P)	2023/01/04		96	%	70 - 130
			Total Potassium (K)	2023/01/04		102	%	70 - 130
			Total Selenium (Se)	2023/01/04		95	%	70 - 130
			Total Silver (Ag)	2023/01/04		99	%	70 - 130
			Total Sodium (Na)	2023/01/04		102	%	70 - 130
			Total Strontium (Sr)	2023/01/04		99	%	70 - 130
			Total Thallium (Tl)	2023/01/04		99	%	70 - 130
			Total Tin (Sn)	2023/01/04		99	%	70 - 130
			Total Titanium (Ti)	2023/01/04		99	%	70 - 130
			Total Uranium (U)	2023/01/04		98	%	70 - 130
			Total Vanadium (V)	2023/01/04		101	%	70 - 130
			Total Zinc (Zn)	2023/01/04		94	%	70 - 130
8413652	PBA	RPD [UOM434-01]	Total Aluminum (Al)	2023/01/04	0.34		%	20
			Total Antimony (Sb)	2023/01/04	0.68		%	20
			Total Arsenic (As)	2023/01/04	2.0		%	20
			Total Barium (Ba)	2023/01/04	1.5		%	20
			Total Beryllium (Be)	2023/01/04	2.1		%	20
			Total Bismuth (Bi)	2023/01/04	0.55		%	20
			Total Boron (B)	2023/01/04	2.7		%	20
			Total Cadmium (Cd)	2023/01/04	1.5		%	20
			Total Calcium (Ca)	2023/01/04	0.27		%	20
			Total Chromium (Cr)	2023/01/04	0.95		%	20
			Total Cobalt (Co)	2023/01/04	0.82		%	20
			Total Copper (Cu)	2023/01/04	1.2		%	20
			Total Iron (Fe)	2023/01/04	1.0		%	20
			Total Lead (Pb)	2023/01/04	0.77		%	20
			Total Magnesium (Mg)	2023/01/04	1.0		%	20
			Total Manganese (Mn)	2023/01/04	2.3		%	20
			Total Molybdenum (Mo)	2023/01/04	1.2		%	20
			Total Nickel (Ni)	2023/01/04	1.6		%	20
			Total Phosphorus (P)	2023/01/04	1.3		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Potassium (K)	2023/01/04	1.4		%	20
			Total Selenium (Se)	2023/01/04	1.2		%	20
			Total Silver (Ag)	2023/01/04	2.4		%	20
			Total Sodium (Na)	2023/01/04	0.45		%	20
			Total Strontium (Sr)	2023/01/04	0.29		%	20
			Total Thallium (Tl)	2023/01/04	0.65		%	20
			Total Tin (Sn)	2023/01/04	0.27		%	20
			Total Titanium (Ti)	2023/01/04	0.98		%	20
			Total Uranium (U)	2023/01/04	0.97		%	20
			Total Vanadium (V)	2023/01/04	1.6		%	20
			Total Zinc (Zn)	2023/01/04	1.9		%	20
			Total Aluminum (Al)	2023/01/04	0.43		%	20
			Total Antimony (Sb)	2023/01/04	NC		%	20
			Total Arsenic (As)	2023/01/04	NC		%	20
			Total Barium (Ba)	2023/01/04	4.2		%	20
			Total Beryllium (Be)	2023/01/04	NC		%	20
			Total Bismuth (Bi)	2023/01/04	NC		%	20
			Total Boron (B)	2023/01/04	NC		%	20
			Total Cadmium (Cd)	2023/01/04	NC		%	20
			Total Calcium (Ca)	2023/01/04	1.2		%	20
			Total Chromium (Cr)	2023/01/04	4.8		%	20
			Total Cobalt (Co)	2023/01/04	NC		%	20
			Total Copper (Cu)	2023/01/04	3.0		%	20
			Total Iron (Fe)	2023/01/04	NC		%	20
			Total Lead (Pb)	2023/01/04	0.91		%	20
			Total Magnesium (Mg)	2023/01/04	0.028		%	20
			Total Manganese (Mn)	2023/01/04	0.36		%	20
			Total Molybdenum (Mo)	2023/01/04	NC		%	20
			Total Nickel (Ni)	2023/01/04	1.5		%	20
			Total Phosphorus (P)	2023/01/04	NC		%	20
			Total Potassium (K)	2023/01/04	NC		%	20
			Total Selenium (Se)	2023/01/04	NC		%	20
			Total Silver (Ag)	2023/01/04	NC		%	20
			Total Sodium (Na)	2023/01/04	NC		%	20
			Total Strontium (Sr)	2023/01/04	NC		%	20
			Total Thallium (Tl)	2023/01/04	NC		%	20
			Total Tin (Sn)	2023/01/04	NC		%	20
			Total Titanium (Ti)	2023/01/04	4.9		%	20
			Total Uranium (U)	2023/01/04	NC		%	20
			Total Vanadium (V)	2023/01/04	NC		%	20
			Total Zinc (Zn)	2023/01/04	NC		%	20
8413652	PBA	Spiked Blank	Total Aluminum (Al)	2023/01/04		101	%	85 - 115
			Total Antimony (Sb)	2023/01/04		98	%	85 - 115
			Total Arsenic (As)	2023/01/04		95	%	85 - 115
			Total Barium (Ba)	2023/01/04		99	%	85 - 115
			Total Beryllium (Be)	2023/01/04		99	%	85 - 115
			Total Bismuth (Bi)	2023/01/04		96	%	85 - 115
			Total Boron (B)	2023/01/04		99	%	85 - 115
			Total Cadmium (Cd)	2023/01/04		96	%	85 - 115
			Total Calcium (Ca)	2023/01/04		102	%	85 - 115

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Chromium (Cr)	2023/01/04		98	%	85 - 115
			Total Cobalt (Co)	2023/01/04		98	%	85 - 115
			Total Copper (Cu)	2023/01/04		99	%	85 - 115
			Total Iron (Fe)	2023/01/04		100	%	85 - 115
			Total Lead (Pb)	2023/01/04		97	%	85 - 115
			Total Magnesium (Mg)	2023/01/04		98	%	85 - 115
			Total Manganese (Mn)	2023/01/04		99	%	85 - 115
			Total Molybdenum (Mo)	2023/01/04		100	%	85 - 115
			Total Nickel (Ni)	2023/01/04		96	%	85 - 115
			Total Phosphorus (P)	2023/01/04		104	%	85 - 115
			Total Potassium (K)	2023/01/04		101	%	85 - 115
			Total Selenium (Se)	2023/01/04		94	%	85 - 115
			Total Silver (Ag)	2023/01/04		97	%	85 - 115
			Total Sodium (Na)	2023/01/04		100	%	85 - 115
			Total Strontium (Sr)	2023/01/04		99	%	85 - 115
			Total Thallium (Tl)	2023/01/04		98	%	85 - 115
			Total Tin (Sn)	2023/01/04		99	%	85 - 115
			Total Titanium (Ti)	2023/01/04		96	%	85 - 115
			Total Uranium (U)	2023/01/04		98	%	85 - 115
			Total Vanadium (V)	2023/01/04		99	%	85 - 115
			Total Zinc (Zn)	2023/01/04		93	%	85 - 115
8413652	PBA	RPD	Total Aluminum (Al)	2023/01/04	1.7		%	20
			Total Antimony (Sb)	2023/01/04	2.6		%	20
			Total Arsenic (As)	2023/01/04	0.99		%	20
			Total Barium (Ba)	2023/01/04	2.0		%	20
			Total Beryllium (Be)	2023/01/04	0.30		%	20
			Total Bismuth (Bi)	2023/01/04	1.0		%	20
			Total Boron (B)	2023/01/04	0.019		%	20
			Total Cadmium (Cd)	2023/01/04	0.53		%	20
			Total Calcium (Ca)	2023/01/04	0.97		%	20
			Total Chromium (Cr)	2023/01/04	1.1		%	20
			Total Cobalt (Co)	2023/01/04	0.77		%	20
			Total Copper (Cu)	2023/01/04	0.25		%	20
			Total Iron (Fe)	2023/01/04	0.10		%	20
			Total Lead (Pb)	2023/01/04	0.24		%	20
			Total Magnesium (Mg)	2023/01/04	2.6		%	20
			Total Manganese (Mn)	2023/01/04	0.66		%	20
			Total Molybdenum (Mo)	2023/01/04	0.68		%	20
			Total Nickel (Ni)	2023/01/04	1.7		%	20
			Total Phosphorus (P)	2023/01/04	2.7		%	20
			Total Potassium (K)	2023/01/04	0.62		%	20
			Total Selenium (Se)	2023/01/04	1.4		%	20
			Total Silver (Ag)	2023/01/04	0.68		%	20
			Total Sodium (Na)	2023/01/04	1.9		%	20
			Total Strontium (Sr)	2023/01/04	0.81		%	20
			Total Thallium (Tl)	2023/01/04	0.054		%	20
			Total Tin (Sn)	2023/01/04	1.4		%	20
			Total Titanium (Ti)	2023/01/04	1.1		%	20
			Total Uranium (U)	2023/01/04	0.018		%	20
			Total Vanadium (V)	2023/01/04	0.66		%	20

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Zinc (Zn)	2023/01/04	1.5		%	20
8413652	PBA	Method Blank	Total Aluminum (Al)	2023/01/04	<2.0		ug	
			Total Antimony (Sb)	2023/01/04	<0.050		ug	
			Total Arsenic (As)	2023/01/04	<0.050		ug	
			Total Barium (Ba)	2023/01/04	<0.050		ug	
			Total Beryllium (Be)	2023/01/04	<0.030		ug	
			Total Bismuth (Bi)	2023/01/04	<0.050		ug	
			Total Boron (B)	2023/01/04	<1.0		ug	
			Total Cadmium (Cd)	2023/01/04	<0.010		ug	
			Total Calcium (Ca)	2023/01/04	<5.0		ug	
			Total Chromium (Cr)	2023/01/04	<0.050		ug	
			Total Cobalt (Co)	2023/01/04	<0.030		ug	
			Total Copper (Cu)	2023/01/04	0.098, RDL=0.030		ug	
			Total Iron (Fe)	2023/01/04	<5.0		ug	
			Total Lead (Pb)	2023/01/04	<0.030		ug	
			Total Magnesium (Mg)	2023/01/04	<1.0		ug	
			Total Manganese (Mn)	2023/01/04	<0.050		ug	
			Total Molybdenum (Mo)	2023/01/04	<0.030		ug	
			Total Nickel (Ni)	2023/01/04	<0.050		ug	
			Total Phosphorus (P)	2023/01/04	<5.0		ug	
			Total Potassium (K)	2023/01/04	<5.0		ug	
			Total Selenium (Se)	2023/01/04	<0.10		ug	
			Total Silver (Ag)	2023/01/04	<0.010		ug	
			Total Sodium (Na)	2023/01/04	<5.0		ug	
			Total Strontium (Sr)	2023/01/04	<0.050		ug	
			Total Thallium (Tl)	2023/01/04	<0.010		ug	
			Total Tin (Sn)	2023/01/04	<0.030		ug	
			Total Titanium (Ti)	2023/01/04	<0.10		ug	
			Total Uranium (U)	2023/01/04	<0.010		ug	
			Total Vanadium (V)	2023/01/04	<0.030		ug	
			Total Zinc (Zn)	2023/01/04	<0.50		ug	
8423605	JGC	Spiked Blank	Acid Extractable Mercury (Hg)	2022/12/29		100	%	90 - 110
8423605	JGC	RPD	Acid Extractable Mercury (Hg)	2022/12/29	6.3		%	20
8423605	JGC	Method Blank	Acid Extractable Mercury (Hg)	2022/12/29	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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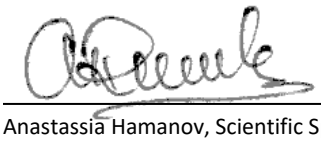
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2AF305
Report Date: 2023/01/04

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/01/09
Report #: R7458734
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2AO995
Received: 2022/12/21, 14:10

Sample Matrix: Filter
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	3	2023/01/05	2023/01/05	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	3	2022/12/22	2022/12/22	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	3	2023/01/04	2023/01/05	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	5	N/A	2022/12/30	BRL SOP-00109	EPA IO-2mod
Total Particulate	5	N/A	2022/12/29	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	5	N/A	2022/12/22		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

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Bureau Veritas Job #: C2AO995
Report Date: 2023/01/09

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		UQQ186		UQQ187	UQQ188		UQQ189	UQQ190		
Sampling Date		2022/12/06		2022/12/10	2022/12/13		2022/12/06	2022/12/13		
COC Number		na		na	na		na	na		
	UNITS	**TSP 20204382**	**RDL**	**TSP 12500461**	**TSP 20204386**	**RDL**	**PM10 06-DEC-22**	**PM10 13-DEC-22**	**RDL**	**QC Batch**
Particulate	ug/m3	4.6	1.2	2.37	1.16	0.62	4.4	1.5	1.2	8419466
Particulate Weight on Filter	ug	112	30	114	56	30	107	36	30	8427876
Volume	m3	24.03	N/A	48.06	48.07	N/A	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C2AO995
Report Date: 2023/01/09

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UQQ186		UQQ187	UQQ188		
Sampling Date		2022/12/06		2022/12/10	2022/12/13		
COC Number		na		na	na		
	UNITS	TSP 20204382	RDL	TSP 12500461	TSP 20204386	RDL	QC Batch
Metals							
Total Aluminum (Al)	ug/m3	<0.083	0.083	<0.042	<0.042	0.042	8419463
Total Antimony (Sb)	ug/m3	<0.0021	0.0021	<0.0010	<0.0010	0.0010	8419463
Total Arsenic (As)	ug/m3	<0.0021	0.0021	<0.0010	<0.0010	0.0010	8419463
Total Barium (Ba)	ug/m3	<0.0021	0.0021	<0.0010	<0.0010	0.0010	8419463
Total Beryllium (Be)	ug/m3	<0.0012	0.0012	<0.00062	<0.00062	0.00062	8419463
Total Bismuth (Bi)	ug/m3	<0.0021	0.0021	<0.0010	<0.0010	0.0010	8419463
Total Boron (B)	ug/m3	<0.042	0.042	<0.021	<0.021	0.021	8419463
Total Cadmium (Cd)	ug/m3	<0.00042	0.00042	<0.00021	<0.00021	0.00021	8419463
Total Calcium (Ca)	ug/m3	<0.21	0.21	<0.10	<0.10	0.10	8419463
Total Chromium (Cr)	ug/m3	<0.0021	0.0021	<0.0010	0.0018	0.0010	8419463
Total Cobalt (Co)	ug/m3	<0.0012	0.0012	<0.00062	<0.00062	0.00062	8419463
Total Copper (Cu)	ug/m3	0.018	0.0012	0.0024	<0.00062	0.00062	8419463
Total Iron (Fe)	ug/m3	<0.21	0.21	<0.10	<0.10	0.10	8419463
Total Lead (Pb)	ug/m3	<0.0012	0.0012	0.0026	<0.00062	0.00062	8419463
Total Magnesium (Mg)	ug/m3	<0.042	0.042	<0.021	<0.021	0.021	8419463
Total Manganese (Mn)	ug/m3	<0.0021	0.0021	<0.0010	<0.0010	0.0010	8419463
Total Molybdenum (Mo)	ug/m3	<0.0012	0.0012	<0.00062	<0.00062	0.00062	8419463
Total Nickel (Ni)	ug/m3	<0.0021	0.0021	<0.0010	<0.0010	0.0010	8419463
Total Potassium (K)	ug/m3	<0.21	0.21	<0.10	<0.10	0.10	8419463
Total Selenium (Se)	ug/m3	<0.0042	0.0042	<0.0021	<0.0021	0.0021	8419463
Total Silver (Ag)	ug/m3	<0.00042	0.00042	<0.00021	<0.00021	0.00021	8419463
Total Sodium (Na)	ug/m3	<0.21	0.21	<0.10	<0.10	0.10	8419463
Total Strontium (Sr)	ug/m3	<0.0021	0.0021	<0.0010	<0.0010	0.0010	8419463
Total Thallium (Tl)	ug/m3	<0.00042	0.00042	<0.00021	<0.00021	0.00021	8419463
Total Tin (Sn)	ug/m3	<0.0012	0.0012	<0.00062	<0.00062	0.00062	8419463
Total Titanium (Ti)	ug/m3	<0.0042	0.0042	<0.0021	<0.0021	0.0021	8419463
Total Uranium (U)	ug/m3	<0.00042	0.00042	<0.00021	<0.00021	0.00021	8419463
Total Vanadium (V)	ug/m3	<0.0012	0.0012	<0.00062	<0.00062	0.00062	8419463
Total Zinc (Zn)	ug/m3	<0.021	0.021	<0.010	<0.010	0.010	8419463

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2AO995
Report Date: 2023/01/09

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UQQ186	UQQ187	UQQ188		
Sampling Date		2022/12/06	2022/12/10	2022/12/13		
COC Number		na	na	na		
	UNITS	TSP 20204382	TSP 12500461	TSP 20204386	RDL	QC Batch
Metals						
Total Aluminum (Al)	ug	<2.0	<2.0	<2.0	2.0	8432615
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	0.050	8432615
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	0.050	8432615
Total Barium (Ba)	ug	<0.050	<0.050	<0.050	0.050	8432615
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	0.030	8432615
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	0.050	8432615
Total Boron (B)	ug	<1.0	<1.0	<1.0	1.0	8432615
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	0.010	8432615
Total Calcium (Ca)	ug	<5.0	<5.0	<5.0	5.0	8432615
Total Chromium (Cr)	ug	<0.050	<0.050	0.087	0.050	8432615
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	0.030	8432615
Total Copper (Cu)	ug	0.42	0.12	<0.030	0.030	8432615
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	5.0	8432615
Total Lead (Pb)	ug	<0.030	0.12	<0.030	0.030	8432615
Total Magnesium (Mg)	ug	<1.0	<1.0	<1.0	1.0	8432615
Total Manganese (Mn)	ug	<0.050	<0.050	<0.050	0.050	8432615
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	0.0025	8433923
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	0.030	8432615
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	0.050	8432615
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	5.0	8432615
Total Potassium (K)	ug	<5.0	<5.0	<5.0	5.0	8432615
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	0.10	8432615
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	0.010	8432615
Total Sodium (Na)	ug	<5.0	<5.0	<5.0	5.0	8432615
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	0.050	8432615
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	0.010	8432615
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	0.030	8432615
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	0.10	8432615
Total Uranium (U)	ug	<0.010	<0.010	<0.010	0.010	8432615
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	0.030	8432615
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	0.50	8432615

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Total Metals on Small Filter (6020Bmod): Post digestion duplicate and spike were done on sample UQK740.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8432615	N_R	Matrix Spike	Total Aluminum (Al)	2023/01/05		97	%	70 - 130
			Total Antimony (Sb)	2023/01/05		102	%	70 - 130
			Total Arsenic (As)	2023/01/05		99	%	70 - 130
			Total Barium (Ba)	2023/01/05		98	%	70 - 130
			Total Beryllium (Be)	2023/01/05		101	%	70 - 130
			Total Bismuth (Bi)	2023/01/05		97	%	70 - 130
			Total Boron (B)	2023/01/05		100	%	70 - 130
			Total Cadmium (Cd)	2023/01/05		97	%	70 - 130
			Total Calcium (Ca)	2023/01/05		96	%	70 - 130
			Total Chromium (Cr)	2023/01/05		99	%	70 - 130
			Total Cobalt (Co)	2023/01/05		99	%	70 - 130
			Total Copper (Cu)	2023/01/05		99	%	70 - 130
			Total Iron (Fe)	2023/01/05		104	%	70 - 130
			Total Lead (Pb)	2023/01/05		97	%	70 - 130
			Total Magnesium (Mg)	2023/01/05		100	%	70 - 130
			Total Manganese (Mn)	2023/01/05		99	%	70 - 130
			Total Molybdenum (Mo)	2023/01/05		102	%	70 - 130
			Total Nickel (Ni)	2023/01/05		98	%	70 - 130
			Total Phosphorus (P)	2023/01/05		97	%	70 - 130
			Total Potassium (K)	2023/01/05		100	%	70 - 130
			Total Selenium (Se)	2023/01/05		93	%	70 - 130
			Total Silver (Ag)	2023/01/05		102	%	70 - 130
			Total Sodium (Na)	2023/01/05		100	%	70 - 130
			Total Strontium (Sr)	2023/01/05		101	%	70 - 130
			Total Thallium (Tl)	2023/01/05		98	%	70 - 130
			Total Tin (Sn)	2023/01/05		102	%	70 - 130
			Total Titanium (Ti)	2023/01/05		97	%	70 - 130
			Total Uranium (U)	2023/01/05		98	%	70 - 130
			Total Vanadium (V)	2023/01/05		99	%	70 - 130
			Total Zinc (Zn)	2023/01/05		95	%	70 - 130
8432615	N_R	RPD	Total Aluminum (Al)	2023/01/05	0.84		%	20
			Total Antimony (Sb)	2023/01/05	0.56		%	20
			Total Arsenic (As)	2023/01/05	0.062		%	20
			Total Barium (Ba)	2023/01/05	2.9		%	20
			Total Beryllium (Be)	2023/01/05	1.3		%	20
			Total Bismuth (Bi)	2023/01/05	2.2		%	20
			Total Boron (B)	2023/01/05	2.3		%	20
			Total Cadmium (Cd)	2023/01/05	0.24		%	20
			Total Calcium (Ca)	2023/01/05	1.7		%	20
			Total Chromium (Cr)	2023/01/05	0.54		%	20
			Total Cobalt (Co)	2023/01/05	0.56		%	20
			Total Copper (Cu)	2023/01/05	0.90		%	20
			Total Iron (Fe)	2023/01/05	0.57		%	20
			Total Lead (Pb)	2023/01/05	1.9		%	20
			Total Magnesium (Mg)	2023/01/05	2.1		%	20
			Total Manganese (Mn)	2023/01/05	0.54		%	20
			Total Molybdenum (Mo)	2023/01/05	0.17		%	20
			Total Nickel (Ni)	2023/01/05	0.97		%	20
			Total Phosphorus (P)	2023/01/05	0.092		%	20
			Total Potassium (K)	2023/01/05	0.66		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Selenium (Se)	2023/01/05	2.7		%	20
			Total Silver (Ag)	2023/01/05	0.68		%	20
			Total Sodium (Na)	2023/01/05	0.77		%	20
			Total Strontium (Sr)	2023/01/05	0.50		%	20
			Total Thallium (Tl)	2023/01/05	3.2		%	20
			Total Tin (Sn)	2023/01/05	0.19		%	20
			Total Titanium (Ti)	2023/01/05	0.96		%	20
			Total Uranium (U)	2023/01/05	2.3		%	20
			Total Vanadium (V)	2023/01/05	0.56		%	20
			Total Zinc (Zn)	2023/01/05	0.56		%	20
			Total Aluminum (Al)	2023/01/05	1.7		%	20
			Total Antimony (Sb)	2023/01/05	0.32		%	20
			Total Arsenic (As)	2023/01/05	0.95		%	20
			Total Barium (Ba)	2023/01/05	0.62		%	20
			Total Beryllium (Be)	2023/01/05	0.23		%	20
			Total Bismuth (Bi)	2023/01/05	2.6		%	20
			Total Boron (B)	2023/01/05	1.5		%	20
			Total Cadmium (Cd)	2023/01/05	0.83		%	20
			Total Calcium (Ca)	2023/01/05	1.0		%	20
			Total Chromium (Cr)	2023/01/05	1.1		%	20
			Total Cobalt (Co)	2023/01/05	1.3		%	20
			Total Copper (Cu)	2023/01/05	1.6		%	20
			Total Iron (Fe)	2023/01/05	1.2		%	20
			Total Lead (Pb)	2023/01/05	2.9		%	20
			Total Magnesium (Mg)	2023/01/05	0.41		%	20
			Total Manganese (Mn)	2023/01/05	0.89		%	20
			Total Molybdenum (Mo)	2023/01/05	0.065		%	20
			Total Nickel (Ni)	2023/01/05	0.67		%	20
			Total Phosphorus (P)	2023/01/05	1.7		%	20
			Total Potassium (K)	2023/01/05	0.90		%	20
			Total Selenium (Se)	2023/01/05	1.1		%	20
			Total Silver (Ag)	2023/01/05	1.6		%	20
			Total Sodium (Na)	2023/01/05	1.8		%	20
			Total Strontium (Sr)	2023/01/05	1.1		%	20
			Total Thallium (Tl)	2023/01/05	0.98		%	20
			Total Tin (Sn)	2023/01/05	0.15		%	20
			Total Titanium (Ti)	2023/01/05	0.57		%	20
			Total Uranium (U)	2023/01/05	1.9		%	20
			Total Vanadium (V)	2023/01/05	0.96		%	20
			Total Zinc (Zn)	2023/01/05	0.74		%	20
			Total Cadmium (Cd)	2023/01/05	NC		%	20
8432615	N_R	Spiked Blank	Total Aluminum (Al)	2023/01/05		97	%	85 - 115
			Total Antimony (Sb)	2023/01/05		99	%	85 - 115
			Total Arsenic (As)	2023/01/05		96	%	85 - 115
			Total Barium (Ba)	2023/01/05		97	%	85 - 115
			Total Beryllium (Be)	2023/01/05		99	%	85 - 115
			Total Bismuth (Bi)	2023/01/05		95	%	85 - 115
			Total Boron (B)	2023/01/05		98	%	85 - 115
			Total Cadmium (Cd)	2023/01/05		97	%	85 - 115
			Total Calcium (Ca)	2023/01/05		98	%	85 - 115

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Chromium (Cr)	2023/01/05		97	%	85 - 115
			Total Cobalt (Co)	2023/01/05		98	%	85 - 115
			Total Copper (Cu)	2023/01/05		99	%	85 - 115
			Total Iron (Fe)	2023/01/05		101	%	85 - 115
			Total Lead (Pb)	2023/01/05		95	%	85 - 115
			Total Magnesium (Mg)	2023/01/05		99	%	85 - 115
			Total Manganese (Mn)	2023/01/05		96	%	85 - 115
			Total Molybdenum (Mo)	2023/01/05		103	%	85 - 115
			Total Nickel (Ni)	2023/01/05		96	%	85 - 115
			Total Phosphorus (P)	2023/01/05		101	%	85 - 115
			Total Potassium (K)	2023/01/05		97	%	85 - 115
			Total Selenium (Se)	2023/01/05		94	%	85 - 115
			Total Silver (Ag)	2023/01/05		100	%	85 - 115
			Total Sodium (Na)	2023/01/05		99	%	85 - 115
			Total Strontium (Sr)	2023/01/05		98	%	85 - 115
			Total Thallium (Tl)	2023/01/05		98	%	85 - 115
			Total Tin (Sn)	2023/01/05		101	%	85 - 115
			Total Titanium (Ti)	2023/01/05		98	%	85 - 115
			Total Uranium (U)	2023/01/05		96	%	85 - 115
			Total Vanadium (V)	2023/01/05		97	%	85 - 115
			Total Zinc (Zn)	2023/01/05		94	%	85 - 115
8432615	N_R	Method Blank	Total Aluminum (Al)	2023/01/05	<2.0		ug	
			Total Antimony (Sb)	2023/01/05	<0.050		ug	
			Total Arsenic (As)	2023/01/05	<0.050		ug	
			Total Barium (Ba)	2023/01/05	<0.050		ug	
			Total Beryllium (Be)	2023/01/05	<0.030		ug	
			Total Bismuth (Bi)	2023/01/05	<0.050		ug	
			Total Boron (B)	2023/01/05	<1.0		ug	
			Total Cadmium (Cd)	2023/01/05	<0.010		ug	
			Total Calcium (Ca)	2023/01/05	<5.0		ug	
			Total Chromium (Cr)	2023/01/05	<0.050		ug	
			Total Cobalt (Co)	2023/01/05	<0.030		ug	
			Total Copper (Cu)	2023/01/05	<0.030		ug	
			Total Iron (Fe)	2023/01/05	<5.0		ug	
			Total Lead (Pb)	2023/01/05	<0.030		ug	
			Total Magnesium (Mg)	2023/01/05	<1.0		ug	
			Total Manganese (Mn)	2023/01/05	<0.050		ug	
			Total Molybdenum (Mo)	2023/01/05	<0.030		ug	
			Total Nickel (Ni)	2023/01/05	<0.050		ug	
			Total Phosphorus (P)	2023/01/05	<5.0		ug	
			Total Potassium (K)	2023/01/05	<5.0		ug	
			Total Selenium (Se)	2023/01/05	<0.10		ug	
			Total Silver (Ag)	2023/01/05	<0.010		ug	
			Total Sodium (Na)	2023/01/05	<5.0		ug	
			Total Strontium (Sr)	2023/01/05	<0.050		ug	
			Total Thallium (Tl)	2023/01/05	<0.010		ug	
			Total Tin (Sn)	2023/01/05	<0.030		ug	
			Total Titanium (Ti)	2023/01/05	<0.10		ug	
			Total Uranium (U)	2023/01/05	<0.010		ug	
			Total Vanadium (V)	2023/01/05	<0.030		ug	

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Zinc (Zn)	2023/01/05	<0.50		ug	
8433923	TLG	Spiked Blank	Acid Extractable Mercury (Hg)	2023/01/05		94	%	90 - 110
8433923	TLG	RPD	Acid Extractable Mercury (Hg)	2023/01/05	9.0		%	20
8433923	TLG	Method Blank	Acid Extractable Mercury (Hg)	2023/01/05	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

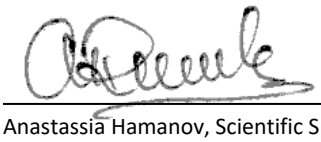
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Bureau Veritas Job #: C2AO995
Report Date: 2023/01/09

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/16
Report #: R7512197
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C331692
Received: 2023/02/02, 13:30

Sample Matrix: Filter
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	7	2023/02/10	2023/02/14	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	7	2023/02/02	2023/02/02	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	7	2023/02/09	2023/02/10	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	7	N/A	2023/02/08	BRL SOP-00109	EPA IO-2mod
Total Particulate	7	N/A	2023/02/07	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	7	N/A	2023/02/02		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

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Bureau Veritas Job #: C331692
Report Date: 2023/02/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		UYR139	UYR140	UYR141	UYR142		
Sampling Date		2022/12/19	2023/01/11	2023/01/13	2023/01/16		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	TSP 19 DEC 20204391	TSP 11 JAN 20204392	TSP 13 JAN 20209161	TSP 16 JAN 20209164	RDL	QC Batch
Particulate	ug/m3	7.66	2.83	2.85	3.08	0.62	8484692
Particulate Weight on Filter	ug	368	136	137	148	30	8492717
Volume	m3	48.04	48.06	48.06	48.06	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		UYR143	UYR144	UYR145		
Sampling Date		2023/01/18	2023/01/21	2023/01/24		
COC Number		n/a	n/a	n/a		
	UNITS	TSP 18 JAN 20204388	TSP 21 JAN 20209156	TSP24 JAN 409155	RDL	QC Batch
Particulate	ug/m3	1.61	1.54	1.79	0.62	8484692
Particulate Weight on Filter	ug	78	74	86	30	8492717
Volume	m3	48.06	48.06	48.06	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C331692
Report Date: 2023/02/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
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ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UYR139	UYR140	UYR141	UYR142		
Sampling Date		2022/12/19	2023/01/11	2023/01/13	2023/01/16		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	TSP 19 DEC 20204391	TSP 11 JAN 20204392	TSP 13 JAN 20209161	TSP 16 JAN 20209164	RDL	QC Batch
Metals							
Total Aluminum (Al)	ug/m3	<0.042	<0.042	<0.042	<0.042	0.042	8483818
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Barium (Ba)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8483818
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Boron (B)	ug/m3	<0.021	<0.021	<0.021	<0.021	0.021	8483818
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8483818
Total Calcium (Ca)	ug/m3	<0.10	<0.10	<0.10	<0.10	0.10	8483818
Total Chromium (Cr)	ug/m3	<0.0010	<0.0010	0.0023	<0.0010	0.0010	8483818
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8483818
Total Copper (Cu)	ug/m3	0.00081	0.00090	0.0021	0.0022	0.00062	8483818
Total Iron (Fe)	ug/m3	<0.10	<0.10	<0.10	<0.10	0.10	8483818
Total Lead (Pb)	ug/m3	<0.00062	<0.00062	<0.00062	0.00090	0.00062	8483818
Total Magnesium (Mg)	ug/m3	0.18	0.027	0.037	0.029	0.021	8483818
Total Manganese (Mn)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8483818
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Potassium (K)	ug/m3	<0.10	<0.10	<0.10	<0.10	0.10	8483818
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8483818
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8483818
Total Sodium (Na)	ug/m3	1.3	0.21	0.26	0.26	0.10	8483818
Total Strontium (Sr)	ug/m3	0.0011	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8483818
Total Tin (Sn)	ug/m3	0.0011	0.0011	0.0010	0.0011	0.00062	8483818
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8483818
Total Uranium (U)	ug/m3	<0.00021	<0.00021	<0.00021	<0.00021	0.00021	8483818
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	<0.00062	<0.00062	0.00062	8483818
Total Zinc (Zn)	ug/m3	<0.010	<0.010	<0.010	0.012	0.010	8483818

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C331692
Report Date: 2023/02/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UYR143	UYR144	UYR145		
Sampling Date		2023/01/18	2023/01/21	2023/01/24		
COC Number		n/a	n/a	n/a		
	UNITS	TSP 18 JAN 20204388	TSP 21 JAN 20209156	TSP24 JAN 409155	RDL	QC Batch
Metals						
Total Aluminum (Al)	ug/m3	<0.042	<0.042	<0.042	0.042	8483818
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Barium (Ba)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8483818
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Boron (B)	ug/m3	<0.021	<0.021	<0.021	0.021	8483818
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	8483818
Total Calcium (Ca)	ug/m3	<0.10	<0.10	<0.10	0.10	8483818
Total Chromium (Cr)	ug/m3	<0.0010	0.0016	0.0014	0.0010	8483818
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8483818
Total Copper (Cu)	ug/m3	<0.00062	<0.00062	0.0016	0.00062	8483818
Total Iron (Fe)	ug/m3	<0.10	<0.10	<0.10	0.10	8483818
Total Lead (Pb)	ug/m3	<0.00062	<0.00062	0.0011	0.00062	8483818
Total Magnesium (Mg)	ug/m3	0.035	<0.021	0.028	0.021	8483818
Total Manganese (Mn)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8483818
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Potassium (K)	ug/m3	<0.10	<0.10	<0.10	0.10	8483818
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	<0.0021	0.0021	8483818
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	8483818
Total Sodium (Na)	ug/m3	0.21	<0.10	0.16	0.10	8483818
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8483818
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	8483818
Total Tin (Sn)	ug/m3	0.0010	0.0011	0.0012	0.00062	8483818
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	<0.0021	0.0021	8483818
Total Uranium (U)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	8483818
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8483818
Total Zinc (Zn)	ug/m3	<0.010	<0.010	<0.010	0.010	8483818

RDL = Reportable Detection Limit
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Bureau Veritas Job #: C331692
Report Date: 2023/02/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UYR139	UYR140	UYR141	UYR142		
Sampling Date		2022/12/19	2023/01/11	2023/01/13	2023/01/16		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	TSP 19 DEC 20204391	TSP 11 JAN 20204392	TSP 13 JAN 20209161	TSP 16 JAN 20209164	RDL	QC Batch
Metals							
Total Aluminum (Al)	ug	<2.0	<2.0	<2.0	<2.0	2.0	8495208
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8495208
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8495208
Total Barium (Ba)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8495208
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8495208
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8495208
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	1.0	8495208
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	0.010	8495208
Total Calcium (Ca)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8495208
Total Chromium (Cr)	ug	<0.050	<0.050	0.11	<0.050	0.050	8495208
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8495208
Total Copper (Cu)	ug	0.039	0.043	0.10	0.11	0.030	8495208
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8495208
Total Lead (Pb)	ug	<0.030	<0.030	<0.030	0.043	0.030	8495208
Total Magnesium (Mg)	ug	8.4	1.3	1.8	1.4	1.0	8495208
Total Manganese (Mn)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8495208
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	<0.0025	0.0025	8497750
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8495208
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	<0.050	0.050	8495208
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8495208
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	5.0	8495208
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	0.10	8495208
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	0.010	8495208
Total Sodium (Na)	ug	61	10	12	12	5.0	8495208
Total Strontium (Sr)	ug	0.054	<0.050	<0.050	<0.050	0.050	8495208
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	0.010	8495208
Total Tin (Sn)	ug	0.051	0.052	0.050	0.054	0.030	8495208
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	<0.10	0.10	8495208
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	0.010	8495208
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	0.030	8495208
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	0.58	0.50	8495208

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Report Date: 2023/02/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		UYR143	UYR144	UYR145		
Sampling Date		2023/01/18	2023/01/21	2023/01/24		
COC Number		n/a	n/a	n/a		
	UNITS	TSP 18 JAN 20204388	TSP 21 JAN 20209156	TSP24 JAN 409155	RDL	QC Batch
Metals						
Total Aluminum (Al)	ug	<2.0	<2.0	<2.0	2.0	8495208
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	0.050	8495208
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	0.050	8495208
Total Barium (Ba)	ug	<0.050	<0.050	<0.050	0.050	8495208
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	0.030	8495208
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	0.050	8495208
Total Boron (B)	ug	<1.0	<1.0	<1.0	1.0	8495208
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	0.010	8495208
Total Calcium (Ca)	ug	<5.0	<5.0	<5.0	5.0	8495208
Total Chromium (Cr)	ug	<0.050	0.077	0.069	0.050	8495208
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	0.030	8495208
Total Copper (Cu)	ug	<0.030	<0.030	0.079	0.030	8495208
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	5.0	8495208
Total Lead (Pb)	ug	<0.030	<0.030	0.054	0.030	8495208
Total Magnesium (Mg)	ug	1.7	<1.0	1.4	1.0	8495208
Total Manganese (Mn)	ug	<0.050	<0.050	<0.050	0.050	8495208
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	0.0025	8497750
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	0.030	8495208
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	0.050	8495208
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	5.0	8495208
Total Potassium (K)	ug	<5.0	<5.0	<5.0	5.0	8495208
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	0.10	8495208
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	0.010	8495208
Total Sodium (Na)	ug	10	<5.0	7.7	5.0	8495208
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	0.050	8495208
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	0.010	8495208
Total Tin (Sn)	ug	0.050	0.051	0.057	0.030	8495208
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	0.10	8495208
Total Uranium (U)	ug	<0.010	<0.010	<0.010	0.010	8495208
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	0.030	8495208
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	0.50	8495208

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8495208	ADA	Matrix Spike [UYR140-01]	Total Aluminum (Al)	2023/02/10		101	%	70 - 130
			Total Antimony (Sb)	2023/02/10		103	%	70 - 130
			Total Arsenic (As)	2023/02/10		98	%	70 - 130
			Total Barium (Ba)	2023/02/10		99	%	70 - 130
			Total Beryllium (Be)	2023/02/10		101	%	70 - 130
			Total Bismuth (Bi)	2023/02/10		98	%	70 - 130
			Total Boron (B)	2023/02/10		95	%	70 - 130
			Total Cadmium (Cd)	2023/02/10		97	%	70 - 130
			Total Calcium (Ca)	2023/02/10		103	%	70 - 130
			Total Chromium (Cr)	2023/02/10		100	%	70 - 130
			Total Cobalt (Co)	2023/02/10		100	%	70 - 130
			Total Copper (Cu)	2023/02/10		104	%	70 - 130
			Total Iron (Fe)	2023/02/10		102	%	70 - 130
			Total Lead (Pb)	2023/02/10		97	%	70 - 130
			Total Magnesium (Mg)	2023/02/10		100	%	70 - 130
			Total Manganese (Mn)	2023/02/10		100	%	70 - 130
			Total Molybdenum (Mo)	2023/02/10		101	%	70 - 130
			Total Nickel (Ni)	2023/02/10		99	%	70 - 130
			Total Phosphorus (P)	2023/02/10		102	%	70 - 130
			Total Potassium (K)	2023/02/10		106	%	70 - 130
			Total Selenium (Se)	2023/02/10		94	%	70 - 130
			Total Silver (Ag)	2023/02/10		101	%	70 - 130
			Total Sodium (Na)	2023/02/10		102	%	70 - 130
			Total Strontium (Sr)	2023/02/10		96	%	70 - 130
			Total Thallium (Tl)	2023/02/10		97	%	70 - 130
			Total Tin (Sn)	2023/02/10		102	%	70 - 130
			Total Titanium (Ti)	2023/02/10		100	%	70 - 130
			Total Uranium (U)	2023/02/10		102	%	70 - 130
			Total Vanadium (V)	2023/02/10		99	%	70 - 130
			Total Zinc (Zn)	2023/02/10		96	%	70 - 130
8495208	ADA	RPD [UYR140-01]	Total Aluminum (Al)	2023/02/10	2.3		%	20
			Total Antimony (Sb)	2023/02/10	1.2		%	20
			Total Arsenic (As)	2023/02/10	1.1		%	20
			Total Barium (Ba)	2023/02/10	0.39		%	20
			Total Beryllium (Be)	2023/02/10	1.3		%	20
			Total Bismuth (Bi)	2023/02/10	4.0		%	20
			Total Boron (B)	2023/02/10	1.6		%	20
			Total Cadmium (Cd)	2023/02/10	2.0		%	20
			Total Calcium (Ca)	2023/02/10	1.4		%	20
			Total Chromium (Cr)	2023/02/10	3.6		%	20
			Total Cobalt (Co)	2023/02/10	2.2		%	20
			Total Copper (Cu)	2023/02/10	2.0		%	20
			Total Iron (Fe)	2023/02/10	1.4		%	20
			Total Lead (Pb)	2023/02/10	1.2		%	20
			Total Magnesium (Mg)	2023/02/10	0.84		%	20
			Total Manganese (Mn)	2023/02/10	0.25		%	20
			Total Molybdenum (Mo)	2023/02/10	0.36		%	20
			Total Nickel (Ni)	2023/02/10	0.026		%	20
			Total Phosphorus (P)	2023/02/10	0.36		%	20
			Total Potassium (K)	2023/02/10	3.3		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Selenium (Se)	2023/02/10	2.7		%	20
			Total Silver (Ag)	2023/02/10	0.17		%	20
			Total Sodium (Na)	2023/02/10	0.68		%	20
			Total Strontium (Sr)	2023/02/10	0.82		%	20
			Total Thallium (Tl)	2023/02/10	5.7		%	20
			Total Tin (Sn)	2023/02/10	0.38		%	20
			Total Titanium (Ti)	2023/02/10	0.78		%	20
			Total Uranium (U)	2023/02/10	0.39		%	20
			Total Vanadium (V)	2023/02/10	0.17		%	20
			Total Zinc (Zn)	2023/02/10	1.1		%	20
			Total Aluminum (Al)	2023/02/10	NC		%	20
			Total Antimony (Sb)	2023/02/10	NC		%	20
			Total Arsenic (As)	2023/02/10	NC		%	20
			Total Barium (Ba)	2023/02/10	NC		%	20
			Total Beryllium (Be)	2023/02/10	NC		%	20
			Total Bismuth (Bi)	2023/02/10	NC		%	20
			Total Boron (B)	2023/02/10	NC		%	20
			Total Cadmium (Cd)	2023/02/10	NC		%	20
			Total Calcium (Ca)	2023/02/10	NC		%	20
			Total Chromium (Cr)	2023/02/10	NC		%	20
			Total Cobalt (Co)	2023/02/10	NC		%	20
			Total Copper (Cu)	2023/02/10	1.4		%	20
			Total Iron (Fe)	2023/02/10	NC		%	20
			Total Lead (Pb)	2023/02/10	NC		%	20
			Total Magnesium (Mg)	2023/02/10	5.7		%	20
			Total Manganese (Mn)	2023/02/10	NC		%	20
			Total Molybdenum (Mo)	2023/02/10	NC		%	20
			Total Nickel (Ni)	2023/02/10	NC		%	20
			Total Phosphorus (P)	2023/02/10	NC		%	20
			Total Potassium (K)	2023/02/10	NC		%	20
			Total Selenium (Se)	2023/02/10	NC		%	20
			Total Silver (Ag)	2023/02/10	NC		%	20
			Total Sodium (Na)	2023/02/10	19		%	20
			Total Strontium (Sr)	2023/02/10	NC		%	20
			Total Thallium (Tl)	2023/02/10	NC		%	20
			Total Tin (Sn)	2023/02/10	2.6		%	20
			Total Titanium (Ti)	2023/02/10	NC		%	20
			Total Uranium (U)	2023/02/10	NC		%	20
			Total Vanadium (V)	2023/02/10	NC		%	20
			Total Zinc (Zn)	2023/02/10	NC		%	20
8495208	ADA	Spiked Blank	Total Aluminum (Al)	2023/02/10		100	%	85 - 115
			Total Antimony (Sb)	2023/02/10		97	%	85 - 115
			Total Arsenic (As)	2023/02/10		95	%	85 - 115
			Total Barium (Ba)	2023/02/10		101	%	85 - 115
			Total Beryllium (Be)	2023/02/10		101	%	85 - 115
			Total Bismuth (Bi)	2023/02/10		97	%	85 - 115
			Total Boron (B)	2023/02/10		97	%	85 - 115
			Total Cadmium (Cd)	2023/02/10		96	%	85 - 115
			Total Calcium (Ca)	2023/02/10		103	%	85 - 115
			Total Chromium (Cr)	2023/02/10		96	%	85 - 115

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Cobalt (Co)	2023/02/10		98	%	85 - 115
			Total Copper (Cu)	2023/02/10		103	%	85 - 115
			Total Iron (Fe)	2023/02/10		99	%	85 - 115
			Total Lead (Pb)	2023/02/10		96	%	85 - 115
			Total Magnesium (Mg)	2023/02/10		94	%	85 - 115
			Total Manganese (Mn)	2023/02/10		97	%	85 - 115
			Total Molybdenum (Mo)	2023/02/10		99	%	85 - 115
			Total Nickel (Ni)	2023/02/10		96	%	85 - 115
			Total Phosphorus (P)	2023/02/10		105	%	85 - 115
			Total Potassium (K)	2023/02/10		103	%	85 - 115
			Total Selenium (Se)	2023/02/10		94	%	85 - 115
			Total Silver (Ag)	2023/02/10		87	%	85 - 115
			Total Sodium (Na)	2023/02/10		97	%	85 - 115
			Total Strontium (Sr)	2023/02/10		94	%	85 - 115
			Total Thallium (Tl)	2023/02/10		96	%	85 - 115
			Total Tin (Sn)	2023/02/10		99	%	85 - 115
			Total Titanium (Ti)	2023/02/10		95	%	85 - 115
			Total Uranium (U)	2023/02/10		97	%	85 - 115
			Total Vanadium (V)	2023/02/10		95	%	85 - 115
			Total Zinc (Zn)	2023/02/10		94	%	85 - 115
8495208	ADA	RPD	Total Aluminum (Al)	2023/02/10	0.63		%	20
			Total Antimony (Sb)	2023/02/10	1.3		%	20
			Total Arsenic (As)	2023/02/10	0.43		%	20
			Total Barium (Ba)	2023/02/10	2.9		%	20
			Total Beryllium (Be)	2023/02/10	0.69		%	20
			Total Bismuth (Bi)	2023/02/10	1.5		%	20
			Total Boron (B)	2023/02/10	1.0		%	20
			Total Cadmium (Cd)	2023/02/10	0.035		%	20
			Total Calcium (Ca)	2023/02/10	2.5		%	20
			Total Chromium (Cr)	2023/02/10	1.2		%	20
			Total Cobalt (Co)	2023/02/10	1.1		%	20
			Total Copper (Cu)	2023/02/10	0.87		%	20
			Total Iron (Fe)	2023/02/10	0.42		%	20
			Total Lead (Pb)	2023/02/10	0.51		%	20
			Total Magnesium (Mg)	2023/02/10	0.99		%	20
			Total Manganese (Mn)	2023/02/10	0.90		%	20
			Total Molybdenum (Mo)	2023/02/10	0.86		%	20
			Total Nickel (Ni)	2023/02/10	0.26		%	20
			Total Phosphorus (P)	2023/02/10	0.71		%	20
			Total Potassium (K)	2023/02/10	0.073		%	20
			Total Selenium (Se)	2023/02/10	0.14		%	20
			Total Silver (Ag)	2023/02/10	5.4		%	20
			Total Sodium (Na)	2023/02/10	0.25		%	20
			Total Strontium (Sr)	2023/02/10	0.20		%	20
			Total Thallium (Tl)	2023/02/10	1.7		%	20
			Total Tin (Sn)	2023/02/10	2.1		%	20
			Total Titanium (Ti)	2023/02/10	1.8		%	20
			Total Uranium (U)	2023/02/10	0.78		%	20
			Total Vanadium (V)	2023/02/10	0.28		%	20
			Total Zinc (Zn)	2023/02/10	0.020		%	20

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8495208	ADA	Method Blank	Total Aluminum (Al)	2023/02/10	<2.0		ug	
			Total Antimony (Sb)	2023/02/10	<0.050		ug	
			Total Arsenic (As)	2023/02/10	<0.050		ug	
			Total Barium (Ba)	2023/02/10	<0.050		ug	
			Total Beryllium (Be)	2023/02/10	<0.030		ug	
			Total Bismuth (Bi)	2023/02/10	<0.050		ug	
			Total Boron (B)	2023/02/10	<1.0		ug	
			Total Cadmium (Cd)	2023/02/10	<0.010		ug	
			Total Calcium (Ca)	2023/02/10	<5.0		ug	
			Total Chromium (Cr)	2023/02/10	<0.050		ug	
			Total Cobalt (Co)	2023/02/10	<0.030		ug	
			Total Copper (Cu)	2023/02/10	<0.030		ug	
			Total Iron (Fe)	2023/02/10	<5.0		ug	
			Total Lead (Pb)	2023/02/10	<0.030		ug	
			Total Magnesium (Mg)	2023/02/10	<1.0		ug	
			Total Manganese (Mn)	2023/02/10	<0.050		ug	
			Total Molybdenum (Mo)	2023/02/10	<0.030		ug	
			Total Nickel (Ni)	2023/02/10	<0.050		ug	
			Total Phosphorus (P)	2023/02/10	<5.0		ug	
			Total Potassium (K)	2023/02/10	<5.0		ug	
			Total Selenium (Se)	2023/02/10	<0.10		ug	
			Total Silver (Ag)	2023/02/10	<0.010		ug	
			Total Sodium (Na)	2023/02/10	<5.0		ug	
			Total Strontium (Sr)	2023/02/10	<0.050		ug	
			Total Thallium (Tl)	2023/02/10	<0.010		ug	
			Total Tin (Sn)	2023/02/10	<0.030		ug	
			Total Titanium (Ti)	2023/02/10	<0.10		ug	
			Total Uranium (U)	2023/02/10	<0.010		ug	
			Total Vanadium (V)	2023/02/10	<0.030		ug	
			Total Zinc (Zn)	2023/02/10	<0.50		ug	
8497750	MEN	Spiked Blank	Acid Extractable Mercury (Hg)	2023/02/14		97	%	90 - 110
8497750	MEN	RPD	Acid Extractable Mercury (Hg)	2023/02/14	0.41		%	20
8497750	MEN	Method Blank	Acid Extractable Mercury (Hg)	2023/02/14	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

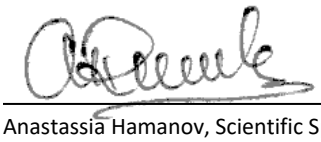
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C331692
Report Date: 2023/02/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/08
Report #: R7501182
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C331737
Received: 2023/02/02, 13:30

Sample Matrix: Filter
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Particulate Calculation	7	N/A	2023/02/08	BRL SOP-00109	EPA IO-2mod
Total Particulate	7	N/A	2023/02/07	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	7	N/A	2023/02/02		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C331737
Report Date: 2023/02/08

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		UYR372	UYR373	UYR374		
Sampling Date		2022/12/19	2023/01/11	2023/01/13		
COC Number		n/a	n/a	n/a		
	UNITS	PM10 19 DEC 20204390	PM10 11 JAN 20204389	PM10 13 JAN 20409163	RDL	QC Batch
Particulate	ug/m3	1.4	2.8	2.4	1.2	8484692
Particulate Weight on Filter	ug	34	67	59	30	8492717
Volume	m3	24.05	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		UYR375	UYR376	UYR377		
Sampling Date		2023/01/16	2023/01/18	2023/01/21		
COC Number		n/a	n/a	n/a		
	UNITS	PM10 16 JAN 20409165	PM10 18 JAN 12500457	PM10 21 JAN 20409162	RDL	QC Batch
Particulate	ug/m3	5.7	2.1	2.2	1.2	8484692
Particulate Weight on Filter	ug	138	50	52	30	8492717
Volume	m3	24.05	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		UYR378		
Sampling Date		2023/01/24		
COC Number		n/a		
	UNITS	PM10 24 JAN 20409157	RDL	QC Batch
Particulate	ug/m3	1.5	1.2	8484692
Particulate Weight on Filter	ug	37	30	8492717
Volume	m3	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C331737
Report Date: 2023/02/08

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C331737
Report Date: 2023/02/08

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/23
Report #: R7520085
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C347484
Received: 2023/02/17, 08:30

Sample Matrix: Filter
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Particulate Calculation	5	N/A	2023/02/23	BRL SOP-00109	EPA IO-2mod
Total Particulate	5	N/A	2023/02/22	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	5	N/A	2023/02/17		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

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Bureau Veritas Job #: C347484
Report Date: 2023/02/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		VBY177	VBY178	VBY179	VBY180	VBY181		
Sampling Date		2023/01/27	2023/01/30	2023/02/02	2023/02/06	2023/02/09		
COC Number		na	na	na	na	na		
	UNITS	PM10 JAN27	PM10 JAN30	PM10 FEB2	PM10 FEB6	PM10 FEB9	RDL	QC Batch
Particulate	ug/m3	4.2	2.8	4.8	30.8	27.1	1.2	8510728
Particulate Weight on Filter	ug	102	68	115	741	652	30	8518172
Volume	m3	24.05	24.05	24.05	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C347484
Report Date: 2023/02/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C347484
Report Date: 2023/02/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/02
Report #: R7530181
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C347494
Received: 2023/02/17, 08:30

Sample Matrix: Filter
Samples Received: 5

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	5	2023/03/01	2023/03/02	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	5	2023/02/17	2023/02/23	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	5	2023/02/23	2023/02/24	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	5	N/A	2023/02/23	BRL SOP-00109	EPA IO-2mod
Total Particulate	5	N/A	2023/02/22	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	5	N/A	2023/02/17		

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

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Bureau Veritas Job #: C347494
Report Date: 2023/03/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		VBY224	VBY226	VBY228	VBY230	VBY232		
Sampling Date		2023/01/27	2023/01/30	2023/02/02	2023/02/06	2023/02/09		
COC Number		na	na	na	na	na		
	UNITS	**TSP JAN27**	**TSP JAN30**	**TSP FEB2**	**TSP FEB6**	**TSP FEB9**	**RDL**	**QC Batch**
Particulate	ug/m3	5.1	6.2	6.9	18.4	14.7	1.2	8510728
Particulate Weight on Filter	ug	122	149	167	442	353	30	8518172
Volume	m3	24.05	24.05	24.05	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C347494
Report Date: 2023/03/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VBY224	VBY226	VBY228	VBY230	VBY232		
Sampling Date		2023/01/27	2023/01/30	2023/02/02	2023/02/06	2023/02/09		
COC Number		na	na	na	na	na		
	UNITS	TSP JAN27	TSP JAN30	TSP FEB2	TSP FEB6	TSP FEB9	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug/m3	<0.083	<0.083	<0.083	<0.083	<0.083	0.083	8511127
Total Antimony (Sb)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8511127
Total Arsenic (As)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8511127
Total Barium (Ba)	ug/m3	<0.0021	<0.0021	<0.0021	0.38	0.18	0.0021	8511127
Total Beryllium (Be)	ug/m3	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.0012	8511127
Total Bismuth (Bi)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8511127
Total Boron (B)	ug/m3	<0.042	<0.042	<0.042	<0.042	<0.042	0.042	8511127
Total Cadmium (Cd)	ug/m3	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	0.00042	8511127
Total Calcium (Ca)	ug/m3	<0.21	<0.21	<0.21	<0.21	<0.21	0.21	8511127
Total Chromium (Cr)	ug/m3	<0.0021	<0.0021	0.0051	0.0042	<0.0021	0.0021	8511127
Total Cobalt (Co)	ug/m3	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.0012	8511127
Total Copper (Cu)	ug/m3	0.0015	0.0017	<0.0012	0.0024	0.0027	0.0012	8511127
Total Iron (Fe)	ug/m3	<0.21	<0.21	<0.21	<0.21	<0.21	0.21	8511127
Total Lead (Pb)	ug/m3	<0.0012	<0.0012	<0.0012	<0.0012	0.0029	0.0012	8511127
Total Magnesium (Mg)	ug/m3	<0.042	0.046	0.10	<0.042	<0.042	0.042	8511127
Total Manganese (Mn)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8511127
Total Molybdenum (Mo)	ug/m3	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.0012	8511127
Total Nickel (Ni)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8511127
Total Potassium (K)	ug/m3	<0.21	<0.21	<0.21	<0.21	<0.21	0.21	8511127
Total Selenium (Se)	ug/m3	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.0042	8511127
Total Silver (Ag)	ug/m3	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	0.00042	8511127
Total Sodium (Na)	ug/m3	<0.21	<0.21	0.37	<0.21	<0.21	0.21	8511127
Total Strontium (Sr)	ug/m3	<0.0021	<0.0021	<0.0021	<0.0021	<0.0021	0.0021	8511127
Total Thallium (Tl)	ug/m3	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	0.00042	8511127
Total Tin (Sn)	ug/m3	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.0012	8511127
Total Titanium (Ti)	ug/m3	<0.0042	<0.0042	<0.0042	<0.0042	<0.0042	0.0042	8511127
Total Uranium (U)	ug/m3	<0.00042	<0.00042	<0.00042	<0.00042	<0.00042	0.00042	8511127
Total Vanadium (V)	ug/m3	<0.0012	<0.0012	<0.0012	<0.0012	<0.0012	0.0012	8511127
Total Zinc (Zn)	ug/m3	<0.021	<0.021	<0.021	<0.021	<0.021	0.021	8511127

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Bureau Veritas Job #: C347494
Report Date: 2023/03/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VBY224	VBY226	VBY228	VBY230	VBY232		
Sampling Date		2023/01/27	2023/01/30	2023/02/02	2023/02/06	2023/02/09		
COC Number		na	na	na	na	na		
	UNITS	TSP JAN27	TSP JAN30	TSP FEB2	TSP FEB6	TSP FEB9	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug	<2.0	<2.0	<2.0	<2.0	<2.0	2.0	8518479
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8518479
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8518479
Total Barium (Ba)	ug	<0.050	<0.050	<0.050	9.1	4.3	0.050	8518479
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8518479
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8518479
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	8518479
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8518479
Total Calcium (Ca)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8518479
Total Chromium (Cr)	ug	<0.050	<0.050	0.12	0.10	<0.050	0.050	8518479
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8518479
Total Copper (Cu)	ug	0.037	0.041	<0.030	0.058	0.066	0.030	8518479
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8518479
Total Lead (Pb)	ug	<0.030	<0.030	<0.030	<0.030	0.070	0.030	8518479
Total Magnesium (Mg)	ug	<1.0	1.1	2.4	<1.0	<1.0	1.0	8518479
Total Manganese (Mn)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8518479
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	0.0039	<0.0025	<0.0025	0.0025	8528183
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8518479
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	8518479
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8518479
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	8518479
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8518479
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8518479
Total Sodium (Na)	ug	<5.0	<5.0	8.8	<5.0	<5.0	5.0	8518479
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	0.050	<0.050	0.050	8518479
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8518479
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8518479
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	8518479
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	8518479
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	8518479
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	8518479

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C347494
Report Date: 2023/03/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8518479	ADA	Matrix Spike [VBY224-01]	Total Aluminum (Al)	2023/02/24		95	%	70 - 130
			Total Antimony (Sb)	2023/02/24		100	%	70 - 130
			Total Arsenic (As)	2023/02/24		95	%	70 - 130
			Total Barium (Ba)	2023/02/24		99	%	70 - 130
			Total Beryllium (Be)	2023/02/24		97	%	70 - 130
			Total Bismuth (Bi)	2023/02/24		94	%	70 - 130
			Total Boron (B)	2023/02/24		97	%	70 - 130
			Total Cadmium (Cd)	2023/02/24		96	%	70 - 130
			Total Calcium (Ca)	2023/02/24		97	%	70 - 130
			Total Chromium (Cr)	2023/02/24		98	%	70 - 130
			Total Cobalt (Co)	2023/02/24		94	%	70 - 130
			Total Copper (Cu)	2023/02/24		100	%	70 - 130
			Total Iron (Fe)	2023/02/24		94	%	70 - 130
			Total Lead (Pb)	2023/02/24		97	%	70 - 130
			Total Magnesium (Mg)	2023/02/24		95	%	70 - 130
			Total Manganese (Mn)	2023/02/24		95	%	70 - 130
			Total Molybdenum (Mo)	2023/02/24		96	%	70 - 130
			Total Nickel (Ni)	2023/02/24		92	%	70 - 130
			Total Phosphorus (P)	2023/02/24		100	%	70 - 130
			Total Potassium (K)	2023/02/24		101	%	70 - 130
			Total Selenium (Se)	2023/02/24		93	%	70 - 130
			Total Silver (Ag)	2023/02/24		100	%	70 - 130
			Total Sodium (Na)	2023/02/24		97	%	70 - 130
			Total Strontium (Sr)	2023/02/24		91	%	70 - 130
			Total Thallium (Tl)	2023/02/24		96	%	70 - 130
			Total Tin (Sn)	2023/02/24		100	%	70 - 130
			Total Titanium (Ti)	2023/02/24		94	%	70 - 130
			Total Uranium (U)	2023/02/24		96	%	70 - 130
			Total Vanadium (V)	2023/02/24		94	%	70 - 130
			Total Zinc (Zn)	2023/02/24		93	%	70 - 130
8518479	ADA	RPD [VBY224-01]	Total Aluminum (Al)	2023/02/24	0.25		%	20
			Total Antimony (Sb)	2023/02/24	0.26		%	20
			Total Arsenic (As)	2023/02/24	1.9		%	20
			Total Barium (Ba)	2023/02/24	1.0		%	20
			Total Beryllium (Be)	2023/02/24	4.3		%	20
			Total Bismuth (Bi)	2023/02/24	4.6		%	20
			Total Boron (B)	2023/02/24	5.2		%	20
			Total Cadmium (Cd)	2023/02/24	0.21		%	20
			Total Calcium (Ca)	2023/02/24	0.53		%	20
			Total Chromium (Cr)	2023/02/24	2.6		%	20
			Total Cobalt (Co)	2023/02/24	4.7		%	20
			Total Copper (Cu)	2023/02/24	3.0		%	20
			Total Iron (Fe)	2023/02/24	4.8		%	20
			Total Lead (Pb)	2023/02/24	2.1		%	20
			Total Magnesium (Mg)	2023/02/24	0.56		%	20
			Total Manganese (Mn)	2023/02/24	0.52		%	20
			Total Molybdenum (Mo)	2023/02/24	0.021		%	20
			Total Nickel (Ni)	2023/02/24	2.5		%	20
			Total Phosphorus (P)	2023/02/24	0.20		%	20
			Total Potassium (K)	2023/02/24	0.54		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Selenium (Se)	2023/02/24	0.86		%	20
			Total Silver (Ag)	2023/02/24	1.1		%	20
			Total Sodium (Na)	2023/02/24	0.15		%	20
			Total Strontium (Sr)	2023/02/24	2.0		%	20
			Total Thallium (Tl)	2023/02/24	0.36		%	20
			Total Tin (Sn)	2023/02/24	0.78		%	20
			Total Titanium (Ti)	2023/02/24	2.0		%	20
			Total Uranium (U)	2023/02/24	2.5		%	20
			Total Vanadium (V)	2023/02/24	1.9		%	20
			Total Zinc (Zn)	2023/02/24	2.8		%	20
			Total Aluminum (Al)	2023/02/24	NC		%	20
			Total Antimony (Sb)	2023/02/24	NC		%	20
			Total Arsenic (As)	2023/02/24	NC		%	20
			Total Barium (Ba)	2023/02/24	NC		%	20
			Total Beryllium (Be)	2023/02/24	NC		%	20
			Total Bismuth (Bi)	2023/02/24	NC		%	20
			Total Boron (B)	2023/02/24	NC		%	20
			Total Cadmium (Cd)	2023/02/24	NC		%	20
			Total Calcium (Ca)	2023/02/24	NC		%	20
			Total Chromium (Cr)	2023/02/24	NC		%	20
			Total Cobalt (Co)	2023/02/24	NC		%	20
			Total Copper (Cu)	2023/02/24	3.6		%	20
			Total Iron (Fe)	2023/02/24	NC		%	20
			Total Lead (Pb)	2023/02/24	NC		%	20
			Total Magnesium (Mg)	2023/02/24	NC		%	20
			Total Manganese (Mn)	2023/02/24	NC		%	20
			Total Molybdenum (Mo)	2023/02/24	NC		%	20
			Total Nickel (Ni)	2023/02/24	NC		%	20
			Total Phosphorus (P)	2023/02/24	NC		%	20
			Total Potassium (K)	2023/02/24	NC		%	20
			Total Selenium (Se)	2023/02/24	NC		%	20
			Total Silver (Ag)	2023/02/24	NC		%	20
			Total Sodium (Na)	2023/02/24	NC		%	20
			Total Strontium (Sr)	2023/02/24	NC		%	20
			Total Thallium (Tl)	2023/02/24	NC		%	20
			Total Tin (Sn)	2023/02/24	NC		%	20
			Total Titanium (Ti)	2023/02/24	NC		%	20
			Total Uranium (U)	2023/02/24	NC		%	20
			Total Vanadium (V)	2023/02/24	NC		%	20
			Total Zinc (Zn)	2023/02/24	NC		%	20
8518479	ADA	Spiked Blank	Total Aluminum (Al)	2023/02/24		98	%	85 - 115
			Total Antimony (Sb)	2023/02/24		99	%	85 - 115
			Total Arsenic (As)	2023/02/24		97	%	85 - 115
			Total Barium (Ba)	2023/02/24		97	%	85 - 115
			Total Beryllium (Be)	2023/02/24		99	%	85 - 115
			Total Bismuth (Bi)	2023/02/24		98	%	85 - 115
			Total Boron (B)	2023/02/24		101	%	85 - 115
			Total Cadmium (Cd)	2023/02/24		98	%	85 - 115
			Total Calcium (Ca)	2023/02/24		98	%	85 - 115
			Total Chromium (Cr)	2023/02/24		96	%	85 - 115

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Cobalt (Co)	2023/02/24		96	%	85 - 115
			Total Copper (Cu)	2023/02/24		102	%	85 - 115
			Total Iron (Fe)	2023/02/24		96	%	85 - 115
			Total Lead (Pb)	2023/02/24		100	%	85 - 115
			Total Magnesium (Mg)	2023/02/24		96	%	85 - 115
			Total Manganese (Mn)	2023/02/24		96	%	85 - 115
			Total Molybdenum (Mo)	2023/02/24		97	%	85 - 115
			Total Nickel (Ni)	2023/02/24		93	%	85 - 115
			Total Phosphorus (P)	2023/02/24		105	%	85 - 115
			Total Potassium (K)	2023/02/24		102	%	85 - 115
			Total Selenium (Se)	2023/02/24		94	%	85 - 115
			Total Silver (Ag)	2023/02/24		94	%	85 - 115
			Total Sodium (Na)	2023/02/24		98	%	85 - 115
			Total Strontium (Sr)	2023/02/24		93	%	85 - 115
			Total Thallium (Tl)	2023/02/24		97	%	85 - 115
			Total Tin (Sn)	2023/02/24		102	%	85 - 115
			Total Titanium (Ti)	2023/02/24		94	%	85 - 115
			Total Uranium (U)	2023/02/24		100	%	85 - 115
			Total Vanadium (V)	2023/02/24		95	%	85 - 115
			Total Zinc (Zn)	2023/02/24		95	%	85 - 115
8518479	ADA	RPD	Total Aluminum (Al)	2023/02/24	2.0		%	20
			Total Antimony (Sb)	2023/02/24	2.1		%	20
			Total Arsenic (As)	2023/02/24	0.89		%	20
			Total Barium (Ba)	2023/02/24	4.3		%	20
			Total Beryllium (Be)	2023/02/24	1.5		%	20
			Total Bismuth (Bi)	2023/02/24	1.3		%	20
			Total Boron (B)	2023/02/24	1.4		%	20
			Total Cadmium (Cd)	2023/02/24	0.44		%	20
			Total Calcium (Ca)	2023/02/24	3.7		%	20
			Total Chromium (Cr)	2023/02/24	4.6		%	20
			Total Cobalt (Co)	2023/02/24	4.8		%	20
			Total Copper (Cu)	2023/02/24	2.6		%	20
			Total Iron (Fe)	2023/02/24	2.9		%	20
			Total Lead (Pb)	2023/02/24	1.6		%	20
			Total Magnesium (Mg)	2023/02/24	0.18		%	20
			Total Manganese (Mn)	2023/02/24	0.39		%	20
			Total Molybdenum (Mo)	2023/02/24	0.53		%	20
			Total Nickel (Ni)	2023/02/24	0.99		%	20
			Total Phosphorus (P)	2023/02/24	0.63		%	20
			Total Potassium (K)	2023/02/24	2.5		%	20
			Total Selenium (Se)	2023/02/24	1.4		%	20
			Total Silver (Ag)	2023/02/24	11		%	20
			Total Sodium (Na)	2023/02/24	2.9		%	20
			Total Strontium (Sr)	2023/02/24	1.3		%	20
			Total Thallium (Tl)	2023/02/24	1.7		%	20
			Total Tin (Sn)	2023/02/24	0.35		%	20
			Total Titanium (Ti)	2023/02/24	4.4		%	20
			Total Uranium (U)	2023/02/24	4.3		%	20
			Total Vanadium (V)	2023/02/24	2.0		%	20
			Total Zinc (Zn)	2023/02/24	0.82		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8518479	ADA	Method Blank	Total Aluminum (Al)	2023/02/24	<2.0		ug	
			Total Antimony (Sb)	2023/02/24	<0.050		ug	
			Total Arsenic (As)	2023/02/24	<0.050		ug	
			Total Barium (Ba)	2023/02/24	<0.050		ug	
			Total Beryllium (Be)	2023/02/24	<0.030		ug	
			Total Bismuth (Bi)	2023/02/24	<0.050		ug	
			Total Boron (B)	2023/02/24	<1.0		ug	
			Total Cadmium (Cd)	2023/02/24	<0.010		ug	
			Total Calcium (Ca)	2023/02/24	<5.0		ug	
			Total Chromium (Cr)	2023/02/24	<0.050		ug	
			Total Cobalt (Co)	2023/02/24	<0.030		ug	
			Total Copper (Cu)	2023/02/24	<0.030		ug	
			Total Iron (Fe)	2023/02/24	<5.0		ug	
			Total Lead (Pb)	2023/02/24	<0.030		ug	
			Total Magnesium (Mg)	2023/02/24	<1.0		ug	
			Total Manganese (Mn)	2023/02/24	<0.050		ug	
			Total Molybdenum (Mo)	2023/02/24	<0.030		ug	
			Total Nickel (Ni)	2023/02/24	<0.050		ug	
			Total Phosphorus (P)	2023/02/24	<5.0		ug	
			Total Potassium (K)	2023/02/24	<5.0		ug	
			Total Selenium (Se)	2023/02/24	<0.10		ug	
			Total Silver (Ag)	2023/02/24	<0.010		ug	
			Total Sodium (Na)	2023/02/24	<5.0		ug	
			Total Strontium (Sr)	2023/02/24	<0.050		ug	
			Total Thallium (Tl)	2023/02/24	<0.010		ug	
			Total Tin (Sn)	2023/02/24	<0.030		ug	
			Total Titanium (Ti)	2023/02/24	<0.10		ug	
			Total Uranium (U)	2023/02/24	<0.010		ug	
			Total Vanadium (V)	2023/02/24	<0.030		ug	
			Total Zinc (Zn)	2023/02/24	<0.50		ug	
8528183	TLG	Spiked Blank	Acid Extractable Mercury (Hg)	2023/03/02		94	%	90 - 110
8528183	TLG	RPD	Acid Extractable Mercury (Hg)	2023/03/02	0.64		%	20
8528183	TLG	Method Blank	Acid Extractable Mercury (Hg)	2023/03/02	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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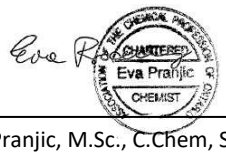
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C347494
Report Date: 2023/03/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Ewa Pranjic, M.Sc., C.Chem, Scientific Specialist

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/16
Report #: R7549258
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C368770
Received: 2023/03/10, 09:00

Sample Matrix: Filter
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Particulate Calculation	7	N/A	2023/03/15	BRL SOP-00109	EPA IO-2mod
Total Particulate	7	N/A	2023/03/13	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	7	N/A	2023/03/10		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/16
Report #: R7549258
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C368770
Received: 2023/03/10, 09:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas Job #: C368770
Report Date: 2023/03/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		VGJ034	VGJ035	VGJ036	VGJ037	VGJ038	VGJ039	VGJ040		
Sampling Date		2023/02/11	2023/02/14	2023/02/17	2023/02/20	2023/02/23	2023/02/26	2023/03/01		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	PM10 11 FEB	PM10 14 FEB	PM10 17 FEB	PM10 20 FEB	PM10 23 FEB	PM10 26 FEB	PM10 01 MAR	RDL	QC Batch
Particulate	ug/m3	13.2	9.5	14.1	5.5	6.2	4.7	9.1	1.2	8547340
Particulate Weight on Filter	ug	318	229	338	133	149	113	219	30	8553152
Volume	m3	24.05	24.05	24.05	24.05	24.05	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C368770
Report Date: 2023/03/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VGJ034 **Collected:** 2023/02/11
Sample ID: PM10 11 FEB **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Taufir (Mateen) Kazemi

Bureau Veritas ID: VGJ035 **Collected:** 2023/02/14
Sample ID: PM10 14 FEB **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Taufir (Mateen) Kazemi

Bureau Veritas ID: VGJ036 **Collected:** 2023/02/17
Sample ID: PM10 17 FEB **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Taufir (Mateen) Kazemi

Bureau Veritas ID: VGJ037 **Collected:** 2023/02/20
Sample ID: PM10 20 FEB **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Taufir (Mateen) Kazemi

Bureau Veritas ID: VGJ038 **Collected:** 2023/02/23
Sample ID: PM10 23 FEB **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Taufir (Mateen) Kazemi

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Bureau Veritas Job #: C368770
Report Date: 2023/03/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VGJ039
Sample ID: PM10 26 FEB
Matrix: Filter

Collected: 2023/02/26
Shipped:
Received: 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Taufir (Mateen) Kazemi

Bureau Veritas ID: VGJ040
Sample ID: PM10 01 MAR
Matrix: Filter

Collected: 2023/03/01
Shipped:
Received: 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Taufir (Mateen) Kazemi

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Bureau Veritas Job #: C368770
Report Date: 2023/03/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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Bureau Veritas Job #: C368770
Report Date: 2023/03/16

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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AIR

CAM FCD-01302 /3

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	Silica by NIOSH 7500	PM10	Metals	Dustfall*
PM10 11 Feb		Teflon	24.05	W22001167	11-Feb-23	24 hr		x		
PM10 14 Feb		Teflon	24.05	W22001559	14-Feb-23	24 hr		x		
PM10 17 Feb		Teflon	24.05	W22001561	17-Feb-23	24 hr		x		
PM10 20 Feb		Teflon	24.05	W22001564	20-Feb-23	24 hr		x		
PM10 23 Feb		Teflon	24.05	W22001570	23-Feb-23	24 hr		x		
PM10 26 Feb		Teflon	24.05	W22001567	26-Feb-23	24 hr		x		
PM10 01 Mar		Teflon	24.05	W22001566	01-Mar-23	24 hr		x		

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

Client Signature: Adam Gauthier AG
Affiliation: WSP
Date/Time: 07-Mar-23

Received by:
Affiliation:
Date/Time: 2023/03/10 09:00

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

10-Mar-23 09:00
Gina Baybayan
C368770
JDK AIR-RmTmp

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/23
Report #: R7557464
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C368778
Received: 2023/03/10, 09:00

Sample Matrix: Filter
Samples Received: 7

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	7	2023/03/21	2023/03/22	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	7	2023/03/10	2023/03/15	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	7	2023/03/15	2023/03/16	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	7	N/A	2023/03/15	BRL SOP-00109	EPA IO-2mod
Total Particulate	7	N/A	2023/03/13	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	7	N/A	2023/03/10		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/23
Report #: R7557464
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C368778
Received: 2023/03/10, 09:00

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

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Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C368778
Report Date: 2023/03/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		VGJ067		VGJ068	VGJ069	VGJ070	VGJ071	VGJ072	VGJ073		
Sampling Date		2023/02/11		2023/02/14	2023/02/17	2023/02/20	2023/02/23	2023/02/26	2023/03/01		
COC Number		n/a		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	**TSP FEB11**	**RDL**	**TSP FEB14**	**TSP FEB17**	**TSP FEB20**	**TSP FEB23**	**TSP FEB26**	**TSP MAR01**	**RDL**	**QC Batch**
Particulate	ug/m3	2.55	0.61	4.50	2.17	4.01	4.48	3.98	4.14	0.62	8547340
Particulate Weight on Filter	ug	125	30	217	105	193	216	192	199	30	8553152
Volume	m3	48.98	N/A	48.06	48.06	48.07	48.06	48.06	48.06	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C368778
Report Date: 2023/03/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VGJ067	VGJ067		VGJ068	VGJ069	VGJ070		
Sampling Date		2023/02/11	2023/02/11		2023/02/14	2023/02/17	2023/02/20		
COC Number		n/a	n/a		n/a	n/a	n/a		
	UNITS	TSP FEB11	TSP FEB11 Lab-Dup	RDL	TSP FEB14	TSP FEB17	TSP FEB20	RDL	QC Batch
Metals									
Total Aluminum (Al)	ug	<2.0	<2.0	2.0	<2.0	<2.0	<2.0	2.0	8553209
Total Aluminum (Al)	ug/m3	<0.041	N/A	0.041	<0.042	<0.042	<0.042	0.042	8547339
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	8553209
Total Antimony (Sb)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Arsenic (As)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	8553209
Total Arsenic (As)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Barium (Ba)	ug	1.9	1.9	0.050	0.97	1.1	1.2	0.050	8553209
Total Barium (Ba)	ug/m3	0.038	N/A	0.0010	0.020	0.023	0.024	0.0010	8547339
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	8553209
Total Beryllium (Be)	ug/m3	<0.00061	N/A	0.00061	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	8553209
Total Bismuth (Bi)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Boron (B)	ug	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	1.0	8553209
Total Boron (B)	ug/m3	<0.020	N/A	0.020	<0.021	<0.021	<0.021	0.021	8547339
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	8553209
Total Cadmium (Cd)	ug/m3	<0.00020	N/A	0.00020	<0.00021	<0.00021	<0.00021	0.00021	8547339
Total Calcium (Ca)	ug	<5.0	<5.0	5.0	<5.0	<5.0	<5.0	5.0	8553209
Total Calcium (Ca)	ug/m3	<0.10	N/A	0.10	<0.10	<0.10	<0.10	0.10	8547339
Total Chromium (Cr)	ug	<0.050	<0.050	0.050	0.19	<0.050	0.12	0.050	8553209
Total Chromium (Cr)	ug/m3	<0.0010	N/A	0.0010	0.0039	<0.0010	0.0024	0.0010	8547339
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	8553209
Total Cobalt (Co)	ug/m3	<0.00061	N/A	0.00061	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Copper (Cu)	ug	<0.030	<0.030	0.030	0.92	0.035	0.073	0.030	8553209
Total Copper (Cu)	ug/m3	<0.00061	N/A	0.00061	0.019	0.00072	0.0015	0.00062	8547339
Total Iron (Fe)	ug	<5.0	<5.0	5.0	<5.0	<5.0	<5.0	5.0	8553209
Total Iron (Fe)	ug/m3	<0.10	N/A	0.10	<0.10	<0.10	<0.10	0.10	8547339
Total Lead (Pb)	ug	<0.030	<0.030	0.030	<0.030	<0.030	0.065	0.030	8553209
Total Lead (Pb)	ug/m3	<0.00061	N/A	0.00061	<0.00062	<0.00062	0.0014	0.00062	8547339

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VGJ067	VGJ067		VGJ068	VGJ069	VGJ070		
Sampling Date		2023/02/11	2023/02/11		2023/02/14	2023/02/17	2023/02/20		
COC Number		n/a	n/a		n/a	n/a	n/a		
	UNITS	TSP FEB11	TSP FEB11 Lab-Dup	RDL	TSP FEB14	TSP FEB17	TSP FEB20	RDL	QC Batch
Total Magnesium (Mg)	ug	<1.0	<1.0	1.0	2.2	<1.0	1.6	1.0	8553209
Total Magnesium (Mg)	ug/m3	<0.020	N/A	0.020	0.046	<0.021	0.033	0.021	8547339
Total Manganese (Mn)	ug	<0.050	<0.050	0.050	0.053	<0.050	<0.050	0.050	8553209
Total Manganese (Mn)	ug/m3	<0.0010	N/A	0.0010	0.0011	<0.0010	<0.0010	0.0010	8547339
Acid Extractable Mercury (Hg	ug	<0.0025	N/A	0.0025	<0.0025	<0.0025	<0.0025	0.0025	8563683
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	8553209
Total Molybdenum (Mo)	ug/m3	<0.00061	N/A	0.00061	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Nickel (Ni)	ug	<0.050	<0.050	0.050	0.081	<0.050	<0.050	0.050	8553209
Total Nickel (Ni)	ug/m3	<0.0010	N/A	0.0010	0.0017	<0.0010	<0.0010	0.0010	8547339
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	<5.0	<5.0	<5.0	5.0	8553209
Total Potassium (K)	ug	<5.0	<5.0	5.0	<5.0	<5.0	<5.0	5.0	8553209
Total Potassium (K)	ug/m3	<0.10	N/A	0.10	<0.10	<0.10	<0.10	0.10	8547339
Total Selenium (Se)	ug	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	0.10	8553209
Total Selenium (Se)	ug/m3	<0.0020	N/A	0.0020	<0.0021	<0.0021	<0.0021	0.0021	8547339
Total Silver (Ag)	ug	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	8553209
Total Silver (Ag)	ug/m3	<0.00020	N/A	0.00020	<0.00021	<0.00021	<0.00021	0.00021	8547339
Total Sodium (Na)	ug	<5.0	<5.0	5.0	7.8	<5.0	6.6	5.0	8553209
Total Sodium (Na)	ug/m3	<0.10	N/A	0.10	0.16	<0.10	0.14	0.10	8547339
Total Strontium (Sr)	ug	<0.050	<0.050	0.050	<0.050	<0.050	<0.050	0.050	8553209
Total Strontium (Sr)	ug/m3	<0.0010	N/A	0.0010	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	8553209
Total Thallium (Tl)	ug/m3	<0.00020	N/A	0.00020	<0.00021	<0.00021	<0.00021	0.00021	8547339
Total Tin (Sn)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	8553209
Total Tin (Sn)	ug/m3	<0.00061	N/A	0.00061	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Titanium (Ti)	ug	0.12	0.11	0.10	<0.10	<0.10	<0.10	0.10	8553209
Total Titanium (Ti)	ug/m3	0.0025	N/A	0.0020	<0.0021	<0.0021	<0.0021	0.0021	8547339
Total Uranium (U)	ug	<0.010	<0.010	0.010	<0.010	<0.010	<0.010	0.010	8553209
Total Uranium (U)	ug/m3	<0.00020	N/A	0.00020	<0.00021	<0.00021	<0.00021	0.00021	8547339
Total Vanadium (V)	ug	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	0.030	8553209

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C368778
Report Date: 2023/03/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VGJ067	VGJ067		VGJ068	VGJ069	VGJ070		
Sampling Date		2023/02/11	2023/02/11		2023/02/14	2023/02/17	2023/02/20		
COC Number		n/a	n/a		n/a	n/a	n/a		
	UNITS	TSP FEB11	TSP FEB11 Lab-Dup	RDL	TSP FEB14	TSP FEB17	TSP FEB20	RDL	QC Batch
Total Vanadium (V)	ug/m3	<0.00061	N/A	0.00061	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	<0.50	<0.50	<0.50	0.50	8553209
Total Zinc (Zn)	ug/m3	<0.010	N/A	0.010	<0.010	<0.010	<0.010	0.010	8547339

RDL = Reportable Detection Limit
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Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VGJ071	VGJ072	VGJ073		
Sampling Date		2023/02/23	2023/02/26	2023/03/01		
COC Number		n/a	n/a	n/a		
	UNITS	TSP FEB23	TSP FEB26	TSP MAR01	RDL	QC Batch
Metals						
Total Aluminum (Al)	ug	<2.0	<2.0	<2.0	2.0	8553209
Total Aluminum (Al)	ug/m3	<0.042	<0.042	<0.042	0.042	8547339
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	0.050	8553209
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	0.050	8553209
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Barium (Ba)	ug	2.4	0.99	0.42	0.050	8553209
Total Barium (Ba)	ug/m3	0.049	0.021	0.0088	0.0010	8547339
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	0.030	8553209
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	0.050	8553209
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Boron (B)	ug	<1.0	<1.0	<1.0	1.0	8553209
Total Boron (B)	ug/m3	<0.021	<0.021	<0.021	0.021	8547339
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	0.010	8553209
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	8547339
Total Calcium (Ca)	ug	<5.0	<5.0	<5.0	5.0	8553209
Total Calcium (Ca)	ug/m3	<0.10	<0.10	<0.10	0.10	8547339
Total Chromium (Cr)	ug	0.077	<0.050	<0.050	0.050	8553209
Total Chromium (Cr)	ug/m3	0.0016	<0.0010	<0.0010	0.0010	8547339
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	0.030	8553209
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Copper (Cu)	ug	0.030	0.097	0.047	0.030	8553209
Total Copper (Cu)	ug/m3	0.00063	0.0020	0.00098	0.00062	8547339
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	5.0	8553209
Total Iron (Fe)	ug/m3	<0.10	<0.10	<0.10	0.10	8547339
Total Lead (Pb)	ug	<0.030	0.14	<0.030	0.030	8553209
Total Lead (Pb)	ug/m3	<0.00062	0.0029	<0.00062	0.00062	8547339
Total Magnesium (Mg)	ug	2.0	<1.0	2.6	1.0	8553209
Total Magnesium (Mg)	ug/m3	0.041	<0.021	0.054	0.021	8547339

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QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VGJ071	VGJ072	VGJ073		
Sampling Date		2023/02/23	2023/02/26	2023/03/01		
COC Number		n/a	n/a	n/a		
	UNITS	TSP FEB23	TSP FEB26	TSP MAR01	RDL	QC Batch
Total Manganese (Mn)	ug	<0.050	<0.050	0.082	0.050	8553209
Total Manganese (Mn)	ug/m3	<0.0010	<0.0010	0.0017	0.0010	8547339
Acid Extractable Mercury (Hg	ug	<0.0025	<0.0025	<0.0025	0.0025	8563683
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	0.030	8553209
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	0.050	8553209
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	5.0	8553209
Total Potassium (K)	ug	<5.0	<5.0	<5.0	5.0	8553209
Total Potassium (K)	ug/m3	<0.10	<0.10	<0.10	0.10	8547339
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	0.10	8553209
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	<0.0021	0.0021	8547339
Total Silver (Ag)	ug	0.011	<0.010	<0.010	0.010	8553209
Total Silver (Ag)	ug/m3	0.00022	<0.00021	<0.00021	0.00021	8547339
Total Sodium (Na)	ug	6.2	<5.0	12	5.0	8553209
Total Sodium (Na)	ug/m3	0.13	<0.10	0.25	0.10	8547339
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	0.050	8553209
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	8547339
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	0.010	8553209
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	8547339
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	0.030	8553209
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	0.10	8553209
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	<0.0021	0.0021	8547339
Total Uranium (U)	ug	<0.010	<0.010	<0.010	0.010	8553209
Total Uranium (U)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	8547339
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	0.030	8553209
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	8547339
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	0.50	8553209
Total Zinc (Zn)	ug/m3	<0.010	<0.010	<0.010	0.010	8547339

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QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C368778
Report Date: 2023/03/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VGJ067 **Collected:** 2023/02/11
Sample ID: TSP FEB11 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8563683	2023/03/21	2023/03/22	Jaswinder Kaur
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8547339	2023/03/15	2023/03/15	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8553209	2023/03/15	2023/03/16	Nan Raykha
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Marinela Sim

Bureau Veritas ID: VGJ067 Dup **Collected:** 2023/02/11
Sample ID: TSP FEB11 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8553209	2023/03/15	2023/03/16	Nan Raykha

Bureau Veritas ID: VGJ068 **Collected:** 2023/02/14
Sample ID: TSP FEB14 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8563683	2023/03/21	2023/03/22	Jaswinder Kaur
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8547339	2023/03/15	2023/03/15	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8553209	2023/03/15	2023/03/16	Nan Raykha
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Marinela Sim

Bureau Veritas ID: VGJ069 **Collected:** 2023/02/17
Sample ID: TSP FEB17 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8563683	2023/03/21	2023/03/22	Jaswinder Kaur
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8547339	2023/03/15	2023/03/15	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8553209	2023/03/15	2023/03/16	Nan Raykha
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Marinela Sim

Bureau Veritas ID: VGJ070 **Collected:** 2023/02/20
Sample ID: TSP FEB20 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8563683	2023/03/21	2023/03/22	Jaswinder Kaur

TEST SUMMARY

Bureau Veritas ID: VGJ070 **Collected:** 2023/02/20
Sample ID: TSP FEB20 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8547339	2023/03/15	2023/03/15	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8553209	2023/03/15	2023/03/16	Nan Raykha
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Marinela Sim

Bureau Veritas ID: VGJ071 **Collected:** 2023/02/23
Sample ID: TSP FEB23 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8563683	2023/03/21	2023/03/22	Jaswinder Kaur
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8547339	2023/03/15	2023/03/15	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8553209	2023/03/15	2023/03/16	Nan Raykha
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Marinela Sim

Bureau Veritas ID: VGJ072 **Collected:** 2023/02/26
Sample ID: TSP FEB26 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8563683	2023/03/21	2023/03/22	Jaswinder Kaur
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8547339	2023/03/15	2023/03/15	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8553209	2023/03/15	2023/03/16	Nan Raykha
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Marinela Sim

Bureau Veritas ID: VGJ073 **Collected:** 2023/03/01
Sample ID: TSP MAR01 **Shipped:**
Matrix: Filter **Received:** 2023/03/10

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8563683	2023/03/21	2023/03/22	Jaswinder Kaur
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8547339	2023/03/15	2023/03/15	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8553209	2023/03/15	2023/03/16	Nan Raykha
Particulate Calculation	CALC	8547340	N/A	2023/03/15	Automated Statchk
Total Particulate	BAL	8553152	N/A	2023/03/13	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/03/10	Marinela Sim

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Total Metals on Small Filter (6020Bmod): Post digestion duplicate and spike were done on sample VGJ067.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8553209	Total Aluminum (Al)	2023/03/16	94 (1)	70 - 130	100	85 - 115	<2.0	ug	NC (3)	20
8553209	Total Antimony (Sb)	2023/03/16	99 (1)	70 - 130	108	85 - 115	<0.050	ug	NC (3)	20
8553209	Total Arsenic (As)	2023/03/16	96 (1)	70 - 130	98	85 - 115	<0.050	ug	NC (3)	20
8553209	Total Barium (Ba)	2023/03/16	99 (1)	70 - 130	100	85 - 115	<0.050	ug	0.088 (3)	20
8553209	Total Beryllium (Be)	2023/03/16	97 (1)	70 - 130	101	85 - 115	<0.030	ug	NC (3)	20
8553209	Total Bismuth (Bi)	2023/03/16	95 (1)	70 - 130	98	85 - 115	<0.050	ug	NC (3)	20
8553209	Total Boron (B)	2023/03/16	95 (1)	70 - 130	98	85 - 115	<1.0	ug	NC (3)	20
8553209	Total Cadmium (Cd)	2023/03/16	95 (1)	70 - 130	97	85 - 115	<0.010	ug	NC (3)	20
8553209	Total Calcium (Ca)	2023/03/16	96 (1)	70 - 130	101	85 - 115	<5.0	ug	NC (3)	20
8553209	Total Chromium (Cr)	2023/03/16	97 (1)	70 - 130	97	85 - 115	<0.050	ug	NC (3)	20
8553209	Total Cobalt (Co)	2023/03/16	99 (1)	70 - 130	101	85 - 115	<0.030	ug	NC (3)	20
8553209	Total Copper (Cu)	2023/03/16	102 (1)	70 - 130	103	85 - 115	<0.030	ug	NC (3)	20
8553209	Total Iron (Fe)	2023/03/16	101 (1)	70 - 130	102	85 - 115	<5.0	ug	NC (3)	20
8553209	Total Lead (Pb)	2023/03/16	97 (1)	70 - 130	99	85 - 115	<0.030	ug	NC (3)	20
8553209	Total Magnesium (Mg)	2023/03/16	98 (1)	70 - 130	99	85 - 115	<1.0	ug	NC (3)	20
8553209	Total Manganese (Mn)	2023/03/16	96 (1)	70 - 130	97	85 - 115	<0.050	ug	NC (3)	20
8553209	Total Molybdenum (Mo)	2023/03/16	103 (1)	70 - 130	113	85 - 115	<0.030	ug	NC (3)	20
8553209	Total Nickel (Ni)	2023/03/16	97 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20
8553209	Total Phosphorus (P)	2023/03/16	97 (1)	70 - 130	106	85 - 115	<5.0	ug	NC (3)	20
8553209	Total Potassium (K)	2023/03/16	97 (1)	70 - 130	99	85 - 115	<5.0	ug	NC (3)	20
8553209	Total Selenium (Se)	2023/03/16	94 (1)	70 - 130	96	85 - 115	<0.10	ug	NC (3)	20
8553209	Total Silver (Ag)	2023/03/16	100 (1)	70 - 130	101	85 - 115	<0.010	ug	NC (3)	20
8553209	Total Sodium (Na)	2023/03/16	98 (1)	70 - 130	99	85 - 115	<5.0	ug	NC (3)	20
8553209	Total Strontium (Sr)	2023/03/16	95 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20
8553209	Total Thallium (Tl)	2023/03/16	98 (1)	70 - 130	100	85 - 115	<0.010	ug	NC (3)	20
8553209	Total Tin (Sn)	2023/03/16	99 (1)	70 - 130	111	85 - 115	<0.030	ug	NC (3)	20
8553209	Total Titanium (Ti)	2023/03/16	95 (1)	70 - 130	106	85 - 115	<0.10	ug	7.6 (3)	20
8553209	Total Uranium (U)	2023/03/16	96 (1)	70 - 130	98	85 - 115	<0.010	ug	NC (3)	20
8553209	Total Vanadium (V)	2023/03/16	97 (1)	70 - 130	99	85 - 115	<0.030	ug	NC (3)	20
8553209	Total Zinc (Zn)	2023/03/16	92 (1)	70 - 130	93	85 - 115	<0.50	ug	NC (3)	20

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QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8563683	Acid Extractable Mercury (Hg)	2023/03/22			96	90 - 110	<0.0025	ug	3.1 (2)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [VGJ067-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [VGJ067-01]

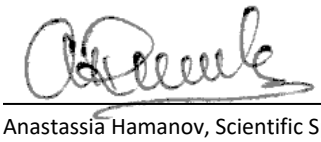
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Bureau Veritas Job #: C368778
Report Date: 2023/03/23

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist



Marinela Sim, Project Manager

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BUREAU VERITAS

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Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP 11 Feb	11-Feb-23	Teflon	48.98	W22001168	11-Feb-23	48 hr	X		X	X
TSP 14 Feb	14-Feb-23	Teflon	48.06	W22001560	14-Feb-23	48 hr	X		X	X
TSP 17 Feb	17-Feb-23	Teflon	48.06	W22001562	17-Feb-23	48 hr	X		X	X
TSP 20 Feb	20-Feb-23	Teflon	48.07	W22001563	20-Feb-23	48 hr	X		X	X
TSP 23 Feb	23-Feb-23	Teflon	48.06	W22001569	23-Feb-23	48 hr	X		X	X
TSP 26 Feb	26-Feb-23	Teflon	48.06	W22001568	26-Feb-23	48 hr	X		X	X
TSP 01 Mar	01-Mar-23	Teflon	48.06	W22001565	01-Mar-23	48 hr	X		X	X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: Teflon
Name:
PO #: Crawford
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

Client Signature: Adam Gauthier AG
Affiliation: WSP
Date/Time: 07-Mar-23

Marinela Sim
Affiliation:
Date/Time:

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

T-1 2023/03/10 0900

10-Mar-23 09:00
Gina Baybayan
C368778
JDK AIR-RmTmp

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/04/18
Report #: R7592740
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3A1441
Received: 2023/04/12, 09:21

Sample Matrix: Filter
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Particulate Calculation	9	N/A	2023/04/18	BRL SOP-00109	EPA IO-2mod
Total Particulate	9	N/A	2023/04/14	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	9	N/A	2023/04/12		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/04/18
Report #: R7592740
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3A1441
Received: 2023/04/12, 09:21

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas Job #: C3A1441
Report Date: 2023/04/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		VNH313	VNH314	VNH315	VNH316	VNH317	VNH318		
Sampling Date		2023/03/04	2023/03/07	2023/03/13	2023/03/16	2023/03/19	2023/03/22		
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	PM10 04 MAR	PM10 07 MAR	PM10 13 MAR	PM10 16 MAR	PM10 19 MAR	PM10 22 MAR	RDL	QC Batch
Particulate	ug/m3	10.0	8.8	7.2	9.4	5.3	7.9	1.2	8603711
Particulate Weight on Filter	ug	242	211	174	227	128	189	30	8613159
Volume	m3	24.05	24.05	24.05	24.05	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		VNH319	VNH320	VNH321		
Sampling Date		2023/03/25	2023/03/27	2023/03/31		
COC Number		n/a	n/a	n/a		
	UNITS	PM10 25 MAR	PM10 27 MAR	PM10 31 MAR	RDL	QC Batch
Particulate	ug/m3	8.7	13.0	11.1	1.2	8603711
Particulate Weight on Filter	ug	209	313	268	30	8613159
Volume	m3	24.05	24.05	24.05	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C3A1441
Report Date: 2023/04/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VNH313 **Collected:** 2023/03/04
Sample ID: PM10 04 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH314 **Collected:** 2023/03/07
Sample ID: PM10 07 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH315 **Collected:** 2023/03/13
Sample ID: PM10 13 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH316 **Collected:** 2023/03/16
Sample ID: PM10 16 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH317 **Collected:** 2023/03/19
Sample ID: PM10 19 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

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Bureau Veritas Job #: C3A1441
Report Date: 2023/04/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VNH318
Sample ID: PM10 22 MAR
Matrix: Filter
Collected: 2023/03/22
Shipped:
Received: 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH319
Sample ID: PM10 25 MAR
Matrix: Filter
Collected: 2023/03/25
Shipped:
Received: 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH320
Sample ID: PM10 27 MAR
Matrix: Filter
Collected: 2023/03/27
Shipped:
Received: 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH321
Sample ID: PM10 31 MAR
Matrix: Filter
Collected: 2023/03/31
Shipped:
Received: 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3A1441
Report Date: 2023/04/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

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CAM FCD-01302 /3

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Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	Silica by NIOSH 7500	PM10	Metals	Dustfall*
PM10 04 Mar	Teflon	24.05	W22002500	04-Mar-23	24 hr		x		
PM10 07 Mar	Teflon	24.05	WC1415652	07-Mar-23	24 hr		x		
PM10 13 Mar	Teflon	24.05	W22002490	13-Mar-23	24 hr		x		
PM10 16 Mar	Teflon	24.05	W22001165	16-Mar-23	24 hr		x		
PM10 19 Mar	Teflon	24.05	W22002492	19-Mar-23	24 hr		x		
PM10 22 Mar	Teflon	24.05	WC1415655	22-Mar-23	24 hr		x		
PM10 25 Mar	Teflon	24.05	WC1415654	25-Mar-23	25 hr		x		
PM10 27 Mar	Teflon	24.05	W22001171	27-Mar-23	26 hr		x		
PM10 31 Mar	Teflon	24.05	W220011172	31-Mar-23	24 hr		x		

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 06-Apr-23

Received by: SAMA BASRA
Affiliation:
Date/Time: 2023/04/12 09:21

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

12-Apr-23 09:21
Gina Baybayan
C3A1441
KSS AIR-RmTmp

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/04/25
Report #: R7601897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3A1456
Received: 2023/04/12, 09:21

Sample Matrix: Filter
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	9	2023/04/19	2023/04/21	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	9	2023/04/12	2023/04/18	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	9	2023/04/20	2023/04/21	BRL SOP-00103 / BRL SOP-00102	EPA 6020B m
Particulate Calculation	9	N/A	2023/04/18	BRL SOP-00109	EPA IO-2mod
Total Particulate	9	N/A	2023/04/14	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	9	N/A	2023/04/12		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/04/25
Report #: R7601897
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3A1456
Received: 2023/04/12, 09:21

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3A1456
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		VNH368	VNH369		VNH370		VNH371		VNH372		
Sampling Date		2023/03/04	2023/03/07		2023/03/13		2023/03/16		2023/03/19		
COC Number		n/a	n/a		n/a		n/a		n/a		
	UNITS	TSP 04 MAR	TSP 07 MAR	RDL	TSP 13 MAR	RDL	TSP 16 MAR	RDL	TSP 19 MAR	RDL	QC Batch
Particulate	ug/m3	4.67	3.97	0.62	5.32	0.83	4.31	0.62	3.86	0.98	8603711
Particulate Weight on Filter	ug	225	191	30	192	30	207	30	119	30	8613159
Volume	m3	48.06	48.06	N/A	36.03	N/A	48.05	N/A	30.68	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		VNH373	VNH374	VNH375	VNH376		
Sampling Date		2023/03/22	2023/03/25	2023/03/27	2023/03/31		
COC Number		n/a	n/a	n/a	n/a		
	UNITS	TSP 22 MAR	TSP 25 MAR	TSP 27 MAR	TSP 31 MAR	RDL	QC Batch
Particulate	ug/m3	3.05	3.51	<0.62	11.2	0.62	8603711
Particulate Weight on Filter	ug	147	169	<30	537	30	8613159
Volume	m3	48.06	48.06	48.06	48.06	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH368	VNH369	VNH369		VNH370		
Sampling Date		2023/03/04	2023/03/07	2023/03/07		2023/03/13		
COC Number		n/a	n/a	n/a		n/a		
	UNITS	TSP 04 MAR	TSP 07 MAR	TSP 07 MAR Lab-Dup	RDL	TSP 13 MAR	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug	<2.0	7.0	6.6	2.0	<2.0	2.0	8618772
Total Aluminum (Al)	ug/m3	<0.042	0.15	N/A	0.042	<0.056	0.056	8603412
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	0.050	<0.050	0.050	8618772
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	N/A	0.0010	<0.0014	0.0014	8603412
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	0.050	<0.050	0.050	8618772
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	N/A	0.0010	<0.0014	0.0014	8603412
Total Barium (Ba)	ug	2.1	1.6	1.6	0.050	2.4	0.050	8618772
Total Barium (Ba)	ug/m3	0.043	0.032	N/A	0.0010	0.067	0.0014	8603412
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	0.030	<0.030	0.030	8618772
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	N/A	0.00062	<0.00083	0.00083	8603412
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	0.050	<0.050	0.050	8618772
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	N/A	0.0010	<0.0014	0.0014	8603412
Total Boron (B)	ug	<1.0	<1.0	<1.0	1.0	<1.0	1.0	8618772
Total Boron (B)	ug/m3	<0.021	<0.021	N/A	0.021	<0.028	0.028	8603412
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	0.010	<0.010	0.010	8618772
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	N/A	0.00021	<0.00028	0.00028	8603412
Total Calcium (Ca)	ug	7.4	<5.0	<5.0	5.0	<5.0	5.0	8618772
Total Calcium (Ca)	ug/m3	0.15	<0.10	N/A	0.10	<0.14	0.14	8603412
Total Chromium (Cr)	ug	0.12	0.064	0.068	0.050	<0.050	0.050	8618772
Total Chromium (Cr)	ug/m3	0.0024	0.0013	N/A	0.0010	<0.0014	0.0014	8603412
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	0.030	<0.030	0.030	8618772
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	N/A	0.00062	<0.00083	0.00083	8603412
Total Copper (Cu)	ug	<0.030	<0.030	<0.030	0.030	<0.030	0.030	8618772
Total Copper (Cu)	ug/m3	<0.00062	<0.00062	N/A	0.00062	<0.00083	0.00083	8603412
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	5.0	<5.0	5.0	8618772
Total Iron (Fe)	ug/m3	<0.10	<0.10	N/A	0.10	<0.14	0.14	8603412
Total Lead (Pb)	ug	<0.030	<0.030	<0.030	0.030	<0.030	0.030	8618772

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH368	VNH369	VNH369		VNH370		
Sampling Date		2023/03/04	2023/03/07	2023/03/07		2023/03/13		
COC Number		n/a	n/a	n/a		n/a		
	UNITS	TSP 04 MAR	TSP 07 MAR	TSP 07 MAR Lab-Dup	RDL	TSP 13 MAR	RDL	QC Batch
Total Lead (Pb)	ug/m3	<0.00062	<0.00062	N/A	0.00062	<0.00083	0.00083	8603412
Total Magnesium (Mg)	ug	<1.0	<1.0	<1.0	1.0	<1.0	1.0	8618772
Total Magnesium (Mg)	ug/m3	<0.021	<0.021	N/A	0.021	<0.028	0.028	8603412
Total Manganese (Mn)	ug	<0.050	<0.050	<0.050	0.050	<0.050	0.050	8618772
Total Manganese (Mn)	ug/m3	<0.0010	<0.0010	N/A	0.0010	<0.0014	0.0014	8603412
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	N/A	0.0025	<0.0025	0.0025	8621407
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	0.030	<0.030	0.030	8618772
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	N/A	0.00062	<0.00083	0.00083	8603412
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	0.050	<0.050	0.050	8618772
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	N/A	0.0010	<0.0014	0.0014	8603412
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	5.0	<5.0	5.0	8618772
Total Potassium (K)	ug	<5.0	<5.0	<5.0	5.0	<5.0	5.0	8618772
Total Potassium (K)	ug/m3	<0.10	<0.10	N/A	0.10	<0.14	0.14	8603412
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	0.10	<0.10	0.10	8618772
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	N/A	0.0021	<0.0028	0.0028	8603412
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	0.010	<0.010	0.010	8618772
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	N/A	0.00021	<0.00028	0.00028	8603412
Total Sodium (Na)	ug	<5.0	8.1	8.2	5.0	<5.0	5.0	8618772
Total Sodium (Na)	ug/m3	<0.10	0.17	N/A	0.10	<0.14	0.14	8603412
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	0.050	<0.050	0.050	8618772
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	N/A	0.0010	<0.0014	0.0014	8603412
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	0.010	<0.010	0.010	8618772
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	N/A	0.00021	<0.00028	0.00028	8603412
Total Tin (Sn)	ug	<0.030	0.033	0.033	0.030	<0.030	0.030	8618772
Total Tin (Sn)	ug/m3	<0.00062	0.00069	N/A	0.00062	<0.00083	0.00083	8603412
Total Titanium (Ti)	ug	<0.10	<0.10	<0.10	0.10	<0.10	0.10	8618772
Total Titanium (Ti)	ug/m3	<0.0021	<0.0021	N/A	0.0021	<0.0028	0.0028	8603412
Total Uranium (U)	ug	<0.010	<0.010	<0.010	0.010	<0.010	0.010	8618772

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
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N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3A1456
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH368	VNH369	VNH369		VNH370		
Sampling Date		2023/03/04	2023/03/07	2023/03/07		2023/03/13		
COC Number		n/a	n/a	n/a		n/a		
	UNITS	**TSP 04 MAR**	**TSP 07 MAR**	**TSP 07 MAR Lab-Dup**	**RDL**	**TSP 13 MAR**	**RDL**	**QC Batch**
Total Uranium (U)	ug/m3	<0.00021	<0.00021	N/A	0.00021	<0.00028	0.00028	8603412
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	0.030	<0.030	0.030	8618772
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	N/A	0.00062	<0.00083	0.00083	8603412
Total Zinc (Zn)	ug	<0.50	<0.50	<0.50	0.50	<0.50	0.50	8618772
Total Zinc (Zn)	ug/m3	<0.010	<0.010	N/A	0.010	<0.014	0.014	8603412

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3A1456
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH371		VNH372		VNH373	VNH374		
Sampling Date		2023/03/16		2023/03/19		2023/03/22	2023/03/25		
COC Number		n/a		n/a		n/a	n/a		
	UNITS	TSP 16 MAR	RDL	TSP 19 MAR	RDL	TSP 22 MAR	TSP 25 MAR	RDL	QC Batch
Metals									
Total Aluminum (Al)	ug	<2.0	2.0	<2.0	2.0	<2.0	8.5	2.0	8618772
Total Aluminum (Al)	ug/m3	<0.042	0.042	<0.065	0.065	<0.042	0.18	0.042	8603412
Total Antimony (Sb)	ug	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	8618772
Total Antimony (Sb)	ug/m3	<0.0010	0.0010	<0.0016	0.0016	<0.0010	<0.0010	0.0010	8603412
Total Arsenic (As)	ug	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	8618772
Total Arsenic (As)	ug/m3	<0.0010	0.0010	<0.0016	0.0016	<0.0010	<0.0010	0.0010	8603412
Total Barium (Ba)	ug	1.2	0.050	0.32	0.050	0.19	0.31	0.050	8618772
Total Barium (Ba)	ug/m3	0.025	0.0010	0.010	0.0016	0.0040	0.0065	0.0010	8603412
Total Beryllium (Be)	ug	<0.030	0.030	<0.030	0.030	<0.030	<0.030	0.030	8618772
Total Beryllium (Be)	ug/m3	<0.00062	0.00062	<0.00098	0.00098	<0.00062	<0.00062	0.00062	8603412
Total Bismuth (Bi)	ug	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	8618772
Total Bismuth (Bi)	ug/m3	<0.0010	0.0010	<0.0016	0.0016	<0.0010	<0.0010	0.0010	8603412
Total Boron (B)	ug	<1.0	1.0	<1.0	1.0	<1.0	<1.0	1.0	8618772
Total Boron (B)	ug/m3	<0.021	0.021	<0.033	0.033	<0.021	<0.021	0.021	8603412
Total Cadmium (Cd)	ug	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	8618772
Total Cadmium (Cd)	ug/m3	<0.00021	0.00021	<0.00033	0.00033	<0.00021	<0.00021	0.00021	8603412
Total Calcium (Ca)	ug	<5.0	5.0	<5.0	5.0	<5.0	<5.0	5.0	8618772
Total Calcium (Ca)	ug/m3	<0.10	0.10	<0.16	0.16	<0.10	<0.10	0.10	8603412
Total Chromium (Cr)	ug	0.11	0.050	0.10	0.050	<0.050	0.097	0.050	8618772
Total Chromium (Cr)	ug/m3	0.0024	0.0010	0.0034	0.0016	<0.0010	0.0020	0.0010	8603412
Total Cobalt (Co)	ug	<0.030	0.030	<0.030	0.030	<0.030	<0.030	0.030	8618772
Total Cobalt (Co)	ug/m3	<0.00062	0.00062	<0.00098	0.00098	<0.00062	<0.00062	0.00062	8603412
Total Copper (Cu)	ug	0.032	0.030	<0.030	0.030	0.042	0.063	0.030	8618772
Total Copper (Cu)	ug/m3	0.00066	0.00062	<0.00098	0.00098	0.00087	0.0013	0.00062	8603412
Total Iron (Fe)	ug	<5.0	5.0	<5.0	5.0	<5.0	<5.0	5.0	8618772
Total Iron (Fe)	ug/m3	<0.10	0.10	<0.16	0.16	<0.10	<0.10	0.10	8603412
Total Lead (Pb)	ug	<0.030	0.030	<0.030	0.030	0.033	0.051	0.030	8618772
Total Lead (Pb)	ug/m3	<0.00062	0.00062	<0.00098	0.00098	0.00069	0.0011	0.00062	8603412
Total Magnesium (Mg)	ug	1.3	1.0	<1.0	1.0	<1.0	<1.0	1.0	8618772

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH371		VNH372		VNH373	VNH374		
Sampling Date		2023/03/16		2023/03/19		2023/03/22	2023/03/25		
COC Number		n/a		n/a		n/a	n/a		
	UNITS	TSP 16 MAR	RDL	TSP 19 MAR	RDL	TSP 22 MAR	TSP 25 MAR	RDL	QC Batch
Total Magnesium (Mg)	ug/m3	0.027	0.021	<0.033	0.033	<0.021	<0.021	0.021	8603412
Total Manganese (Mn)	ug	<0.050	0.050	<0.050	0.050	<0.050	0.055	0.050	8618772
Total Manganese (Mn)	ug/m3	<0.0010	0.0010	<0.0016	0.0016	<0.0010	0.0011	0.0010	8603412
Acid Extractable Mercury (Hg)	ug	<0.0025	0.0025	<0.0025	0.0025	<0.0025	<0.0025	0.0025	8621407
Total Molybdenum (Mo)	ug	<0.030	0.030	<0.030	0.030	<0.030	<0.030	0.030	8618772
Total Molybdenum (Mo)	ug/m3	<0.00062	0.00062	<0.00098	0.00098	<0.00062	<0.00062	0.00062	8603412
Total Nickel (Ni)	ug	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	8618772
Total Nickel (Ni)	ug/m3	<0.0010	0.0010	<0.0016	0.0016	<0.0010	<0.0010	0.0010	8603412
Total Phosphorus (P)	ug	<5.0	5.0	<5.0	5.0	<5.0	<5.0	5.0	8618772
Total Potassium (K)	ug	<5.0	5.0	<5.0	5.0	<5.0	<5.0	5.0	8618772
Total Potassium (K)	ug/m3	<0.10	0.10	<0.16	0.16	<0.10	<0.10	0.10	8603412
Total Selenium (Se)	ug	<0.10	0.10	<0.10	0.10	<0.10	<0.10	0.10	8618772
Total Selenium (Se)	ug/m3	<0.0021	0.0021	<0.0033	0.0033	<0.0021	<0.0021	0.0021	8603412
Total Silver (Ag)	ug	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	8618772
Total Silver (Ag)	ug/m3	<0.00021	0.00021	<0.00033	0.00033	<0.00021	<0.00021	0.00021	8603412
Total Sodium (Na)	ug	6.2	5.0	<5.0	5.0	<5.0	6.8	5.0	8618772
Total Sodium (Na)	ug/m3	0.13	0.10	<0.16	0.16	<0.10	0.14	0.10	8603412
Total Strontium (Sr)	ug	<0.050	0.050	<0.050	0.050	<0.050	<0.050	0.050	8618772
Total Strontium (Sr)	ug/m3	<0.0010	0.0010	<0.0016	0.0016	<0.0010	<0.0010	0.0010	8603412
Total Thallium (Tl)	ug	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	8618772
Total Thallium (Tl)	ug/m3	<0.00021	0.00021	<0.00033	0.00033	<0.00021	<0.00021	0.00021	8603412
Total Tin (Sn)	ug	<0.030	0.030	<0.030	0.030	<0.030	<0.030	0.030	8618772
Total Tin (Sn)	ug/m3	<0.00062	0.00062	<0.00098	0.00098	<0.00062	<0.00062	0.00062	8603412
Total Titanium (Ti)	ug	<0.10	0.10	<0.10	0.10	<0.10	0.20	0.10	8618772
Total Titanium (Ti)	ug/m3	<0.0021	0.0021	<0.0033	0.0033	<0.0021	0.0041	0.0021	8603412
Total Uranium (U)	ug	<0.010	0.010	<0.010	0.010	<0.010	<0.010	0.010	8618772
Total Uranium (U)	ug/m3	<0.00021	0.00021	<0.00033	0.00033	<0.00021	<0.00021	0.00021	8603412
Total Vanadium (V)	ug	<0.030	0.030	<0.030	0.030	<0.030	<0.030	0.030	8618772
Total Vanadium (V)	ug/m3	<0.00062	0.00062	<0.00098	0.00098	<0.00062	<0.00062	0.00062	8603412
Total Zinc (Zn)	ug	<0.50	0.50	<0.50	0.50	<0.50	<0.50	0.50	8618772

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3A1456
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH371		VNH372		VNH373	VNH374		
Sampling Date		2023/03/16		2023/03/19		2023/03/22	2023/03/25		
COC Number		n/a		n/a		n/a	n/a		
	UNITS	**TSP 16 MAR**	**RDL**	**TSP 19 MAR**	**RDL**	**TSP 22 MAR**	**TSP 25 MAR**	**RDL**	**QC Batch**
Total Zinc (Zn)	ug/m3	<0.010	0.010	<0.016	0.016	<0.010	<0.010	0.010	8603412

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH375	VNH376		
Sampling Date		2023/03/27	2023/03/31		
COC Number		n/a	n/a		
	UNITS	TSP 27 MAR	TSP 31 MAR	RDL	QC Batch
Metals					
Total Aluminum (Al)	ug	<2.0	3.3	2.0	8618772
Total Aluminum (Al)	ug/m3	<0.042	0.069	0.042	8603412
Total Antimony (Sb)	ug	<0.050	<0.050	0.050	8618772
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	0.0010	8603412
Total Arsenic (As)	ug	<0.050	<0.050	0.050	8618772
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	0.0010	8603412
Total Barium (Ba)	ug	<0.050	6.5	0.050	8618772
Total Barium (Ba)	ug/m3	<0.0010	0.14	0.0010	8603412
Total Beryllium (Be)	ug	<0.030	<0.030	0.030	8618772
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	0.00062	8603412
Total Bismuth (Bi)	ug	<0.050	<0.050	0.050	8618772
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	0.0010	8603412
Total Boron (B)	ug	<1.0	<1.0	1.0	8618772
Total Boron (B)	ug/m3	<0.021	<0.021	0.021	8603412
Total Cadmium (Cd)	ug	<0.010	<0.010	0.010	8618772
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	0.00021	8603412
Total Calcium (Ca)	ug	<5.0	7.3	5.0	8618772
Total Calcium (Ca)	ug/m3	<0.10	0.15	0.10	8603412
Total Chromium (Cr)	ug	0.090	<0.050	0.050	8618772
Total Chromium (Cr)	ug/m3	0.0019	<0.0010	0.0010	8603412
Total Cobalt (Co)	ug	<0.030	<0.030	0.030	8618772
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	0.00062	8603412
Total Copper (Cu)	ug	<0.030	0.049	0.030	8618772
Total Copper (Cu)	ug/m3	<0.00062	0.0010	0.00062	8603412
Total Iron (Fe)	ug	<5.0	<5.0	5.0	8618772
Total Iron (Fe)	ug/m3	<0.10	<0.10	0.10	8603412
Total Lead (Pb)	ug	<0.030	0.066	0.030	8618772
Total Lead (Pb)	ug/m3	<0.00062	0.0014	0.00062	8603412
Total Magnesium (Mg)	ug	<1.0	2.6	1.0	8618772

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH375	VNH376		
Sampling Date		2023/03/27	2023/03/31		
COC Number		n/a	n/a		
	UNITS	TSP 27 MAR	TSP 31 MAR	RDL	QC Batch
Total Magnesium (Mg)	ug/m3	<0.021	0.054	0.021	8603412
Total Manganese (Mn)	ug	<0.050	0.16	0.050	8618772
Total Manganese (Mn)	ug/m3	<0.0010	0.0033	0.0010	8603412
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	0.0025	8621407
Total Molybdenum (Mo)	ug	<0.030	<0.030	0.030	8618772
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	0.00062	8603412
Total Nickel (Ni)	ug	<0.050	<0.050	0.050	8618772
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	0.0010	8603412
Total Phosphorus (P)	ug	<5.0	<5.0	5.0	8618772
Total Potassium (K)	ug	<5.0	<5.0	5.0	8618772
Total Potassium (K)	ug/m3	<0.10	<0.10	0.10	8603412
Total Selenium (Se)	ug	<0.10	<0.10	0.10	8618772
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	0.0021	8603412
Total Silver (Ag)	ug	<0.010	<0.010	0.010	8618772
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	0.00021	8603412
Total Sodium (Na)	ug	<5.0	5.2	5.0	8618772
Total Sodium (Na)	ug/m3	<0.10	0.11	0.10	8603412
Total Strontium (Sr)	ug	<0.050	0.054	0.050	8618772
Total Strontium (Sr)	ug/m3	<0.0010	0.0011	0.0010	8603412
Total Thallium (Tl)	ug	<0.010	<0.010	0.010	8618772
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	0.00021	8603412
Total Tin (Sn)	ug	<0.030	<0.030	0.030	8618772
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	0.00062	8603412
Total Titanium (Ti)	ug	<0.10	0.14	0.10	8618772
Total Titanium (Ti)	ug/m3	<0.0021	0.0028	0.0021	8603412
Total Uranium (U)	ug	<0.010	<0.010	0.010	8618772
Total Uranium (U)	ug/m3	<0.00021	<0.00021	0.00021	8603412
Total Vanadium (V)	ug	<0.030	<0.030	0.030	8618772
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	0.00062	8603412
Total Zinc (Zn)	ug	<0.50	<0.50	0.50	8618772

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		VNH375	VNH376		
Sampling Date		2023/03/27	2023/03/31		
COC Number		n/a	n/a		
	UNITS	**TSP 27 MAR**	**TSP 31 MAR**	**RDL**	**QC Batch**
Total Zinc (Zn)	ug/m3	<0.010	<0.010	0.010	8603412

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3A1456
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VNH368 **Collected:** 2023/03/04
Sample ID: TSP 04 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH369 **Collected:** 2023/03/07
Sample ID: TSP 07 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH369 Dup **Collected:** 2023/03/07
Sample ID: TSP 07 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad

Bureau Veritas ID: VNH370 **Collected:** 2023/03/13
Sample ID: TSP 13 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH371 **Collected:** 2023/03/16
Sample ID: TSP 16 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TEST SUMMARY

Bureau Veritas ID: VNH371 **Collected:** 2023/03/16
Sample ID: TSP 16 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH372 **Collected:** 2023/03/19
Sample ID: TSP 19 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH373 **Collected:** 2023/03/22
Sample ID: TSP 22 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH374 **Collected:** 2023/03/25
Sample ID: TSP 25 MAR **Shipped:**
Matrix: Filter **Received:** 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas Job #: C3A1456
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VNH375
Sample ID: TSP 27 MAR
Matrix: Filter

Collected: 2023/03/27
Shipped:
Received: 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

Bureau Veritas ID: VNH376
Sample ID: TSP 31 MAR
Matrix: Filter

Collected: 2023/03/31
Shipped:
Received: 2023/04/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	8621407	2023/04/19	2023/04/21	Gagandeep Rai
Total Metals on Hi-Vol Filter (6020Amod)	CALC	8603412	2023/04/18	2023/04/18	Automated Statchk
Total Metals on Small Filter (6020Bmod)	ICP1/MS	8618772	2023/04/20	2023/04/21	Arefa Dabhad
Particulate Calculation	CALC	8603711	N/A	2023/04/18	Automated Statchk
Total Particulate	BAL	8613159	N/A	2023/04/14	Nancy Dhir
Air Volume from LoVol Sampling		ONSITE	N/A	2023/04/12	Prabhdeep Kaur

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8618772	Total Aluminum (Al)	2023/04/21	101 (1)	70 - 130	99	85 - 115	<2.0	ug	6.0 (3)	20
8618772	Total Antimony (Sb)	2023/04/21	101 (1)	70 - 130	98	85 - 115	<0.050	ug	NC (3)	20
8618772	Total Arsenic (As)	2023/04/21	98 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20
8618772	Total Barium (Ba)	2023/04/21	96 (1)	70 - 130	97	85 - 115	<0.050	ug	0.84 (3)	20
8618772	Total Beryllium (Be)	2023/04/21	99 (1)	70 - 130	97	85 - 115	<0.030	ug	NC (3)	20
8618772	Total Bismuth (Bi)	2023/04/21	97 (1)	70 - 130	96	85 - 115	<0.050	ug	NC (3)	20
8618772	Total Boron (B)	2023/04/21	90 (1)	70 - 130	91	85 - 115	<1.0	ug	NC (3)	20
8618772	Total Cadmium (Cd)	2023/04/21	96 (1)	70 - 130	95	85 - 115	<0.010	ug	NC (3)	20
8618772	Total Calcium (Ca)	2023/04/21	99 (1)	70 - 130	101	85 - 115	<5.0	ug	NC (3)	20
8618772	Total Chromium (Cr)	2023/04/21	98 (1)	70 - 130	101	85 - 115	<0.050	ug	5.2 (3)	20
8618772	Total Cobalt (Co)	2023/04/21	97 (1)	70 - 130	96	85 - 115	<0.030	ug	NC (3)	20
8618772	Total Copper (Cu)	2023/04/21	103 (1)	70 - 130	98	85 - 115	0.040, RDL=0.030	ug	NC (3)	20
8618772	Total Iron (Fe)	2023/04/21	100 (1)	70 - 130	101	85 - 115	<5.0	ug	NC (3)	20
8618772	Total Lead (Pb)	2023/04/21	97 (1)	70 - 130	97	85 - 115	<0.030	ug	NC (3)	20
8618772	Total Magnesium (Mg)	2023/04/21	100 (1)	70 - 130	100	85 - 115	<1.0	ug	NC (3)	20
8618772	Total Manganese (Mn)	2023/04/21	99 (1)	70 - 130	99	85 - 115	<0.050	ug	NC (3)	20
8618772	Total Molybdenum (Mo)	2023/04/21	98 (1)	70 - 130	97	85 - 115	<0.030	ug	NC (3)	20
8618772	Total Nickel (Ni)	2023/04/21	98 (1)	70 - 130	97	85 - 115	<0.050	ug	NC (3)	20
8618772	Total Phosphorus (P)	2023/04/21	100 (1)	70 - 130	113	85 - 115	<5.0	ug	NC (3)	20
8618772	Total Potassium (K)	2023/04/21	106 (1)	70 - 130	102	85 - 115	<5.0	ug	NC (3)	20
8618772	Total Selenium (Se)	2023/04/21	95 (1)	70 - 130	95	85 - 115	<0.10	ug	NC (3)	20
8618772	Total Silver (Ag)	2023/04/21	100 (1)	70 - 130	98	85 - 115	<0.010	ug	NC (3)	20
8618772	Total Sodium (Na)	2023/04/21	99 (1)	70 - 130	102	85 - 115	<5.0	ug	1.1 (3)	20
8618772	Total Strontium (Sr)	2023/04/21	95 (1)	70 - 130	94	85 - 115	<0.050	ug	NC (3)	20
8618772	Total Thallium (Tl)	2023/04/21	98 (1)	70 - 130	97	85 - 115	<0.010	ug	NC (3)	20
8618772	Total Tin (Sn)	2023/04/21	101 (1)	70 - 130	100	85 - 115	<0.030	ug	0.71 (3)	20
8618772	Total Titanium (Ti)	2023/04/21	97 (1)	70 - 130	98	85 - 115	<0.10	ug	NC (3)	20
8618772	Total Uranium (U)	2023/04/21	96 (1)	70 - 130	98	85 - 115	<0.010	ug	NC (3)	20
8618772	Total Vanadium (V)	2023/04/21	96 (1)	70 - 130	96	85 - 115	<0.030	ug	NC (3)	20

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT(CONT'D)

			Matrix Spike		SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8618772	Total Zinc (Zn)	2023/04/21	95 (1)	70 - 130	95	85 - 115	<0.50	ug	NC (3)	20
8621407	Acid Extractable Mercury (Hg)	2023/04/21			95	90 - 110	<0.0025	ug	2.5 (2)	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Matrix Spike Parent ID [VNH369-01]

(2) Duplicate Parent ID

(3) Duplicate Parent ID [VNH369-01]

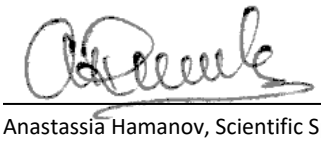
Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3A1456
Report Date: 2023/04/25

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

AD

CAM FCD-01302 /3

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury
TSP 04 Mar	Teflon	48.06	W22002488	04-Mar-23	48 hr	X		X	X
TSP 07 Mar	Teflon	48.06	WC1415651	07-Mar-23	48 hr	X		X	X
TSP 13 Mar	Teflon	36.03	W22002489	13-Mar-23	48 hr	X		X	X
TSP 16 Mar	Teflon	48.05	W22001166	16-Mar-23	48 hr	X		X	X
TSP 19 Mar	Teflon	30.68	W22002491	19-Mar-23	49 hr	X		X	X
TSP 22 Mar	Teflon	48.06	W22002493	22-Mar-23	50 hr	X		X	X
TSP 25 Mar	Teflon	48.06	WC1415653	25-Mar-23	48 hr	X		X	X
TSP 27 Mar	Teflon	48.06	W22001169	27-Mar-23	48 hr	X		X	X
TSP 31 Mar	Teflon	48.06	W22001170	31-Mar-23	48 hr	X		X	X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: Teflon
Name:
PO #: Crawford
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 06-Apr-23

Marinela Sim SAMPLE BASTOLA
Affiliation:
Date/Time: 2023/04/12 09:21

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

12-Apr-23 09:21
Gina Baybayan
C3A1456
KSS AIR-RmTmp

AIR

CAM FCD-01302 /3

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID		Filter type	Total Volume Sampled (m3)	Filter ID	Sample Date	Sample Collection Time	TSP	PM10	Metals	Mercury									
TSP 6 April		Teflon	48.06	W22002462	06-Apr-23	48 hr	X		X	X									
TSP 12 April		Teflon	48.06	W22002463	12-Apr-23	48 hr	X		X	X									
TSP 18 April		Teflon	48.06	W12500533	18-Apr-23	48 hr	X		X	X									
TSP 24 April		Teflon	48.06	W12500529	24-Apr-23	48 hr	X		X	X									
TSP 30 April		Teflon	48.06	WC1415833	30-Apr-23	48 hr	X		X	X									
TSP 8 May		Teflon	48.06	WC14115830	08-May-23	48 hr	X		X	X									
TSP 15 May		Teflon	48.06	W12500221	15-May-23	48 hr	X		X	X									
TSP 18 May		Teflon	48.06	W12500220	18-May-23	48 hr	x		x	x									

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: Crawford
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

Client Signature:	Adam Gauthier	Marinela Sim	
Affiliation:	WSP	Affiliation:	
Date/Time:	15-Jun-23	Date/Time:	

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

SAMPA BASTOLA 2023/06/16 09:05

16-Jun-23 09:05
Gina Baybayan
C3H5940
AK0 AIR-RmTmp

Your Project #: C3H5926

Attention: Cristina Bacchus

Bureau Veritas Laboratories
6740 Campobello Road
Mississauga, ON
Canada L5N 2L8

Report Date: 07/06/2023
Report #: R7702811
Version: 1 - Final

ANALYTICAL REPORT

BV LABS JOB #: C3I7617
Received: 06/27/2023, 00:00

Sample Matrix: Air
Samples Received: 5

Analyses	Quantity	Date Analyzed	Laboratory Method	Analytical Method
Silica by NIOSH 7500-PVC filter (1)	5	06/28/2023	NOV5SOP-00001	NIOSH 7500

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Results relate only to the items tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) Tridymite: A NIST-traceable standard is not available for tridymite. If tridymite is detected, the result is estimated and intended solely for information purposes.
Total (Quartz & Cristobalite): If one silica polymorph is positive, but the total is less than (<) the reporting limit, then the data user needs to decide which value is appropriate for their situation.

Encryption Key



Megan Stupar
Client Service Rep
06 Jul 2023 14:42:17

Please direct all questions regarding this Analytical Report to your Project Manager.
Megan Stupar, Client Service Rep
Email: megan.stupar@bureauveritas.com
Phone# (248) 344-1770

==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
This report is authorized by Jason Forbes, Director of Operations responsible for Michigan Industrial Hygiene laboratory operations.

Total Cover Pages : 1

ANALYTICAL RESULTS

Client ID:	WCX467-PM10 18 APRIL	Matrix:	Air
BV Labs ID:	WFI586	Sample Media:	PVC filter untared, 47mm
Date Sampled:	04/18/2023	Air Volume (L):	24050

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	23	0.00096	5.0	NIOSH 7500	06/28/2023
Cristobalite	<5.0	<0.00021	5.0	NIOSH 7500	06/28/2023
Total (Quartz and Cristobalite)	23	0.00096	10	NIOSH 7500	06/28/2023
Tridymite	<10	<0.00042	10	NIOSH 7500	06/28/2023

RL = Reporting Limit

Client ID:	WCX468-PM10 24 APRIL	Matrix:	Air
BV Labs ID:	WFI587	Sample Media:	PVC filter untared, 47mm
Date Sampled:	04/24/2023	Air Volume (L):	24050

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	<0.00021	5.0	NIOSH 7500	06/28/2023
Cristobalite	<5.0	<0.00021	5.0	NIOSH 7500	06/28/2023
Total (Quartz and Cristobalite)	<10	<0.00042	10	NIOSH 7500	06/28/2023
Tridymite	<10	<0.00042	10	NIOSH 7500	06/28/2023

RL = Reporting Limit

Client ID:	WCX470-PM10 8 MAY	Matrix:	Air
BV Labs ID:	WFI588	Sample Media:	PVC filter untared, 47mm
Date Sampled:	05/08/2023	Air Volume (L):	24050

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	39	0.0016	5.0	NIOSH 7500	06/28/2023
Cristobalite	<5.0	<0.00021	5.0	NIOSH 7500	06/28/2023
Total (Quartz and Cristobalite)	39	0.0016	10	NIOSH 7500	06/28/2023
Tridymite	<10	<0.00042	10	NIOSH 7500	06/28/2023

RL = Reporting Limit

Client ID:	WCX471-PM10 15 MAY	Matrix:	Air
BV Labs ID:	WFI589	Sample Media:	PVC filter untared, 47mm
Date Sampled:	05/15/2023	Air Volume (L):	24050

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	<0.00021	5.0	NIOSH 7500	06/28/2023
Cristobalite	<5.0	<0.00021	5.0	NIOSH 7500	06/28/2023
Total (Quartz and Cristobalite)	<10	<0.00042	10	NIOSH 7500	06/28/2023
Tridymite	<10	<0.00042	10	NIOSH 7500	06/28/2023

RL = Reporting Limit

BV Labs Job #: C3I7617
Report Date: 07/06/2023

Bureau Veritas Laboratories
Client Project #: C3H5926

ANALYTICAL RESULTS

Client ID:	WCX472-PM10 18 MAY	Matrix:	Air
BV Labs ID:	WFI590	Sample Media:	PVC filter untared, 47mm
Date Sampled:	05/18/2023	Air Volume (L):	24050

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	24	0.00099	5.0	NIOSH 7500	06/28/2023
Cristobalite	16	0.00064	5.0	NIOSH 7500	06/28/2023
Total (Quartz and Cristobalite)	39	0.0016	10	NIOSH 7500	06/28/2023
Tridymite	<10	<0.00042	10	NIOSH 7500	06/28/2023

RL = Reporting Limit

GENERAL COMMENTS

Unless otherwise noted below the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and /or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

The client provided their pertinent field sampling data on the analysis request paperwork submitted with the samples. Results apply to the sample as received.

Sample WFI590 [WCX472-PM10 18 MAY] : The cristobalite result reported should be considered a maximum value. The result for cristobalite was based on the primary diffraction angle and identification could not be confirmed at additional angles.

Results relate only to the items tested.

C3I7617

Appendix D

Sent to: **Bureau Veritas (Novi)**
22345 Roethal Dr.
Novi, MI, 48375
Tel: (248) 344-1770

BV LABS INTERLAB CHAIN OF CUSTODY RECORD

COC # C3H5926-MBV-01-01

REPORT INFORMATION	
Company:	Bureau Veritas Laboratories
Address:	6740 Campobello Road, Mississauga, Ontario, L5N 2L8
Contact Name:	Cristina (Maria) Bacchus
Email:	maria.bacchus@bureauveritas.com
Phone:	(905) 817-5763
BV Labs Project #:	C3H5926
Client Invoice To:	WSP E & I Canada Limited (9991)
Client Report To:	WSP E & I Canada Limited (9991) **Incl. on Report? Yes / No**

#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.	Subcontracting from AT-AMB to BV Novi	ADDITIONAL SAMPLE INFORMATION
1	WCX467-PM10 18 APRIL	FLT	2023/04/18		AG	1	X	(P: 01)
2	WCX468-PM10 24 APRIL	FLT	2023/04/24		AG	1	X	(P: 01)
3	WCX470-PM10 8 MAY	FLT	2023/05/08		AG	1	X	(P: 01)
4	WCX471-PM10 15 MAY	FLT	2023/05/15		AG	1	X	(P: 01)
5	WCX472-PM10 18 MAY	FLT	2023/05/18		AG	1	X	(P: 01)
6								
7								
8								
9								
10								

ANALYSIS REQUESTED

Job Barcode Label

SITE LOCATION: CRAWFORD

SITE #:

PROJECT #: ONEMA2002.2021E.100*

PO/AFE, TASK ORDER/SERVICE ORDER, LINE ITEM: CO6200346

REGULATORY CRITERIA

SPECIAL INSTRUCTIONS

Please inform Bureau Veritas immediately if you are not accredited for the requested test(s) or the hold time is approaching.
Please return a copy of this form with the report.
SUBBV-AMB for silica, all 3 forms. Client is WSP. Volume = 24.05m for all samples. Copy jade.browne@bureauveritas.com on report.

REQUIRED EDDs

National Excel (N001)
OEC Excel (O036)
Woods EQEDD 3-file
Equis (N054)

TURNAROUND TIME

☐ Rush Required

2023/06/29
Date Required

Please inform us if rush charges will be incurred.

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

RECEIVING LAB USE ONLY

BV Labs Job #

RELINQUISHED BY: (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**RECEIVED BY:** (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**Samples Labelled By:**	**Labels Verified By:**
1. NIRAL PATEL	2023/06/26	15:41	1. AKHYA TOSREJ	06/27/23	10:00AM		
2.			2.				

Appendix D - Quality Assurance Report - Crawford Phase 4

Your Project #: C2F3238
Site Location: WOOD ENVIRONMENTAL & INFRASTRUCTURE SOLUTIONS

Attention: Marinela Sim

Bureau Veritas Laboratories
6740 Campobello Road
Mississauga, ON
Canada L5N 2L8

Report Date: 06/14/2022
Report #: R7166693
Version: 1 - Final

ANALYTICAL REPORT

BV LABS JOB #: C2F7838
Received: 06/09/2022, 00:00

Sample Matrix: Air
Samples Received: 1

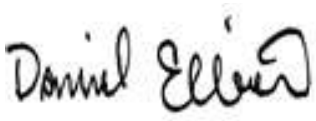
Analyses	Quantity	Date Analyzed	Laboratory Method	Analytical Method
Respirable Particulate-NIOSH 0600 - PVC	1	06/10/2022	NOV8SOP-00001	NIOSH 0600
Silica by NIOSH 7500-PVC filter (1)	1	06/10/2022	NOV5SOP-00001	NIOSH 7500
Silica Percentage in Particulate	1	06/10/2022		

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Results relate only to the items tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) Tridymite: A NIST-traceable standard is not available for tridymite. If tridymite is detected, the result is estimated and intended solely for information purposes.
Total (Quartz & Cristobalite): If one silica polymorph is positive, but the total is less than (<) the reporting limit, then the data user needs to decide which value is appropriate for their situation.

Encryption Key



Daniel Elliott
CS
14 Jun 2022 14:30:52

Please direct all questions regarding this Analytical Report to your Project Manager.
Daniel Elliott, CS
Email: daniel.elliott@bureauveritas.com
Phone# (248) 344-1770
==========
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Total Cover Pages : 1

BV Labs Job #: C2F7838
Report Date: 06/14/2022

Bureau Veritas Laboratories
Client Project #: C2F3238
Site Location: WOOD ENVIRONMENTAL & INFRASTRUCTURE SOLUTIONS

ANALYTICAL RESULTS

Client ID:	SUT086-SILICA 17-MAY	Matrix:	Air
BV Labs ID:	SVT226	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	05/17/2022	Air Volume (L):	24030

ANALYTE	Mass ug	Concentration mg/m3	%	RL ug	Test Method	Date Analyzed
Respirable Particulate	130	0.0054		50	NIOSH 0600	06/10/2022
Quartz	<5.0	<0.00021	<3.8	5.0	NIOSH 7500	06/10/2022
Cristobalite	<5.0	<0.00021	<3.8	5.0	NIOSH 7500	06/10/2022
Total (Quartz and Cristobalite)	<10	<0.00042		10	NIOSH 7500	06/10/2022
Tridymite	<10	<0.00042	<7.7	10	NIOSH 7500	06/10/2022

N/A = Not Applicable
RL = Reporting Limit

BV Labs Job #: C2F7838
Report Date: 06/14/2022

Bureau Veritas Laboratories
Client Project #: C2F3238
Site Location: WOOD ENVIRONMENTAL & INFRASTRUCTURE SOLUTIONS

GENERAL COMMENTS

Unless otherwise noted below the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and /or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

The client provided their pertinent field sampling data on the analysis request paperwork submitted with the samples. Results apply to the sample as received.

Results relate only to the items tested.

C2F7838

Appendix

Sent to: **Bureau Veritas (Novi)**
22345 Roethal Dr.
Novi, MI, 48375
Tel: (248) 344-1770

BUREAU VERITAS INTERLAB CHAIN OF CUSTODY RECORD

COC # C2F3238-MBV-01-01

REPORT INFORMATION	
Company:	Bureau Veritas
Address:	6740 Campobello Road, Mississauga, Ontario, L5N 2L8
Contact Name:	Marinela Sim
Email:	Marinela.Sim@bureauveritas.com
Phone:	(905) 817-5828
Bureau Veritas Project #:	C2F3238
Client Invoice To:	Wood Environment & Infrastructure Solutions, a division of Wood Canada Limited (99
Client Report To:	Wood Environment & Infrastructure Solutions, a division of V **Incl. on Report? Yes / No**

ANALYSIS REQUESTED

#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.	Subcontracting from AT-AMB to BV Novi	Total Particulate									ADDITIONAL SAMPLE INFORMATION
1	SUT086-SILICA 17-MAY	FLT	2022/05/17		AG	1	X	X									(P: 01) Volume = 24.03 m3
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

Job Barcode Label

SITE LOCATION:
OMEMA2022.2021E.100*.5120.57300

SITE #:

PROJECT #:
OMEMA2022.2021E.100*.5120.5730

PO/AFE, TASK ORDER/SERVICE ORDER, LINE ITEM:
SEE SITE LOCATION

REGULATORY CRITERIA

SPECIAL INSTRUCTIONS
Please inform Bureau Veritas immediately if you are not accredited for the requested test(s).
Please return a copy of this form with the report.
SUBBV-AMB is for Silica by NIOSH 7500 at BV Novi
cc report copies to jade.browne@bureauveritas.com

REQUIRED EDDs
National Excel (N001)
OEC Excel (O036)
Woods EQEDD 3-file
Equis (N054)

TURNAROUND TIME
☐ Rush Required
2022/06/17
Date Required
Please inform us if rush charges will be incurred.

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

RECEIVING LAB USE ONLY
Bureau Veritas Job #

RELINQUISHED BY: (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**RECEIVED BY:** (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**Samples Labelled By:**	**Labels Verified By:**
Niral NIRAL PATEL	2022/06/08	15:07	1. Megan Skopal	2022/06/08	10:45 AM		
			2.				

Drawn to Scale / Not Drawn to Scale / Proof Before Report

Your Project #: C2L3111

Attention: Marinela Sim

Bureau Veritas Laboratories
6740 Campobello Road
Mississauga, ON
Canada L5N 2L8

Report Date: 08/19/2022
Report #: R7260300
Version: 1 - Final

ANALYTICAL REPORT

BV LABS JOB #: C2N1449
Received: 08/15/2022, 00:00

Sample Matrix: Air
Samples Received: 5

Analyses	Quantity	Date Analyzed	Laboratory Method	Analytical Method
Respirable Particulate-NIOSH 0600 - PVC	4	08/17/2022	NOV8SOP-00001	NIOSH 0600
Respirable Particulate-NIOSH 0600 - PVC	1	08/19/2022	NOV8SOP-00001	NIOSH 0600
Silica by NIOSH 7500-PVC filter (1)	4	08/18/2022	NOV5SOP-00001	NIOSH 7500
Silica Percentage in Particulate	4	08/17/2022		

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) Tridymite: A NIST-traceable standard is not available for tridymite. If tridymite is detected, the result is estimated and intended solely for information purposes.
Total (Quartz & Cristobalite): If one silica polymorph is positive, but the total is less than (<) the reporting limit, then the data user needs to decide which value is appropriate for their situation.

Encryption Key



Daniel Elliott
CS
19 Aug 2022 11:39:27

Please direct all questions regarding this Analytical Report to your Project Manager.
Daniel Elliott, CS
Email: daniel.elliott@bureauveritas.com
Phone# (248) 344-1770

==========

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.

Total Cover Pages : 1

BV Labs Job #: C2N1449
Report Date: 08/19/2022

Bureau Veritas Laboratories
Client Project #: C2L3111

ANALYTICAL RESULTS

Client ID:	THP591-PY041322018	Matrix:	Air
BV Labs ID:	TLM163	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	05/23/2022	Air Volume (L):	24030

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Respirable Particulate	160	0.0067	50	NIOSH 0600	08/19/2022

N/A = Not Applicable
RL = Reporting Limit

Client ID:	THP592-PY041322013	Matrix:	Air
BV Labs ID:	TLM164	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	05/29/2022	Air Volume (L):	24030

ANALYTE	Mass ug	Concentration mg/m3	%	RL ug	Test Method	Date Analyzed
Respirable Particulate	340	0.014		50	NIOSH 0600	08/17/2022
Quartz	<30	<0.0012	<8.8	30	NIOSH 7500	08/18/2022
Cristobalite	<5.0	<0.00021	<1.5	5.0	NIOSH 7500	08/18/2022
Total (Quartz and Cristobalite)	<35	<0.0015		35	NIOSH 7500	08/18/2022
Tridymite	<10	<0.00042	<2.9	10	NIOSH 7500	08/18/2022

N/A = Not Applicable
RL = Reporting Limit

Client ID:	THP593-PY041322012	Matrix:	Air
BV Labs ID:	TLM165	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	06/04/2022	Air Volume (L):	24030

ANALYTE	Mass ug	Concentration mg/m3	%	RL ug	Test Method	Date Analyzed
Respirable Particulate	100	0.0042		50	NIOSH 0600	08/17/2022
Quartz	<5.0	<0.00021	<5.0	5.0	NIOSH 7500	08/18/2022
Cristobalite	<5.0	<0.00021	<5.0	5.0	NIOSH 7500	08/18/2022
Total (Quartz and Cristobalite)	<10	<0.00042		10	NIOSH 7500	08/18/2022
Tridymite	<10	<0.00042	<10	10	NIOSH 7500	08/18/2022

N/A = Not Applicable
RL = Reporting Limit

BV Labs Job #: C2N1449
Report Date: 08/19/2022

Bureau Veritas Laboratories
Client Project #: C2L3111

ANALYTICAL RESULTS

Client ID:	THP594-PY041322011	Matrix:	Air
BV Labs ID:	TLM166	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	07/04/2022	Air Volume (L):	24040

ANALYTE	Mass ug	Concentration mg/m3	%	RL ug	Test Method	Date Analyzed
Respirable Particulate	140	0.0058		50	NIOSH 0600	08/17/2022
Quartz	<5.0	<0.00021	<3.6	5.0	NIOSH 7500	08/18/2022
Cristobalite	<5.0	<0.00021	<3.6	5.0	NIOSH 7500	08/18/2022
Total (Quartz and Cristobalite)	<10	<0.00042		10	NIOSH 7500	08/18/2022
Tridymite	<10	<0.00042	<7.1	10	NIOSH 7500	08/18/2022

N/A = Not Applicable
RL = Reporting Limit

Client ID:	THP595-PY041322017	Matrix:	Air
BV Labs ID:	TLM167	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	07/10/2022	Air Volume (L):	24030

ANALYTE	Mass ug	Concentration mg/m3	%	RL ug	Test Method	Date Analyzed
Respirable Particulate	140	0.0058		50	NIOSH 0600	08/17/2022
Quartz	8.1	0.00034	5.8	5.0	NIOSH 7500	08/18/2022
Cristobalite	<5.0	<0.00021	<3.6	5.0	NIOSH 7500	08/18/2022
Total (Quartz and Cristobalite)	<10	<0.00042		10	NIOSH 7500	08/18/2022
Tridymite	<10	<0.00042	<7.1	10	NIOSH 7500	08/18/2022

N/A = Not Applicable
RL = Reporting Limit

GENERAL COMMENTS

Unless otherwise noted below the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and /or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

The client provided their pertinent field sampling data on the analysis request paperwork submitted with the samples. Results apply to the sample as received.

Sample TLM164 [THP592-PY041322013] : The reporting limit for quartz was raised due to interferences at the primary angle. The result was calculated on the secondary diffraction angle.

Results relate only to the items tested.

C2N1449

Appendix C

Sent to: **Bureau Veritas (Novi)**
22345 Roethal Dr.
Novi, MI, 48375
Tel: (248) 344-1770

BUREAU VERITAS INTERLAB CHAIN OF CUSTODY RECORD

COC # C2L3111-MBV-01-01

REPORT INFORMATION	
Company:	Bureau Veritas
Address:	6740 Campobello Road, Mississauga, Ontario, L5N 2L8
Contact Name:	Marinela Sim
Email:	Marinela.Sim@bureauveritas.com
Phone:	(905) 817-5828
Bureau Veritas Project #:	C2L3111
Client Invoice To:	Wood Environment & Infrastructure Solutions Canada Limited (9991)
Client Report To:	Wood Environment & Infrastructure Solutions Canada Limite **Incl. on Report? Yes / No**

ANALYSIS REQUESTED

#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.	Subcontracting from AT-AMB to BV Novi										ADDITIONAL SAMPLE INFORMATION
1	THP591-PY041322018	FLT	2022/05/23		AG	1	X										(P: 01)
2	THP592-PY041322013	FLT	2022/05/29		AG	1	X										(P: 01) Volume(m3): 24.03
3	THP593-PY041322012	FLT	2022/06/04		AG	1	X										(P: 01) Volume(m3): 24.03
4	THP594-PY041322011	FLT	2022/07/04		AG	1	X										(P: 01) Volume(m3): 24.04
5	THP595-PY041322017	FLT	2022/07/10		AG	1	X										(P: 01) Volume(m3): 24.03
6																	
7																	
8																	
9																	
10																	

Job Barcode Label

SITE LOCATION:

SITE #:

PROJECT #:
OMEMA2002.2021E.100*

PO/AFE, TASK ORDER/SERVICE ORDER, LINE ITEM:
C926200346

REGULATORY CRITERIA

SPECIAL INSTRUCTIONS
Please inform Bureau Veritas immediately if you are not accredited for the requested test(s).
Please return a copy of this form with the report.
SUBBV-AMB (for silica by NIOSH 7500 PVC filter after particulate analysis is complete) **No silica for THP591. Run particulates for THP592-THP595 only.
Copy jade.browne@bureauveritas.com on report.

REQUIRED EDDs
National Excel (N001)
OEC Excel (O036)
Woods EQEDD 3-file
Equis (N054)

TURNAROUND TIME
☐ Rush Required
2022/08/12
Date Required
Please inform us if rush charges will be incurred.

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

RECEIVING LAB USE ONLY
Bureau Veritas Job #

RELINQUISHED BY: (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**RECEIVED BY:** (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**Samples Labelled By:**	**Labels Verified By:**
1. NIRAL PATEL	2022/08/11	10:42	1.	8/12	11:56	1	
2.			2.				

Drawing Quality Assurance Report 2021

Your Project #: C2R4321
Site Location: WSP E & I CANADA LIMITED

Attention: Marinela Sim

Bureau Veritas Laboratories
6740 Campobello Road
Mississauga, ON
Canada L5N 2L8

Report Date: 10/13/2022
Report #: R7339414
Version: 1 - Final

ANALYTICAL REPORT

BV LABS JOB #: C2S9114
Received: 10/05/2022, 00:00

Sample Matrix: Air
Samples Received: 4

Analyses	Quantity	Date Analyzed	Laboratory Method	Analytical Method
Silica by NIOSH 7500-PVC filter (1)	4	10/12/2022	NOV5SOP-00001	NIOSH 7500

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) Tridymite: A NIST-traceable standard is not available for tridymite. If tridymite is detected, the result is estimated and intended solely for information purposes.
Total (Quartz & Cristobalite): If one silica polymorph is positive, but the total is less than (<) the reporting limit, then the data user needs to decide which value is appropriate for their situation.

Encryption Key

Please direct all questions regarding this Analytical Report to your Project Manager.
Megan Stupar, Client Service Rep
Email: megan.stupar.ext@bureauveritas.com
Phone# (248) 344-1770

==========

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.

Total Cover Pages : 1

BV Labs Job #: C2S9114
Report Date: 10/13/2022

Bureau Veritas Laboratories
Client Project #: C2R4321
Site Location: WSP E & I CANADA LIMITED

ANALYTICAL RESULTS

Client ID:	TUR786-PM10 15-AUG-22	Matrix:	Air
BV Labs ID:	TXV093	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	08/15/2022	Air Volume (L):	24.03

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	<0.21	5.0	NIOSH 7500	10/12/2022
Cristobalite	<5.0	<0.21	5.0	NIOSH 7500	10/12/2022
Total (Quartz and Cristobalite)	<10	<0.42	10	NIOSH 7500	10/12/2022
Tridymite	<10	<0.42	10	NIOSH 7500	10/12/2022

RL = Reporting Limit

Client ID:	TUR787-PM10 21-AUG-22	Matrix:	Air
BV Labs ID:	TXV094	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	08/21/2022	Air Volume (L):	24.04

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	<0.21	5.0	NIOSH 7500	10/12/2022
Cristobalite	<5.0	<0.21	5.0	NIOSH 7500	10/12/2022
Total (Quartz and Cristobalite)	<10	<0.42	10	NIOSH 7500	10/12/2022
Tridymite	<10	<0.42	10	NIOSH 7500	10/12/2022

RL = Reporting Limit

Client ID:	TUR788-PM10 27-AUG-22	Matrix:	Air
BV Labs ID:	TXV095	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	08/27/2022	Air Volume (L):	24.04

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	<0.21	5.0	NIOSH 7500	10/12/2022
Cristobalite	<5.0	<0.21	5.0	NIOSH 7500	10/12/2022
Total (Quartz and Cristobalite)	<10	<0.42	10	NIOSH 7500	10/12/2022
Tridymite	<10	<0.42	10	NIOSH 7500	10/12/2022

RL = Reporting Limit

Client ID:	TUR789-PM10 02-SEP-22	Matrix:	Air
BV Labs ID:	TXV096	Sample Media:	5 MICR W/PAD PW 2 PC CASS
Date Sampled:	09/02/2022	Air Volume (L):	24.04

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	13	0.55	5.0	NIOSH 7500	10/12/2022
Cristobalite	<5.0	<0.21	5.0	NIOSH 7500	10/12/2022
Total (Quartz and Cristobalite)	13	0.55	10	NIOSH 7500	10/12/2022
Tridymite	<10	<0.42	10	NIOSH 7500	10/12/2022

RL = Reporting Limit

BV Labs Job #: C2S9114
Report Date: 10/13/2022

Bureau Veritas Laboratories
Client Project #: C2R4321
Site Location: WSP E & I CANADA LIMITED

GENERAL COMMENTS

Unless otherwise noted below the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and /or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

The client provided their pertinent field sampling data on the analysis request paperwork submitted with the samples. Results apply to the sample as received.

As discussed on October 11, 2022, client sample TUR785-PM10 09-AUG-22 was collected on the wrong sampling media for silica analysis. Sample TUR785-PM10 09-AUG-22 has been voided.

Results relate only to the items tested.

Sent to: **Bureau Veritas (Novi)**
22345 Roethal Dr.
Novi, MI, 48375
Tel: (248) 344-1770

BUREAU VERITAS INTERLAB CHAIN OF CUSTODY RECORD

COC # C2R4321-MBV-01-01

REPORT INFORMATION	
Company:	Bureau Veritas
Address:	6740 Campobello Road, Mississauga, Ontario, L5N 2L8
Contact Name:	Marinela Sim
Email:	Marinela.Sim@bureauveritas.com
Phone:	(905) 817-5828
Bureau Veritas Project #:	C2R4321
Client Invoice To:	WSP E & I Canada Limited (9991)
Client Report To:	WSP E & I Canada Limited (9991)

ANALYSIS REQUESTED

Job Barcode Label

#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.	Subcontracting from AT-AMB to BV Novi	ADDITIONAL SAMPLE INFORMATION
1	TUR785-PM10 09-AUG-22	FLT	2022/08/09		AG	1	X	(P: 01) Volume(m3): 23.85
2	TUR786-PM10 15-AUG-22	FLT	2022/08/15		AG	1	X	(P: 01) Volume(m3): 24.03
3	TUR787-PM10 21-AUG-22	FLT	2022/08/21		AG	1	X	(P: 01) Volume(m3): 24.04
4	TUR788-PM10 27-AUG-22	FLT	2022/08/27		AG	1	X	(P: 01) Volume(m3): 24.04
5	TUR789-PM10 02-SEP-22	FLT	2022/09/02		AG	1	X	(P: 01) Volume(m3): 24.04
6								
7								
8								
9								
10								

SITE LOCATION:
OMEMA2002.2021E.100*

SITE #:

PROJECT #:
OMEMA2002.2021E.100*

PO/AFE, TASK ORDER/SERVICE ORDER, LINE ITEM:
C026200346

REGULATORY CRITERIA

SPECIAL INSTRUCTIONS
Please inform Bureau Veritas immediately if:
- You are not accredited for the requested test(s)
- The hold time is approaching for the requested test(s).

Please return a copy of this form with the report.
SUBBV-AMB (for silica by NIOSH 7500 PVC filter after particulate analysis is complete) ** Run particulates and silica for TUR785 - TUR789.
Copy jade.browne@bureauveritas.com on report. ✓

REQUIRED EDDs
National Excel (N001)
OEC Excel (O036)
Woods EQEDD 3-file Equis (N054)

TURNAROUND TIME
☐ Rush Required
2022/10/05
Date Required
Please inform us if rush charges will be incurred.

COOLER ID:

	YES	NO
Custody Seal Present		
Custody Seal Intact		
Cooling Media Present		

Temp: (°C) 1: 2: 3:

COOLER ID:

	YES	NO
Custody Seal Present		
Custody Seal Intact		
Cooling Media Present		

Temp: (°C) 1: 2: 3:

COOLER ID:

	YES	NO
Custody Seal Present		
Custody Seal Intact		
Cooling Media Present		

Temp: (°C) 1: 2: 3:

RECEIVING LAB USE ONLY
Bureau Veritas Job #
C259114

RELINQUISHED BY: (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**RECEIVED BY:** (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**Samples Labelled By:**	**Labels Verified By:**
1.			1. Nadia Davis Nadia Davis	2022/10/05	12:10 pm		
2.			2.				

Your Project #: C2T6716

Attention: Marinela Sim

Bureau Veritas Laboratories
6740 Campobello Road
Mississauga, ON
Canada L5N 2L8

Report Date: 11/02/2022
Report #: R7369125
Version: 1 - Final

ANALYTICAL REPORT

BV LABS JOB #: C2V4203
Received: 10/27/2022, 00:00

Sample Matrix: Air
Samples Received: 3

Analyses	Quantity	Date Analyzed	Laboratory Method	Analytical Method
Silica by NIOSH 7500-PVC filter (1)	3	11/01/2022	NOV5SOP-00001	NIOSH 7500

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) Tridymite: A NIST-traceable standard is not available for tridymite. If tridymite is detected, the result is estimated and intended solely for information purposes.
Total (Quartz & Cristobalite): If one silica polymorph is positive, but the total is less than (<) the reporting limit, then the data user needs to decide which value is appropriate for their situation.

Encryption Key



Megan Stupar
Client Service Rep
02 Nov 2022 15:37:21

Please direct all questions regarding this Analytical Report to your Project Manager.
Megan Stupar, Client Service Rep
Email: megan.stupar.ext@bureauveritas.com
Phone# (248) 344-1770

==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
This report is authorized by Jason Forbes, General Manager responsible for Michigan Industrial Hygiene laboratory operations.

Total Cover Pages : 1

BV Labs Job #: C2V4203
Report Date: 11/02/2022

Bureau Veritas Laboratories
Client Project #: C2T6716

ANALYTICAL RESULTS

Client ID:	TZJ885-PM10 22072501	Matrix:	Air
BV Labs ID:	UDB616	Sample Media:	PVC filter untared, 47mm
Date Sampled:	09/14/2022		

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	N/A	5.0	NIOSH 7500	11/01/2022
Cristobalite	<5.0	N/A	5.0	NIOSH 7500	11/01/2022
Total (Quartz and Cristobalite)	<10	N/A	10	NIOSH 7500	11/01/2022
Tridymite	<10	N/A	10	NIOSH 7500	11/01/2022

RL = Reporting Limit

Client ID:	TZJ886-PM10 22072502	Matrix:	Air
BV Labs ID:	UDB617	Sample Media:	PVC filter untared, 47mm
Date Sampled:	09/20/2022		

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	6.9	N/A	5.0	NIOSH 7500	11/01/2022
Cristobalite	<5.0	N/A	5.0	NIOSH 7500	11/01/2022
Total (Quartz and Cristobalite)	<10	N/A	10	NIOSH 7500	11/01/2022
Tridymite	<10	N/A	10	NIOSH 7500	11/01/2022

RL = Reporting Limit

Client ID:	TZJ887-PM10 22072504	Matrix:	Air
BV Labs ID:	UDB618	Sample Media:	PVC filter untared, 47mm
Date Sampled:	09/26/2022		

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	N/A	5.0	NIOSH 7500	11/01/2022
Cristobalite	<5.0	N/A	5.0	NIOSH 7500	11/01/2022
Total (Quartz and Cristobalite)	<10	N/A	10	NIOSH 7500	11/01/2022
Tridymite	<10	N/A	10	NIOSH 7500	11/01/2022

RL = Reporting Limit

GENERAL COMMENTS

Unless otherwise noted below the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and /or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

The client provided their pertinent field sampling data on the analysis request paperwork submitted with the samples. Results apply to the sample as received.

Results relate only to the items tested.

C2V 4203

Appendix

Sent to: **Bureau Veritas (Novi)**
22345 Roethal Dr.
Novi, MI, 48375
Tel: (248) 344-1770

BUREAU VERITAS INTERLAB CHAIN OF CUSTODY RECORD

COC # C2T6716-MBV-01-01

REPORT INFORMATION		**ANALYSIS REQUESTED**	Job Barcode Label
Company:	Bureau Veritas		
Address:	6740 Campobello Road, Mississauga, Ontario, L5N 2L8		
Contact Name:	Marinela Sim		
Email:	Marinela.Sim@bureauveritas.com		
Phone:	(905) 817-5828		
Bureau Veritas Project #:	C2T6716		
Client Invoice To:	WSP E & I Canada Limited (9991)		
Client Report To:	WSP E & I Canada Limited (9991) **Incl. on Report? Yes / No**		

#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.	Subcontracting from AT-AMB to BV Novi	ADDITIONAL SAMPLE INFORMATION
1	TZJ885-PM10 22072501	FLT	2022/09/14		AG	1	X	(P: 01) Requesting silica analysis.
2	TZJ886-PM10 22072502	FLT	2022/09/20		AG	1	X	(P: 01) Requesting silica analysis.
3	TZJ887-PM10 22072504	FLT	2022/09/26		AG	1	X	(P: 01) Requesting silica analysis.
4								
5								
6								
7								
8								
9								
10								

SITE LOCATION: OMEMA2002.2021E.100*

SITE #:

PROJECT #: OMEMA2002.2021E.100*

PO/AFE, TASK ORDER/SERVICE ORDER, LINE ITEM: C026200346

REGULATORY CRITERIA

SPECIAL INSTRUCTIONS

Please inform Bureau Veritas immediately if:
- You are not accredited for the requested test(s)
- The hold time is approaching for the requested test(s).

Please return a copy of this form with the report.
SUBBV-AMB (for silica by NIOSH 7500 PVC filter after particulate analysis is complete)
Copy jade.browne@bureauveritas.com on report.

REQUIRED EDDs

National Excel (N001)
OEC Excel (O036)
Woods EQEDD 3-file
Equis (N054)

TURNAROUND TIME

☐ Rush Required

2022/10/26
Date Required

Please inform us if rush charges will be incurred.

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

RECEIVING LAB USE ONLY

Bureau Veritas Job #

RELINQUISHED BY: (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**RECEIVED BY:** (SIGN & PRINT)	**DATE:** (YYYY/MM/DD)	**TIME:** (HH:MM)	**Samples Labelled By:**	**Labels Verified By:**
1. NIRAL PATEL	2022/10/26	10:49	1.	10/27	11:25		
2.			2.				

Crawford Project Quote Report

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100
Your C.O.C. #: 43947

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/09/08
Report #: R7288073
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2O2792
Received: 2022/08/24, 16:29

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2022/09/07	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2022/09/07	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2022/09/07	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100
Your C.O.C. #: 43947

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/09/08
Report #: R7288073
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2O2792
Received: 2022/08/24, 16:29

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
==========
This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports.
For Service Group specific validation please refer to the Validation Signature Page.

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TNW728		
Sampling Date		2022/08/10		
COC Number		43947		
	UNITS	**VOC-1 CRAWFORD (CNC) AUG9-12:00-AUG 10-1138**	**RDL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	(-3.7)	N/A	8209469
2-Propanone	ppbv	2.32	0.12	8209466
Dichlorodifluoromethane (FREON 12)	ppbv	0.55	0.20	8209461
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8209461
Chloromethane	ppbv	0.47	0.30	8209461
Vinyl Chloride	ppbv	<0.020	0.020	8209466
Chloroethane	ppbv	<0.30	0.30	8209461
1,3-Butadiene	ppbv	<0.50	0.50	8209461
Trichlorofluoromethane (FREON 11)	ppbv	0.30	0.20	8209461
Ethanol (ethyl alcohol)	ppbv	<1.0	1.0	8209461
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8209461
2-propanol	ppbv	<1.0	1.0	8209461
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.22	0.10	8209466
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8209466
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8209461
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8209466
Ethyl Acetate	ppbv	<1.0	1.0	8209461
1,1-Dichloroethylene	ppbv	<0.050	0.050	8209466
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8209466
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8209466
Methylene Chloride(Dichloromethane)	ppbv	0.115	0.050	8209466
Chloroform	ppbv	<0.040	0.040	8209466
Carbon Tetrachloride	ppbv	0.131	0.050	8209466
1,1-Dichloroethane	ppbv	<0.050	0.050	8209466
1,2-Dichloroethane	ppbv	0.010	0.010	8209466
Ethylene Dibromide	ppbv	<0.010	0.010	8209466
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8209466
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8209466

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TNW728		
Sampling Date		2022/08/10		
COC Number		43947		
	UNITS	**VOC-1 CRAWFORD (CNC) AUG9-12:00-AUG 10-1138**	**RDL**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8209466
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8209466
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8209466
1,2-Dichloropropane	ppbv	<0.050	0.050	8209466
Bromomethane	ppbv	<0.050	0.050	8209466
Bromoform	ppbv	<0.10	0.10	8209466
Bromodichloromethane	ppbv	<0.20	0.20	8209461
Dibromochloromethane	ppbv	<0.20	0.20	8209461
Trichloroethylene	ppbv	<0.050	0.050	8209466
Tetrachloroethylene	ppbv	<0.050	0.050	8209466
Benzene	ppbv	<0.050	0.050	8209466
Toluene	ppbv	<0.050	0.050	8209466
Ethylbenzene	ppbv	<0.050	0.050	8209466
p+m-Xylene	ppbv	<0.10	0.10	8209466
o-Xylene	ppbv	<0.050	0.050	8209466
Styrene	ppbv	<0.050	0.050	8209466
4-ethyltoluene	ppbv	<0.50	0.50	8209461
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8209461
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8209461
Chlorobenzene	ppbv	<0.050	0.050	8209466
Benzyl chloride	ppbv	<0.50	0.50	8209461
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8209461
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8209466
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8209466
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8209466
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8209466
Hexane	ppbv	<0.10	0.10	8209466
Heptane	ppbv	<0.30	0.30	8209461
Cyclohexane	ppbv	<0.20	0.20	8209461
Tetrahydrofuran	ppbv	<0.40	0.40	8209461

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TNW728		
Sampling Date		2022/08/10		
COC Number		43947		
	UNITS	**VOC-1 CRAWFORD (CNC) AUG9-12:00-AUG 10-1138**	**RDL**	**QC Batch**
1,4-Dioxane	ppbv	<1.0	1.0	8209461
Naphthalene	ppbv	<0.10	0.10	8209466
Total Xylenes	ppbv	<0.15	0.15	8209466
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8209466
Vinyl Bromide	ppbv	<0.20	0.20	8209461
Propene	ppbv	<0.50	0.50	8209461
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8209461
Carbon Disulfide	ppbv	<0.50	0.50	8209461
Vinyl Acetate	ppbv	<0.20	0.20	8209461
Surrogate Recovery (%)				
Bromochloromethane	%	94	N/A	8209466
D5-Chlorobenzene	%	76	N/A	8209466
Difluorobenzene	%	79	N/A	8209466
Bromochloromethane	%	94	N/A	8209461
D5-Chlorobenzene	%	76	N/A	8209461
Difluorobenzene	%	79	N/A	8209461

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2O2792
Report Date: 2022/09/08

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100
Your P.O. #: C026200346
Sampler Initials: RF

TEST SUMMARY

Bureau Veritas ID: TNW728
Sample ID: VOC-1 CRAWFORD (CNC) AUG9-12:00-AUG 10-1138
Matrix: Air

Collected: 2022/08/10
Shipped:
Received: 2022/08/24

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8209469	N/A	2022/09/07	Pratima Patel
Volatile Organics in Air by GC/MS/SIM	GC/MS	8209466	N/A	2022/09/07	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8209461	N/A	2022/09/07	Pratima Patel

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8209461	Bromochloromethane	2022/09/07	104	60 - 140	103	%		
8209461	D5-Chlorobenzene	2022/09/07	107	60 - 140	85	%		
8209461	Difluorobenzene	2022/09/07	109	60 - 140	86	%		
8209466	Bromochloromethane	2022/09/07	104	60 - 140	103	%		
8209466	D5-Chlorobenzene	2022/09/07	107	60 - 140	85	%		
8209466	Difluorobenzene	2022/09/07	109	60 - 140	86	%		
8209461	1,2,4-Trimethylbenzene	2022/09/07	103	70 - 130	<0.50	ppbv	NC (1)	25
8209461	1,2-Dichlorotetrafluoroethane	2022/09/07	90	70 - 130	<0.17	ppbv	NC (1)	25
8209461	1,3,5-Trimethylbenzene	2022/09/07	99	70 - 130	<0.50	ppbv	NC (1)	25
8209461	1,3-Butadiene	2022/09/07	99	70 - 130	<0.50	ppbv	NC (1)	25
8209461	1,3-Dichlorobenzene	2022/09/07	92	70 - 130	<0.40	ppbv	NC (1)	25
8209461	1,4-Dioxane	2022/09/07	113	70 - 130	<1.0	ppbv	NC (1)	25
8209461	2,2,4-Trimethylpentane	2022/09/07	104	70 - 130	<0.20	ppbv	NC (1)	25
8209461	2-propanol	2022/09/07	108	70 - 130	<1.0	ppbv	NC (1)	25
8209461	4-ethyltoluene	2022/09/07	103	70 - 130	<0.50	ppbv	NC (1)	25
8209461	Benzyl chloride	2022/09/07	113	70 - 130	<0.50	ppbv	NC (1)	25
8209461	Bromodichloromethane	2022/09/07	90	70 - 130	<0.20	ppbv	NC (1)	25
8209461	Carbon Disulfide	2022/09/07	100	70 - 130	<0.50	ppbv	NC (1)	25
8209461	Chloroethane	2022/09/07	96	70 - 130	<0.30	ppbv	NC (1)	25
8209461	Chloromethane	2022/09/07	97	70 - 130	<0.30	ppbv	1.3 (1)	25
8209461	Cyclohexane	2022/09/07	107	70 - 130	<0.20	ppbv	NC (1)	25
8209461	Dibromochloromethane	2022/09/07	95	70 - 130	<0.20	ppbv	NC (1)	25
8209461	Dichlorodifluoromethane (FREON 12)	2022/09/07	93	70 - 130	<0.20	ppbv	0.68 (1)	25
8209461	Ethanol (ethyl alcohol)	2022/09/07	92	70 - 130	<1.0	ppbv	0.72 (1)	25
8209461	Ethyl Acetate	2022/09/07	102	70 - 130	<1.0	ppbv	NC (1)	25
8209461	Heptane	2022/09/07	108	70 - 130	<0.30	ppbv	1.5 (1)	25
8209461	Methyl Butyl Ketone (2-Hexanone)	2022/09/07	107	70 - 130	<1.0	ppbv	NC (1)	25
8209461	Propene	2022/09/07	106	70 - 130	<0.50	ppbv	NC (1)	25
8209461	Tetrahydrofuran	2022/09/07	102	70 - 130	<0.40	ppbv	NC (1)	25
8209461	Trichlorofluoromethane (FREON 11)	2022/09/07	93	70 - 130	<0.20	ppbv	0.78 (1)	25

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8209461	Trichlorotrifluoroethane	2022/09/07	90	70 - 130	<0.15	ppbv	NC (1)	25
8209461	Vinyl Acetate	2022/09/07	102	70 - 130	<0.20	ppbv	NC (1)	25
8209461	Vinyl Bromide	2022/09/07	99	70 - 130	<0.20	ppbv	NC (1)	25
8209466	1,1,1,2-Tetrachloroethane	2022/09/07	92	70 - 130	<0.021	ppbv	NC (1)	25
8209466	1,1,1-Trichloroethane	2022/09/07	96	70 - 130	<0.050	ppbv	NC (1)	25
8209466	1,1,2,2-Tetrachloroethane	2022/09/07	87	70 - 130	<0.0027	ppbv	NC (1)	25
8209466	1,1,2-Trichloroethane	2022/09/07	100	70 - 130	<0.012	ppbv	NC (1)	25
8209466	1,1-Dichloroethane	2022/09/07	92	70 - 130	<0.050	ppbv	NC (1)	25
8209466	1,1-Dichloroethylene	2022/09/07	96	70 - 130	<0.050	ppbv	NC (1)	25
8209466	1,2,4-Trichlorobenzene	2022/09/07	93	70 - 130	<0.10	ppbv	NC (1)	25
8209466	1,2-Dichlorobenzene	2022/09/07	91	70 - 130	<0.050	ppbv	NC (1)	25
8209466	1,2-Dichloroethane	2022/09/07	95	70 - 130	<0.010	ppbv	13 (1)	25
8209466	1,2-Dichloropropane	2022/09/07	103	70 - 130	<0.050	ppbv	NC (1)	25
8209466	1,4-Dichlorobenzene	2022/09/07	93	70 - 130	<0.050	ppbv	NC (1)	25
8209466	2-Propanone	2022/09/07	106	70 - 130	<0.12	ppbv	NC (1)	N/A
8209466	Benzene	2022/09/07	102	70 - 130	<0.050	ppbv	0.86 (1)	25
8209466	Bromoform	2022/09/07	93	70 - 130	<0.10	ppbv	NC (1)	25
8209466	Bromomethane	2022/09/07	90	70 - 130	<0.050	ppbv	NC (1)	25
8209466	Carbon Tetrachloride	2022/09/07	96	70 - 130	<0.050	ppbv	0.89 (1)	25
8209466	Chlorobenzene	2022/09/07	94	70 - 130	<0.050	ppbv	NC (1)	25
8209466	Chloroform	2022/09/07	96	70 - 130	<0.040	ppbv	NC (1)	25
8209466	cis-1,2-Dichloroethylene	2022/09/07	98	70 - 130	<0.050	ppbv	NC (1)	25
8209466	cis-1,3-Dichloropropene	2022/09/07	108	70 - 130	<0.050	ppbv	NC (1)	25
8209466	Ethylbenzene	2022/09/07	107	70 - 130	<0.050	ppbv	0.053 (1)	25
8209466	Ethylene Dibromide	2022/09/07	102	70 - 130	<0.010	ppbv	NC (1)	25
8209466	Hexachlorobutadiene	2022/09/07	92	70 - 130	<0.0047	ppbv	NC (1)	25
8209466	Hexane	2022/09/07	99	70 - 130	<0.10	ppbv	13 (1)	25
8209466	Methyl Ethyl Ketone (2-Butanone)	2022/09/07	112	70 - 130	<0.10	ppbv	3.4 (1)	25
8209466	Methyl Isobutyl Ketone	2022/09/07	107	70 - 130	<0.10	ppbv	9.6 (1)	25
8209466	Methyl t-butyl ether (MTBE)	2022/09/07	91	70 - 130	<0.10	ppbv	NC (1)	25

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8209466	Methylene Chloride(Dichloromethane)	2022/09/07	92	70 - 130	<0.050	ppbv	5.2 (1)	25
8209466	Naphthalene	2022/09/07	103	70 - 130	<0.10	ppbv	NC (1)	25
8209466	o-Xylene	2022/09/07	103	70 - 130	<0.050	ppbv	3.2 (1)	25
8209466	p+m-Xylene	2022/09/07	108	70 - 130	<0.10	ppbv	1.7 (1)	25
8209466	Styrene	2022/09/07	105	70 - 130	<0.050	ppbv	0.63 (1)	25
8209466	Tetrachloroethylene	2022/09/07	97	70 - 130	<0.050	ppbv	1.1 (1)	25
8209466	Toluene	2022/09/07	107	70 - 130	<0.050	ppbv	1.9 (1)	25
8209466	Total Xylenes	2022/09/07	106	70 - 130	<0.15	ppbv	2.1 (1)	25
8209466	trans-1,2-Dichloroethylene	2022/09/07	95	70 - 130	<0.10	ppbv	NC (1)	25
8209466	trans-1,3-Dichloropropene	2022/09/07	113	70 - 130	<0.050	ppbv	NC (1)	25
8209466	Trichloroethylene	2022/09/07	98	70 - 130	<0.050	ppbv	NC (1)	25
8209466	Vinyl Chloride	2022/09/07	96	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yujie Yan

Yujie Yan, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100
Your C.O.C. #: 44025

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/09/13
Report #: R7294145
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2O7060
Received: 2022/08/29, 16:30

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2022/09/09	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2022/09/09	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2022/09/09	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100
Your C.O.C. #: 44025

Attention: Ryan Fletcher

Wood Environment & Infrastructure Solutions Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/09/13
Report #: R7294145
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2O7060
Received: 2022/08/29, 16:30

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828
==========
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For Service Group specific validation please refer to the Validation Signature Page.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TOV062	TOV062		
Sampling Date		2022/08/23 11:25	2022/08/23 11:25		
COC Number		44025	44025		
	UNITS	CRAWFORD-VOC-AUG22-11:25 (VOC2)	CRAWFORD-VOC-AUG22-11:25 (VOC2) Lab-Dup	RDL	QC Batch
Volatile Organics					
Pressure on Receipt	psig	(-3.1)	N/A	N/A	8215460
2-Propanone	ppbv	2.02	2.00	0.14	8215459
Dichlorodifluoromethane (FREON 12)	ppbv	0.56	0.56	0.20	8215456
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	<0.17	0.17	8215456
Chloromethane	ppbv	0.47	0.47	0.30	8215456
Vinyl Chloride	ppbv	<0.020	<0.020	0.020	8215459
Chloroethane	ppbv	<0.30	<0.30	0.30	8215456
1,3-Butadiene	ppbv	<0.50	<0.50	0.50	8215456
Trichlorofluoromethane (FREON 11)	ppbv	0.31	0.30	0.20	8215456
Ethanol (ethyl alcohol)	ppbv	<1.0	<1.0	1.0	8215456
Trichlorotrifluoroethane	ppbv	<0.15	<0.15	0.15	8215456
2-propanol	ppbv	<1.0	<1.0	1.0	8215456
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.17	0.17	0.10	8215459
Methyl Isobutyl Ketone	ppbv	<0.10	<0.10	0.10	8215459
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	<1.0	1.0	8215456
Methyl t-butyl ether (MTBE)	ppbv	<0.10	<0.10	0.10	8215459
Ethyl Acetate	ppbv	<1.0	<1.0	1.0	8215456
1,1-Dichloroethylene	ppbv	<0.050	<0.050	0.050	8215459
cis-1,2-Dichloroethylene	ppbv	<0.050	<0.050	0.050	8215459
trans-1,2-Dichloroethylene	ppbv	<0.10	<0.10	0.10	8215459
Methylene Chloride(Dichloromethane)	ppbv	0.112	0.114	0.050	8215459
Chloroform	ppbv	<0.040	<0.040	0.040	8215459
Carbon Tetrachloride	ppbv	0.138	0.140	0.050	8215459
1,1-Dichloroethane	ppbv	<0.050	<0.050	0.050	8215459
1,2-Dichloroethane	ppbv	0.011	0.011	0.010	8215459
Ethylene Dibromide	ppbv	<0.010	<0.010	0.010	8215459
1,1,1-Trichloroethane	ppbv	<0.050	<0.050	0.050	8215459
1,1,2-Trichloroethane	ppbv	<0.012	<0.012	0.012	8215459

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TOV062	TOV062		
Sampling Date		2022/08/23 11:25	2022/08/23 11:25		
COC Number		44025	44025		
	UNITS	CRAWFORD-VOC-AUG22-11:25 (VOC2)	CRAWFORD-VOC-AUG22-11:25 (VOC2) Lab-Dup	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	<0.0027	0.0027	8215459
cis-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	8215459
trans-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	8215459
1,2-Dichloropropane	ppbv	<0.050	<0.050	0.050	8215459
Bromomethane	ppbv	<0.050	<0.050	0.050	8215459
Bromoform	ppbv	<0.10	<0.10	0.10	8215459
Bromodichloromethane	ppbv	<0.20	<0.20	0.20	8215456
Dibromochloromethane	ppbv	<0.20	<0.20	0.20	8215456
Trichloroethylene	ppbv	<0.050	<0.050	0.050	8215459
Tetrachloroethylene	ppbv	<0.050	<0.050	0.050	8215459
Benzene	ppbv	<0.050	<0.050	0.050	8215459
Toluene	ppbv	<0.050	<0.050	0.050	8215459
Ethylbenzene	ppbv	<0.050	<0.050	0.050	8215459
p+m-Xylene	ppbv	<0.10	<0.10	0.10	8215459
o-Xylene	ppbv	<0.050	<0.050	0.050	8215459
Styrene	ppbv	<0.050	<0.050	0.050	8215459
4-ethyltoluene	ppbv	<0.50	<0.50	0.50	8215456
1,3,5-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	8215456
1,2,4-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	8215456
Chlorobenzene	ppbv	<0.050	<0.050	0.050	8215459
Benzyl chloride	ppbv	<0.50	<0.50	0.50	8215456
1,3-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	8215456
1,4-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	8215459
1,2-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	8215459
1,2,4-Trichlorobenzene	ppbv	<0.10	<0.10	0.10	8215459
Hexachlorobutadiene	ppbv	<0.0047	<0.0047	0.0047	8215459
Hexane	ppbv	<0.10	<0.10	0.10	8215459
Heptane	ppbv	<0.30	<0.30	0.30	8215456
Cyclohexane	ppbv	<0.20	<0.20	0.20	8215456
Tetrahydrofuran	ppbv	<0.40	<0.40	0.40	8215456

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TOV062	TOV062		
Sampling Date		2022/08/23 11:25	2022/08/23 11:25		
COC Number		44025	44025		
	UNITS	**CRAWFORD-VOC-AUG22-11:25 (VOC2)**	**CRAWFORD-VOC-AUG22-11:25 (VOC2) Lab-Dup**	**RDL**	**QC Batch**
1,4-Dioxane	ppbv	<1.0	<1.0	1.0	8215456
Naphthalene	ppbv	<0.10	<0.10	0.10	8215459
Total Xylenes	ppbv	<0.15	<0.15	0.15	8215459
1,1,1,2-Tetrachloroethane	ppbv	<0.021	<0.021	0.021	8215459
Vinyl Bromide	ppbv	<0.20	<0.20	0.20	8215456
Propene	ppbv	<0.50	<0.50	0.50	8215456
2,2,4-Trimethylpentane	ppbv	<0.20	<0.20	0.20	8215456
Carbon Disulfide	ppbv	<0.50	<0.50	0.50	8215456
Vinyl Acetate	ppbv	<0.20	<0.20	0.20	8215456
Surrogate Recovery (%)					
Bromochloromethane	%	99	100	N/A	8215459
D5-Chlorobenzene	%	85	84	N/A	8215459
Difluorobenzene	%	85	84	N/A	8215459
Bromochloromethane	%	99	100	N/A	8215456
D5-Chlorobenzene	%	85	84	N/A	8215456
Difluorobenzene	%	85	84	N/A	8215456

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2O7060
Report Date: 2022/09/13

Wood Environment & Infrastructure Solutions Canada Limited
Client Project #: OMEMA2002.2021E.100
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TOV062
Sample ID: CRAWFORD-VOC-AUG22-11:25 (VOC2)
Matrix: Air

Collected: 2022/08/23
Shipped:
Received: 2022/08/29

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8215460	N/A	2022/09/09	Pratima Patel
Volatile Organics in Air by GC/MS/SIM	GC/MS	8215459	N/A	2022/09/09	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8215456	N/A	2022/09/09	Pratima Patel

Bureau Veritas ID: TOV062 Dup
Sample ID: CRAWFORD-VOC-AUG22-11:25 (VOC2)
Matrix: Air

Collected: 2022/08/23
Shipped:
Received: 2022/08/29

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organics in Air by GC/MS/SIM	GC/MS	8215459	N/A	2022/09/09	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8215456	N/A	2022/09/09	Pratima Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvlabs.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8215456	Bromochloromethane	2022/09/09	108	60 - 140	108	%		
8215456	D5-Chlorobenzene	2022/09/09	117	60 - 140	92	%		
8215456	Difluorobenzene	2022/09/09	118	60 - 140	96	%		
8215459	Bromochloromethane	2022/09/09	108	60 - 140	108	%		
8215459	D5-Chlorobenzene	2022/09/09	117	60 - 140	92	%		
8215459	Difluorobenzene	2022/09/09	118	60 - 140	96	%		
8215456	1,2,4-Trimethylbenzene	2022/09/09	110	70 - 130	<0.50	ppbv	NC (1)	25
8215456	1,2-Dichlorotetrafluoroethane	2022/09/09	92	70 - 130	<0.17	ppbv	NC (1)	25
8215456	1,3,5-Trimethylbenzene	2022/09/09	105	70 - 130	<0.50	ppbv	NC (1)	25
8215456	1,3-Butadiene	2022/09/09	103	70 - 130	<0.50	ppbv	NC (1)	25
8215456	1,3-Dichlorobenzene	2022/09/09	96	70 - 130	<0.40	ppbv	NC (1)	25
8215456	1,4-Dioxane	2022/09/09	127	70 - 130	<1.0	ppbv	NC (1)	25
8215456	2,2,4-Trimethylpentane	2022/09/09	112	70 - 130	<0.20	ppbv	NC (1)	25
8215456	2-propanol	2022/09/09	102	70 - 130	<1.0	ppbv	NC (1)	25
8215456	4-ethyltoluene	2022/09/09	110	70 - 130	<0.50	ppbv	NC (1)	25
8215456	Benzyl chloride	2022/09/09	118	70 - 130	<0.50	ppbv	NC (1)	25
8215456	Bromodichloromethane	2022/09/09	93	70 - 130	<0.20	ppbv	NC (1)	25
8215456	Carbon Disulfide	2022/09/09	104	70 - 130	<0.50	ppbv	NC (1)	25
8215456	Chloroethane	2022/09/09	100	70 - 130	<0.30	ppbv	NC (1)	25
8215456	Chloromethane	2022/09/09	99	70 - 130	<0.30	ppbv	0.74 (1)	25
8215456	Cyclohexane	2022/09/09	109	70 - 130	<0.20	ppbv	NC (1)	25
8215456	Dibromochloromethane	2022/09/09	98	70 - 130	<0.20	ppbv	NC (1)	25
8215456	Dichlorodifluoromethane (FREON 12)	2022/09/09	95	70 - 130	<0.20	ppbv	1.3 (1)	25
8215456	Ethanol (ethyl alcohol)	2022/09/09	98	70 - 130	<1.0	ppbv	NC (1)	25
8215456	Ethyl Acetate	2022/09/09	105	70 - 130	<1.0	ppbv	NC (1)	25
8215456	Heptane	2022/09/09	112	70 - 130	<0.30	ppbv	NC (1)	25
8215456	Methyl Butyl Ketone (2-Hexanone)	2022/09/09	111	70 - 130	<1.0	ppbv	NC (1)	25
8215456	Propene	2022/09/09	111	70 - 130	<0.50	ppbv	NC (1)	25
8215456	Tetrahydrofuran	2022/09/09	103	70 - 130	<0.40	ppbv	NC (1)	25
8215456	Trichlorofluoromethane (FREON 11)	2022/09/09	97	70 - 130	<0.20	ppbv	3.0 (1)	25

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8215456	Trichlorotrifluoroethane	2022/09/09	90	70 - 130	<0.15	ppbv	NC (1)	25
8215456	Vinyl Acetate	2022/09/09	104	70 - 130	<0.20	ppbv	NC (1)	25
8215456	Vinyl Bromide	2022/09/09	106	70 - 130	<0.20	ppbv	NC (1)	25
8215459	1,1,1,2-Tetrachloroethane	2022/09/09	104	70 - 130	<0.021	ppbv	NC (1)	25
8215459	1,1,1-Trichloroethane	2022/09/09	97	70 - 130	<0.050	ppbv	NC (1)	25
8215459	1,1,2,2-Tetrachloroethane	2022/09/09	88	70 - 130	<0.0027	ppbv	NC (1)	25
8215459	1,1,2-Trichloroethane	2022/09/09	101	70 - 130	<0.012	ppbv	NC (1)	25
8215459	1,1-Dichloroethane	2022/09/09	94	70 - 130	<0.050	ppbv	NC (1)	25
8215459	1,1-Dichloroethylene	2022/09/09	96	70 - 130	<0.050	ppbv	NC (1)	25
8215459	1,2,4-Trichlorobenzene	2022/09/09	109	70 - 130	<0.10	ppbv	NC (1)	25
8215459	1,2-Dichlorobenzene	2022/09/09	96	70 - 130	<0.050	ppbv	NC (1)	25
8215459	1,2-Dichloroethane	2022/09/09	96	70 - 130	<0.010	ppbv	2.3 (1)	25
8215459	1,2-Dichloropropane	2022/09/09	105	70 - 130	<0.050	ppbv	NC (1)	25
8215459	1,4-Dichlorobenzene	2022/09/09	100	70 - 130	<0.050	ppbv	NC (1)	25
8215459	2-Propanone	2022/09/09	101	70 - 130	<0.14	ppbv	NC (1)	N/A
8215459	Benzene	2022/09/09	102	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Bromoform	2022/09/09	97	70 - 130	<0.10	ppbv	NC (1)	25
8215459	Bromomethane	2022/09/09	92	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Carbon Tetrachloride	2022/09/09	98	70 - 130	<0.050	ppbv	1.6 (1)	25
8215459	Chlorobenzene	2022/09/09	97	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Chloroform	2022/09/09	98	70 - 130	<0.040	ppbv	NC (1)	25
8215459	cis-1,2-Dichloroethylene	2022/09/09	98	70 - 130	<0.050	ppbv	NC (1)	25
8215459	cis-1,3-Dichloropropene	2022/09/09	109	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Ethylbenzene	2022/09/09	111	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Ethylene Dibromide	2022/09/09	104	70 - 130	<0.010	ppbv	NC (1)	25
8215459	Hexachlorobutadiene	2022/09/09	106	70 - 130	<0.0047	ppbv	NC (1)	25
8215459	Hexane	2022/09/09	101	70 - 130	<0.10	ppbv	NC (1)	25
8215459	Methyl Ethyl Ketone (2-Butanone)	2022/09/09	113	70 - 130	<0.10	ppbv	3.3 (1)	25
8215459	Methyl Isobutyl Ketone	2022/09/09	110	70 - 130	<0.10	ppbv	NC (1)	25
8215459	Methyl t-butyl ether (MTBE)	2022/09/09	93	70 - 130	<0.10	ppbv	NC (1)	25

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8215459	Methylene Chloride(Dichloromethane)	2022/09/09	92	70 - 130	<0.050	ppbv	1.7 (1)	25
8215459	Naphthalene	2022/09/09	124	70 - 130	<0.10	ppbv	NC (1)	25
8215459	o-Xylene	2022/09/09	92	70 - 130	<0.050	ppbv	NC (1)	25
8215459	p+m-Xylene	2022/09/09	111	70 - 130	<0.10	ppbv	NC (1)	25
8215459	Styrene	2022/09/09	86	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Tetrachloroethylene	2022/09/09	99	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Toluene	2022/09/09	109	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Total Xylenes	2022/09/09	104	70 - 130	<0.15	ppbv	NC (1)	25
8215459	trans-1,2-Dichloroethylene	2022/09/09	96	70 - 130	<0.10	ppbv	NC (1)	25
8215459	trans-1,3-Dichloropropene	2022/09/09	112	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Trichloroethylene	2022/09/09	100	70 - 130	<0.050	ppbv	NC (1)	25
8215459	Vinyl Chloride	2022/09/09	100	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID [TOV062-01]

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VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Chain of Custody Form - Summa™ Canister

44025

BUREAU VERITAS

AIR

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Mississauga, Ontario, L5N 2L8
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Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CAM FCD-01302 /3

Page 1 of 1

INVOICE INFORMATION

Company Name: Wood
Contact Name: Ryan Fletcher
Address:
E-mail: apinvoice.canada@woodplc.com
Ph: plc.com
Sampled by: Adam Gauthier

REPORT INFORMATION

Company Name:
Project Manager: R Fletcher
Address: 160 Traders Blvd E
E-mail: ryan.fletcher@woodplc.com
Ph:

ANALYSIS REQUESTED

Field Sample ID	Canister Serial #	Flow Regulator Serial #	Collection Date	START VACUUM (inches of Hg)	END VACUUM (inches of Hg)	SOIL VAPOUR	AMBIENT/INDOOR AIR	AMBIENT/COMMERCIAL/INDUSTRIAL	SUB-SLAB GAS	FULL LIST OF VOCs (reference TO15A)	BTEX/Aromatic/Aliphatic Hydrocarbon Fractions	BTEX/F1 (C6-C10) and F2 (C10-C16)	Selected VOC's - please specify	Other	CANISTERS NOT USED
Crawford-VOC-Aug.22-11:25(v2)	SK1835	FM355	Aug.23 11:25	-29	-5		X			X					

29-Aug-22 16:30
Gina Baybayan
C2O7060
BSU AIR-001

TAT Requirement

STD 10 Business day [X]
Rush 5 Business day * [ ]
Rush 2 Business day * [ ]
Rush Other * [ ]

* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002202IE.100
Name:
PO #: C0262 00346
Bureau Veritas Quote #:
Bureau Veritas Contact:
Task Order/Line Item

REPORTING REQUIREMENTS

EDD [ ]
Regulations: ON 153 [ ] ON 419 [ ] BC CSR [ ]
Other

Notes

1) please indicate on chain of custody if your samples are soil vapour or ambient air
2) please list all canisters on the chain of custody even if unused

PROJECT SPECIFIC COMMENTS

Client Signature:
Date/Time: 29 Aug 1630

Received by:
Date/Time: 6/08/29 1630

PLEASE RETURN ALL UNUSED EQUIPMENT

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at www.bvlabs.com/terms-and-conditions

COC-1003 (11/2019)

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/26
Report #: R7358123
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2T6911
Received: 2022/10/12, 16:28

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2022/10/17	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2022/10/17	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2022/10/17	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/10/26
Report #: R7358123
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2T6911
Received: 2022/10/12, 16:28

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TZL286		
Sampling Date		2022/10/03		
COC Number		NA		
	UNITS	VOC3-OCT	RDL	QC Batch
Volatile Organics				
Pressure on Receipt	psig	(-3.1)	N/A	8289075
2-Propanone	ppbv	2.05	0.10	8289072
Dichlorodifluoromethane (FREON 12)	ppbv	0.56	0.20	8287151
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8287151
Chloromethane	ppbv	0.46	0.30	8287151
Vinyl Chloride	ppbv	<0.020	0.020	8289072
Chloroethane	ppbv	<0.30	0.30	8287151
1,3-Butadiene	ppbv	<0.50	0.50	8287151
Trichlorofluoromethane (FREON 11)	ppbv	0.30	0.20	8287151
Ethanol (ethyl alcohol)	ppbv	4.1	1.0	8287151
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8287151
2-propanol	ppbv	<1.0	1.0	8287151
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.43	0.10	8289072
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8289072
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8287151
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8289072
Ethyl Acetate	ppbv	<1.0	1.0	8287151
1,1-Dichloroethylene	ppbv	<0.050	0.050	8289072
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8289072
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8289072
Methylene Chloride(Dichloromethane)	ppbv	0.109	0.050	8289072
Chloroform	ppbv	<0.040	0.040	8289072
Carbon Tetrachloride	ppbv	0.127	0.050	8289072
1,1-Dichloroethane	ppbv	<0.050	0.050	8289072
1,2-Dichloroethane	ppbv	0.011	0.010	8289072
Ethylene Dibromide	ppbv	<0.010	0.010	8289072
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8289072
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8289072
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8289072
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8289072

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TZL286		
Sampling Date		2022/10/03		
COC Number		NA		
	UNITS	**VOC3-OCT**	**RDL**	**QC Batch**
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8289072
1,2-Dichloropropane	ppbv	<0.050	0.050	8289072
Bromomethane	ppbv	<0.050	0.050	8289072
Bromoform	ppbv	<0.10	0.10	8289072
Bromodichloromethane	ppbv	<0.20	0.20	8287151
Dibromochloromethane	ppbv	<0.20	0.20	8287151
Trichloroethylene	ppbv	<0.050	0.050	8289072
Tetrachloroethylene	ppbv	<0.050	0.050	8289072
Benzene	ppbv	<0.050	0.050	8289072
Toluene	ppbv	0.081	0.050	8289072
Ethylbenzene	ppbv	<0.050	0.050	8289072
p+m-Xylene	ppbv	<0.10	0.10	8289072
o-Xylene	ppbv	<0.050	0.050	8289072
Styrene	ppbv	<0.050	0.050	8289072
4-ethyltoluene	ppbv	<0.50	0.50	8287151
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8287151
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8287151
Chlorobenzene	ppbv	<0.050	0.050	8289072
Benzyl chloride	ppbv	<0.50	0.50	8287151
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8287151
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8289072
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8289072
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8289072
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8289072
Hexane	ppbv	<0.10	0.10	8289072
Heptane	ppbv	<0.30	0.30	8287151
Cyclohexane	ppbv	<0.20	0.20	8287151
Tetrahydrofuran	ppbv	<0.40	0.40	8287151
1,4-Dioxane	ppbv	<1.0	1.0	8287151
Naphthalene	ppbv	<0.10	0.10	8289072
Total Xylenes	ppbv	<0.15	0.15	8289072
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8289072

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		TZL286		
Sampling Date		2022/10/03		
COC Number		NA		
	UNITS	**VOC3-OCT**	**RDL**	**QC Batch**
Vinyl Bromide	ppbv	<0.20	0.20	8287151
Propene	ppbv	<0.50	0.50	8287151
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8287151
Carbon Disulfide	ppbv	<0.50	0.50	8287151
Vinyl Acetate	ppbv	<0.20	0.20	8287151
Surrogate Recovery (%)				
Bromochloromethane	%	97	N/A	8289072
D5-Chlorobenzene	%	86	N/A	8289072
Difluorobenzene	%	87	N/A	8289072
Bromochloromethane	%	97	N/A	8287151
D5-Chlorobenzene	%	86	N/A	8287151
Difluorobenzene	%	87	N/A	8287151

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2T6911
Report Date: 2022/10/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: TZL286
Sample ID: VOC3-OCT
Matrix: Air

Collected: 2022/10/03
Shipped:
Received: 2022/10/12

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8289075	N/A	2022/10/17	Yujie Yan
Volatile Organics in Air by GC/MS/SIM	GC/MS	8289072	N/A	2022/10/17	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8287151	N/A	2022/10/17	Yujie Yan

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8287151	Bromochloromethane	2022/10/17	102	60 - 140	106	%		
8287151	D5-Chlorobenzene	2022/10/17	104	60 - 140	92	%		
8287151	Difluorobenzene	2022/10/17	105	60 - 140	97	%		
8289072	Bromochloromethane	2022/10/17	102	60 - 140	106	%		
8289072	D5-Chlorobenzene	2022/10/17	104	60 - 140	92	%		
8289072	Difluorobenzene	2022/10/17	105	60 - 140	97	%		
8287151	1,2,4-Trimethylbenzene	2022/10/17	99	70 - 130	<0.50	ppbv	NC (1)	25
8287151	1,2-Dichlorotetrafluoroethane	2022/10/17	96	70 - 130	<0.17	ppbv	NC (1)	25
8287151	1,3,5-Trimethylbenzene	2022/10/17	90	70 - 130	<0.50	ppbv	NC (1)	25
8287151	1,3-Butadiene	2022/10/17	88	70 - 130	<0.50	ppbv	NC (1)	25
8287151	1,3-Dichlorobenzene	2022/10/17	104	70 - 130	<0.40	ppbv	NC (1)	25
8287151	1,4-Dioxane	2022/10/17	96	70 - 130	<1.0	ppbv	NC (1)	25
8287151	2,2,4-Trimethylpentane	2022/10/17	100	70 - 130	<0.20	ppbv	NC (1)	25
8287151	2-propanol	2022/10/17	97	70 - 130	<1.0	ppbv	NC (1)	25
8287151	4-ethyltoluene	2022/10/17	103	70 - 130	<0.50	ppbv	NC (1)	25
8287151	Benzyl chloride	2022/10/17	126	70 - 130	<0.50	ppbv	NC (1)	25
8287151	Bromodichloromethane	2022/10/17	96	70 - 130	<0.20	ppbv	NC (1)	25
8287151	Carbon Disulfide	2022/10/17	104	70 - 130	<0.50	ppbv	NC (1)	25
8287151	Chloroethane	2022/10/17	104	70 - 130	<0.30	ppbv	NC (1)	25
8287151	Chloromethane	2022/10/17	101	70 - 130	<0.30	ppbv	0.25 (1)	25
8287151	Cyclohexane	2022/10/17	99	70 - 130	<0.20	ppbv	NC (1)	25
8287151	Dibromochloromethane	2022/10/17	102	70 - 130	<0.20	ppbv	NC (1)	25
8287151	Dichlorodifluoromethane (FREON 12)	2022/10/17	99	70 - 130	<0.20	ppbv	0.73 (1)	25
8287151	Ethanol (ethyl alcohol)	2022/10/17	109	70 - 130	<1.0	ppbv	9.7 (1)	25
8287151	Ethyl Acetate	2022/10/17	102	70 - 130	<1.0	ppbv	NC (1)	25
8287151	Heptane	2022/10/17	104	70 - 130	<0.30	ppbv	NC (1)	25
8287151	Methyl Butyl Ketone (2-Hexanone)	2022/10/17	78	70 - 130	<1.0	ppbv	NC (1)	25
8287151	Propene	2022/10/17	97	70 - 130	<0.50	ppbv	NC (1)	25
8287151	Tetrahydrofuran	2022/10/17	93	70 - 130	<0.40	ppbv	NC (1)	25
8287151	Trichlorofluoromethane (FREON 11)	2022/10/17	102	70 - 130	<0.20	ppbv	1.1 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8287151	Trichlorotrifluoroethane	2022/10/17	95	70 - 130	<0.15	ppbv	NC (1)	25
8287151	Vinyl Acetate	2022/10/17	93	70 - 130	<0.20	ppbv	NC (1)	25
8287151	Vinyl Bromide	2022/10/17	105	70 - 130	<0.20	ppbv	NC (1)	25
8289072	1,1,1,2-Tetrachloroethane	2022/10/17	106	70 - 130	<0.021	ppbv	NC (1)	25
8289072	1,1,1-Trichloroethane	2022/10/17	103	70 - 130	<0.050	ppbv	NC (1)	25
8289072	1,1,2,2-Tetrachloroethane	2022/10/17	98	70 - 130	<0.0027	ppbv	NC (1)	25
8289072	1,1,2-Trichloroethane	2022/10/17	104	70 - 130	<0.012	ppbv	NC (1)	25
8289072	1,1-Dichloroethane	2022/10/17	97	70 - 130	<0.050	ppbv	NC (1)	25
8289072	1,1-Dichloroethylene	2022/10/17	97	70 - 130	<0.050	ppbv	NC (1)	25
8289072	1,2,4-Trichlorobenzene	2022/10/17	102	70 - 130	<0.10	ppbv	NC (1)	25
8289072	1,2-Dichlorobenzene	2022/10/17	103	70 - 130	<0.050	ppbv	NC (1)	25
8289072	1,2-Dichloroethane	2022/10/17	100	70 - 130	<0.010	ppbv	8.1 (1)	25
8289072	1,2-Dichloropropane	2022/10/17	105	70 - 130	<0.050	ppbv	NC (1)	25
8289072	1,4-Dichlorobenzene	2022/10/17	105	70 - 130	<0.050	ppbv	NC (1)	25
8289072	2-Propanone	2022/10/17	119	70 - 130	<0.10	ppbv	NC (1)	N/A
8289072	Benzene	2022/10/17	99	70 - 130	<0.050	ppbv	0.20 (1)	25
8289072	Bromoform	2022/10/17	105	70 - 130	<0.10	ppbv	NC (1)	25
8289072	Bromomethane	2022/10/17	95	70 - 130	<0.050	ppbv	NC (1)	25
8289072	Carbon Tetrachloride	2022/10/17	104	70 - 130	<0.050	ppbv	2.9 (1)	25
8289072	Chlorobenzene	2022/10/17	103	70 - 130	<0.050	ppbv	NC (1)	25
8289072	Chloroform	2022/10/17	103	70 - 130	<0.040	ppbv	NC (1)	25
8289072	cis-1,2-Dichloroethylene	2022/10/17	100	70 - 130	<0.050	ppbv	NC (1)	25
8289072	cis-1,3-Dichloropropene	2022/10/17	107	70 - 130	<0.050	ppbv	NC (1)	25
8289072	Ethylbenzene	2022/10/17	110	70 - 130	<0.050	ppbv	NC (1)	25
8289072	Ethylene Dibromide	2022/10/17	106	70 - 130	<0.010	ppbv	NC (1)	25
8289072	Hexachlorobutadiene	2022/10/17	118	70 - 130	<0.0047	ppbv	NC (1)	25
8289072	Hexane	2022/10/17	97	70 - 130	<0.10	ppbv	0.97 (1)	25
8289072	Methyl Ethyl Ketone (2-Butanone)	2022/10/17	110	70 - 130	<0.10	ppbv	NC (1)	25
8289072	Methyl Isobutyl Ketone	2022/10/17	89	70 - 130	<0.10	ppbv	NC (1)	25
8289072	Methyl t-butyl ether (MTBE)	2022/10/17	89	70 - 130	<0.10	ppbv	NC (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8289072	Methylene Chloride(Dichloromethane)	2022/10/17	96	70 - 130	<0.050	ppbv	1.6 (1)	25
8289072	Naphthalene	2022/10/17	89	70 - 130	<0.10	ppbv	NC (1)	25
8289072	o-Xylene	2022/10/17	104	70 - 130	<0.050	ppbv	NC (1)	25
8289072	p+m-Xylene	2022/10/17	106	70 - 130	<0.10	ppbv	NC (1)	25
8289072	Styrene	2022/10/17	91	70 - 130	<0.050	ppbv	NC (1)	25
8289072	Tetrachloroethylene	2022/10/17	101	70 - 130	<0.050	ppbv	NC (1)	25
8289072	Toluene	2022/10/17	103	70 - 130	<0.050	ppbv	0.72 (1)	25
8289072	Total Xylenes	2022/10/17	106	70 - 130	<0.15	ppbv	NC (1)	25
8289072	trans-1,2-Dichloroethylene	2022/10/17	97	70 - 130	<0.10	ppbv	NC (1)	25
8289072	trans-1,3-Dichloropropene	2022/10/17	111	70 - 130	<0.050	ppbv	NC (1)	25
8289072	Trichloroethylene	2022/10/17	102	70 - 130	<0.050	ppbv	NC (1)	25
8289072	Vinyl Chloride	2022/10/17	110	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

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Bureau Veritas Job #: C2T6911
Report Date: 2022/10/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: OMEMA2002.2021E.100*
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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AIR

1/1

CAM FCD-01302 /3

BUREAU VERITAS

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: CNC/Wsp EM
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@woodplc.com airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
VOC 3 - Oct	SX1944	FX794	03-Oct		29	6	X	X

12-Oct-22 16:28
Gina Baybayan
C2T6911
BSU AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name:
PO #: C026200346
BV Quote #:
BV Contact:

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation:
Date/Time: 12 Oct 2022

Received by:
Affiliation:
Date/Time: 12/10/22 1628

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100
Your C.O.C. #: 44929

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/11/17
Report #: R7392165
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2W5603
Received: 2022/11/04, 16:18

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2022/11/10	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2022/11/10	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2022/11/10	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100
Your C.O.C. #: 44929

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/11/17
Report #: R7392165
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2W5603
Received: 2022/11/04, 16:18

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		UFP760		
Sampling Date		2022/10/31		
COC Number		44929		
	UNITS	**VOC 31-OCT**	**RDL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	(-3.1)	N/A	8338025
2-Propanone	ppbv	2.52	0.10	8338023
Dichlorodifluoromethane (FREON 12)	ppbv	0.62	0.20	8338016
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8338016
Chloromethane	ppbv	0.58	0.30	8338016
Vinyl Chloride	ppbv	<0.020	0.020	8338023
Chloroethane	ppbv	<0.30	0.30	8338016
1,3-Butadiene	ppbv	<0.50	0.50	8338016
Trichlorofluoromethane (FREON 11)	ppbv	0.33	0.20	8338016
Ethanol (ethyl alcohol)	ppbv	2.8	1.0	8338016
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8338016
2-propanol	ppbv	<1.0	1.0	8338016
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.44	0.10	8338023
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8338023
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8338016
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8338023
Ethyl Acetate	ppbv	<1.0	1.0	8338016
1,1-Dichloroethylene	ppbv	<0.050	0.050	8338023
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8338023
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8338023
Methylene Chloride(Dichloromethane)	ppbv	0.113	0.050	8338023
Chloroform	ppbv	<0.040	0.040	8338023
Carbon Tetrachloride	ppbv	0.135	0.050	8338023
1,1-Dichloroethane	ppbv	<0.050	0.050	8338023
1,2-Dichloroethane	ppbv	0.015	0.010	8338023
Ethylene Dibromide	ppbv	<0.010	0.010	8338023
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8338023
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8338023
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8338023
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8338023
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8338023

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		UFP760		
Sampling Date		2022/10/31		
COC Number		44929		
	UNITS	VOC 31-OCT	RDL	QC Batch
1,2-Dichloropropane	ppbv	<0.050	0.050	8338023
Bromomethane	ppbv	<0.050	0.050	8338023
Bromoform	ppbv	<0.10	0.10	8338023
Bromodichloromethane	ppbv	<0.20	0.20	8338016
Dibromochloromethane	ppbv	<0.20	0.20	8338016
Trichloroethylene	ppbv	<0.050	0.050	8338023
Tetrachloroethylene	ppbv	<0.050	0.050	8338023
Benzene	ppbv	0.123	0.050	8338023
Toluene	ppbv	0.125	0.050	8338023
Ethylbenzene	ppbv	<0.050	0.050	8338023
p+m-Xylene	ppbv	<0.10	0.10	8338023
o-Xylene	ppbv	<0.050	0.050	8338023
Styrene	ppbv	<0.050	0.050	8338023
4-ethyltoluene	ppbv	<0.50	0.50	8338016
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8338016
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8338016
Chlorobenzene	ppbv	<0.050	0.050	8338023
Benzyl chloride	ppbv	<0.50	0.50	8338016
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8338016
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8338023
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8338023
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8338023
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8338023
Hexane	ppbv	0.10	0.10	8338023
Heptane	ppbv	<0.30	0.30	8338016
Cyclohexane	ppbv	<0.20	0.20	8338016
Tetrahydrofuran	ppbv	<0.40	0.40	8338016
1,4-Dioxane	ppbv	<1.0	1.0	8338016
Naphthalene	ppbv	<0.10	0.10	8338023
Total Xylenes	ppbv	<0.15	0.15	8338023
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8338023
Vinyl Bromide	ppbv	<0.20	0.20	8338016
Propene	ppbv	<0.70	0.70	8338016

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		UFP760		
Sampling Date		2022/10/31		
COC Number		44929		
	UNITS	**VOC 31-OCT**	**RDL**	**QC Batch**
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8338016
Carbon Disulfide	ppbv	<0.50	0.50	8338016
Vinyl Acetate	ppbv	<0.20	0.20	8338016
Surrogate Recovery (%)				
Bromochloromethane	%	83	N/A	8338023
D5-Chlorobenzene	%	75	N/A	8338023
Difluorobenzene	%	73	N/A	8338023
Bromochloromethane	%	83	N/A	8338016
D5-Chlorobenzene	%	75	N/A	8338016
Difluorobenzene	%	73	N/A	8338016

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2W5603
Report Date: 2022/11/17

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100
Your P.O. #: C026200346
Sampler Initials: RF

TEST SUMMARY

Bureau Veritas ID: UFP760
Sample ID: VOC 31-OCT
Matrix: Air

Collected: 2022/10/31
Shipped:
Received: 2022/11/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8338025	N/A	2022/11/10	Pratima Patel
Volatile Organics in Air by GC/MS/SIM	GC/MS	8338023	N/A	2022/11/10	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8338016	N/A	2022/11/10	Pratima Patel

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8338016	Bromochloromethane	2022/11/10	106	60 - 140	106	%		
8338016	D5-Chlorobenzene	2022/11/10	107	60 - 140	89	%		
8338016	Difluorobenzene	2022/11/10	109	60 - 140	91	%		
8338023	Bromochloromethane	2022/11/10	106	60 - 140	106	%		
8338023	D5-Chlorobenzene	2022/11/10	107	60 - 140	89	%		
8338023	Difluorobenzene	2022/11/10	109	60 - 140	91	%		
8338016	1,2,4-Trimethylbenzene	2022/11/10	85	70 - 130	<0.50	ppbv	NC (1)	25
8338016	1,2-Dichlorotetrafluoroethane	2022/11/10	90	70 - 130	<0.17	ppbv	NC (1)	25
8338016	1,3,5-Trimethylbenzene	2022/11/10	75	70 - 130	<0.50	ppbv	NC (1)	25
8338016	1,3-Butadiene	2022/11/10	79	70 - 130	<0.50	ppbv	NC (1)	25
8338016	1,3-Dichlorobenzene	2022/11/10	87	70 - 130	<0.40	ppbv	NC (1)	25
8338016	1,4-Dioxane	2022/11/10	90	70 - 130	<1.0	ppbv	NC (1)	25
8338016	2,2,4-Trimethylpentane	2022/11/10	109	70 - 130	<0.20	ppbv	NC (1)	25
8338016	2-propanol	2022/11/10	98	70 - 130	<1.0	ppbv	NC (1)	25
8338016	4-ethyltoluene	2022/11/10	96	70 - 130	<0.50	ppbv	NC (1)	25
8338016	Benzyl chloride	2022/11/10	102	70 - 130	<0.50	ppbv	NC (1)	25
8338016	Bromodichloromethane	2022/11/10	93	70 - 130	<0.20	ppbv	NC (1)	25
8338016	Carbon Disulfide	2022/11/10	103	70 - 130	<0.50	ppbv	NC (1)	25
8338016	Chloroethane	2022/11/10	103	70 - 130	<0.30	ppbv	NC (1)	25
8338016	Chloromethane	2022/11/10	97	70 - 130	<0.30	ppbv	1.4 (1)	25
8338016	Cyclohexane	2022/11/10	101	70 - 130	<0.20	ppbv	NC (1)	25
8338016	Dibromochloromethane	2022/11/10	96	70 - 130	<0.20	ppbv	NC (1)	25
8338016	Dichlorodifluoromethane (FREON 12)	2022/11/10	93	70 - 130	<0.20	ppbv	1.9 (1)	25
8338016	Ethanol (ethyl alcohol)	2022/11/10	101	70 - 130	<1.0	ppbv	17 (1)	25
8338016	Ethyl Acetate	2022/11/10	105	70 - 130	<1.0	ppbv	NC (1)	25
8338016	Heptane	2022/11/10	107	70 - 130	<0.30	ppbv	NC (1)	25
8338016	Methyl Butyl Ketone (2-Hexanone)	2022/11/10	82	70 - 130	<1.0	ppbv	NC (1)	25
8338016	Propene	2022/11/10	112	70 - 130	<0.50	ppbv	NC (1)	25
8338016	Tetrahydrofuran	2022/11/10	92	70 - 130	<0.40	ppbv	NC (1)	25
8338016	Trichlorofluoromethane (FREON 11)	2022/11/10	95	70 - 130	<0.20	ppbv	0.45 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8338016	Trichlorotrifluoroethane	2022/11/10	92	70 - 130	<0.15	ppbv	NC (1)	25
8338016	Vinyl Acetate	2022/11/10	94	70 - 130	<0.20	ppbv	NC (1)	25
8338016	Vinyl Bromide	2022/11/10	103	70 - 130	<0.20	ppbv	NC (1)	25
8338023	1,1,1,2-Tetrachloroethane	2022/11/10	101	70 - 130	<0.021	ppbv	NC (1)	25
8338023	1,1,1-Trichloroethane	2022/11/10	95	70 - 130	<0.050	ppbv	NC (1)	25
8338023	1,1,2,2-Tetrachloroethane	2022/11/10	87	70 - 130	<0.0027	ppbv	NC (1)	25
8338023	1,1,2-Trichloroethane	2022/11/10	96	70 - 130	<0.012	ppbv	NC (1)	25
8338023	1,1-Dichloroethane	2022/11/10	93	70 - 130	<0.050	ppbv	NC (1)	25
8338023	1,1-Dichloroethylene	2022/11/10	95	70 - 130	<0.050	ppbv	NC (1)	25
8338023	1,2,4-Trichlorobenzene	2022/11/10	85	70 - 130	<0.10	ppbv	NC (1)	25
8338023	1,2-Dichlorobenzene	2022/11/10	87	70 - 130	<0.050	ppbv	NC (1)	25
8338023	1,2-Dichloroethane	2022/11/10	93	70 - 130	<0.010	ppbv	0.72 (1)	25
8338023	1,2-Dichloropropane	2022/11/10	101	70 - 130	<0.050	ppbv	NC (1)	25
8338023	1,4-Dichlorobenzene	2022/11/10	87	70 - 130	<0.050	ppbv	NC (1)	25
8338023	2-Propanone	2022/11/10	119	70 - 130	<0.10	ppbv	NC (1)	N/A
8338023	Benzene	2022/11/10	95	70 - 130	<0.050	ppbv	3.7 (1)	25
8338023	Bromoform	2022/11/10	94	70 - 130	<0.10	ppbv	NC (1)	25
8338023	Bromomethane	2022/11/10	97	70 - 130	<0.050	ppbv	NC (1)	25
8338023	Carbon Tetrachloride	2022/11/10	95	70 - 130	<0.050	ppbv	2.3 (1)	25
8338023	Chlorobenzene	2022/11/10	94	70 - 130	<0.050	ppbv	NC (1)	25
8338023	Chloroform	2022/11/10	96	70 - 130	<0.040	ppbv	NC (1)	25
8338023	cis-1,2-Dichloroethylene	2022/11/10	95	70 - 130	<0.050	ppbv	NC (1)	25
8338023	cis-1,3-Dichloropropene	2022/11/10	99	70 - 130	<0.050	ppbv	NC (1)	25
8338023	Ethylbenzene	2022/11/10	101	70 - 130	<0.050	ppbv	2.1 (1)	25
8338023	Ethylene Dibromide	2022/11/10	96	70 - 130	<0.010	ppbv	NC (1)	25
8338023	Hexachlorobutadiene	2022/11/10	86	70 - 130	<0.0047	ppbv	NC (1)	25
8338023	Hexane	2022/11/10	98	70 - 130	<0.10	ppbv	0.36 (1)	25
8338023	Methyl Ethyl Ketone (2-Butanone)	2022/11/10	115	70 - 130	<0.10	ppbv	2.0 (1)	25
8338023	Methyl Isobutyl Ketone	2022/11/10	93	70 - 130	<0.10	ppbv	NC (1)	25
8338023	Methyl t-butyl ether (MTBE)	2022/11/10	89	70 - 130	<0.10	ppbv	NC (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8338023	Methylene Chloride(Dichloromethane)	2022/11/10	97	70 - 130	<0.050	ppbv	3.6 (1)	25
8338023	Naphthalene	2022/11/10	78	70 - 130	<0.10	ppbv	NC (1)	25
8338023	o-Xylene	2022/11/10	96	70 - 130	<0.050	ppbv	2.7 (1)	25
8338023	p+m-Xylene	2022/11/10	97	70 - 130	<0.10	ppbv	3.3 (1)	25
8338023	Styrene	2022/11/10	75	70 - 130	<0.050	ppbv	NC (1)	25
8338023	Tetrachloroethylene	2022/11/10	93	70 - 130	<0.050	ppbv	NC (1)	25
8338023	Toluene	2022/11/10	98	70 - 130	<0.050	ppbv	4.3 (1)	25
8338023	Total Xylenes	2022/11/10	97	70 - 130	<0.15	ppbv	3.1 (1)	25
8338023	trans-1,2-Dichloroethylene	2022/11/10	97	70 - 130	<0.10	ppbv	NC (1)	25
8338023	trans-1,3-Dichloropropene	2022/11/10	98	70 - 130	<0.050	ppbv	NC (1)	25
8338023	Trichloroethylene	2022/11/10	94	70 - 130	<0.050	ppbv	NC (1)	25
8338023	Vinyl Chloride	2022/11/10	91	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

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Bureau Veritas Job #: C2W5603
Report Date: 2022/11/17

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100
Your P.O. #: C026200346
Sampler Initials: RF

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anke Macfarlane, Laboratory Manager, VOC

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Chain of Custody Form - Summa™ Canister

44929

BUREAU VERITAS

6740 Campobello Rd
Mississauga Ontario, L5N 2L8
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Phone: (905) 817-5700
Fax: (905) 817-5777

CAM FCD-01302 /3

Page 1 of 1

INVOICE INFORMATION	REPORT INFORMATION
Company Name: Wood / WSP	Company Name:
Contact Name: Ryan Fletcher	Project Manager:
Address:	Address: 160 Traders Blvd E
E-mail: apinvoicecanada @woodplc.com	E-mail: ryan.fletcher@wsp.com
Ph:	Ph:
Sampled by:	

ANALYSIS REQUESTED

Field Sample ID	Canister Serial #	Flow Regulator Serial #	Collection Date	START VACUUM (inches of Hg)	END VACUUM (inches of Hg)	SOIL VAPOUR	AMBIENT/INDOOR AIR	AMBIENT/COMMERCIAL/INDUSTRIAL	SUB-SLAB GAS	FULL LIST OF VOCs (reference TO15A)	BTEX/Aromatic/Aliphatic Hydrocarbon Fractions	BTEX/F1 (C6-C10) and F2 (C10-C16)	Selected VOC's - please specify	Other	CANISTERS NOT USED
—	SX1751	FX1534	—												
VOC 31-Oct	SX1594	FX37	31-Oct	29.5	6.5		X			X					X

04-Nov-22 16:18
Marinela Sim
C2W5603
AKP AIR-001

TAT Requirement

- STD 10 Business day [X]
- Rush 5 Business day * [ ]
- Rush 2 Business day * [ ]
- Rush Other * [ ]

* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100
Name:
PO #: CO26200346
Bureau Veritas Quote #:
Bureau Veritas Contact:
Task Order/Line Item

REPORTING REQUIREMENTS

EDD [ ]
Regulations: ON 153 [ ] ON 419 [ ] BC CSR [ ]
Other

Notes

1) please indicate on chain of custody if your samples are soil vapour or ambient air
2) please list all canisters on the chain of custody even if unused

PROJECT SPECIFIC COMMENTS

Client Signature:
Date/Time: 4-Nov 16:15

Received by: Ashutosh Sukumar
Date/Time: Ashutosh Sukumar 2022/11/04 16:18

PLEASE RETURN ALL UNUSED EQUIPMENT

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at www.bvlabs.com/terms-and-conditions

COC-1003 (11/2019)

Your P.O. #: C02600346
Your Project #: OMEMA2002.2021E.100*
Your C.O.C. #: 45024

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2022/12/07
Report #: R7420422
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C2Z4083
Received: 2022/12/02, 09:30

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2022/12/06	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2022/12/06	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2022/12/06	BRL SOP-00304	EPA TO-15 m

Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C2Z4083
Report Date: 2022/12/07

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Your P.O. #: C02600346
Sampler Initials: AG

RESULTS OF ANALYSES OF AIR

Bureau Veritas ID		ULY435	
Sampling Date		2022/11/24	
COC Number		45024	
	UNITS	**CNC-NOV.23/22/7861**	**QC Batch**
Volatile Organics			
Pressure on Receipt	psig	(-1.4)	8387732
QC Batch = Quality Control Batch			

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (AIR)

Bureau Veritas ID		ULY435				
Sampling Date		2022/11/24				
COC Number		45024				
	UNITS	CNC-NOV.23/22/7861	RDL	ug/m3	DL (ug/m3)	QC Batch
Volatile Organics						
2-Propanone	ppbv	0.94	0.10	2.23	0.238	8387729
Dichlorodifluoromethane (FREON 12)	ppbv	0.50	0.20	2.50	0.989	8387443
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	8387443
Chloromethane	ppbv	0.50	0.30	1.02	0.620	8387443
Vinyl Chloride	ppbv	<0.020	0.020	<0.0511	0.0511	8387729
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	8387443
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	8387443
Trichlorofluoromethane (FREON 11)	ppbv	0.28	0.20	1.60	1.12	8387443
Ethanol (ethyl alcohol)	ppbv	2.5	1.0	4.69	1.88	8387443
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	8387443
2-propanol	ppbv	<1.0	1.0	<2.46	2.46	8387443
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.18	0.10	0.545	0.295	8387729
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	<0.410	0.410	8387729
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	<4.10	4.10	8387443
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	<0.361	0.361	8387729
Ethyl Acetate	ppbv	<1.0	1.0	<3.60	3.60	8387443
1,1-Dichloroethylene	ppbv	<0.050	0.050	<0.198	0.198	8387729
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	<0.198	0.198	8387729
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	<0.396	0.396	8387729
Methylene Chloride(Dichloromethane)	ppbv	0.117	0.050	0.406	0.174	8387729
Chloroform	ppbv	<0.040	0.040	<0.195	0.195	8387729
Carbon Tetrachloride	ppbv	0.100	0.050	0.626	0.315	8387729
1,1-Dichloroethane	ppbv	<0.050	0.050	<0.202	0.202	8387729
1,2-Dichloroethane	ppbv	0.023	0.010	0.0922	0.0405	8387729
Ethylene Dibromide	ppbv	<0.010	0.010	<0.0768	0.0768	8387729
1,1,1-Trichloroethane	ppbv	<0.050	0.050	<0.273	0.273	8387729
1,1,2-Trichloroethane	ppbv	<0.012	0.012	<0.0655	0.0655	8387729
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	<0.0185	0.0185	8387729
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	<0.227	0.227	8387729
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	<0.227	0.227	8387729
1,2-Dichloropropane	ppbv	<0.050	0.050	<0.231	0.231	8387729
Bromomethane	ppbv	<0.050	0.050	<0.194	0.194	8387729
Bromoform	ppbv	<0.10	0.10	<1.03	1.03	8387729
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	8387443
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	8387443

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (AIR)

Bureau Veritas ID		ULY435				
Sampling Date		2022/11/24				
COC Number		45024				
	UNITS	CNC-NOV.23/22/7861	RDL	ug/m3	DL (ug/m3)	QC Batch
Trichloroethylene	ppbv	<0.050	0.050	<0.269	0.269	8387729
Tetrachloroethylene	ppbv	<0.050	0.050	<0.339	0.339	8387729
Benzene	ppbv	0.143	0.050	0.456	0.160	8387729
Toluene	ppbv	0.504	0.050	1.90	0.188	8387729
Ethylbenzene	ppbv	<0.050	0.050	<0.217	0.217	8387729
p+m-Xylene	ppbv	0.16	0.10	0.673	0.434	8387729
o-Xylene	ppbv	0.062	0.050	0.268	0.217	8387729
Styrene	ppbv	<0.050	0.050	<0.213	0.213	8387729
4-ethyltoluene	ppbv	<0.50	0.50	<2.46	2.46	8387443
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.45	2.45	8387443
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.45	2.45	8387443
Chlorobenzene	ppbv	<0.050	0.050	<0.230	0.230	8387729
Benzyl chloride	ppbv	<0.50	0.50	<2.59	2.59	8387443
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	8387443
1,4-Dichlorobenzene	ppbv	<0.050	0.050	<0.301	0.301	8387729
1,2-Dichlorobenzene	ppbv	<0.050	0.050	<0.301	0.301	8387729
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	<0.742	0.742	8387729
Hexachlorobutadiene	ppbv	<0.0047	0.0047	<0.0501	0.0501	8387729
Hexane	ppbv	0.11	0.10	0.393	0.352	8387729
Heptane	ppbv	<0.30	0.30	<1.23	1.23	8387443
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	8387443
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	8387443
1,4-Dioxane	ppbv	<1.0	1.0	<3.60	3.60	8387443
Naphthalene	ppbv	<0.10	0.10	<0.524	0.524	8387729
Total Xylenes	ppbv	0.22	0.15	0.941	0.651	8387729
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	<0.144	0.144	8387729
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	8387443
Propene	ppbv	<0.50	0.50	<0.861	0.861	8387443
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	8387443
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	8387443
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	8387443
Surrogate Recovery (%)						
Bromochloromethane	%	101		N/A	N/A	8387729
D5-Chlorobenzene	%	93		N/A	N/A	8387729
Difluorobenzene	%	98		N/A	N/A	8387729

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (AIR)

Bureau Veritas ID		ULY435				
Sampling Date		2022/11/24				
COC Number		45024				
	UNITS	**CNC-NOV.23/22/7861**	**RDL**	**ug/m3**	**DL (ug/m3)**	**QC Batch**
Bromochloromethane	%	101		N/A	N/A	8387443
D5-Chlorobenzene	%	93		N/A	N/A	8387443
Difluorobenzene	%	98		N/A	N/A	8387443

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8387443	TIM	Spiked Blank	Bromochloromethane	2022/12/06		103	%	60 - 140
			D5-Chlorobenzene	2022/12/06		106	%	60 - 140
			Difluorobenzene	2022/12/06		105	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2022/12/06		93	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2022/12/06		92	%	70 - 130
			Chloromethane	2022/12/06		97	%	70 - 130
			Chloroethane	2022/12/06		100	%	70 - 130
			1,3-Butadiene	2022/12/06		98	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2022/12/06		95	%	70 - 130
			Ethanol (ethyl alcohol)	2022/12/06		97	%	70 - 130
			Trichlorotrifluoroethane	2022/12/06		91	%	70 - 130
			2-propanol	2022/12/06		98	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2022/12/06		101	%	70 - 130
			Ethyl Acetate	2022/12/06		104	%	70 - 130
			Bromodichloromethane	2022/12/06		91	%	70 - 130
			Dibromochloromethane	2022/12/06		97	%	70 - 130
			4-ethyltoluene	2022/12/06		103	%	70 - 130
			1,3,5-Trimethylbenzene	2022/12/06		102	%	70 - 130
			1,2,4-Trimethylbenzene	2022/12/06		107	%	70 - 130
			Benzyl chloride	2022/12/06		119	%	70 - 130
			1,3-Dichlorobenzene	2022/12/06		100	%	70 - 130
			Heptane	2022/12/06		104	%	70 - 130
			Cyclohexane	2022/12/06		100	%	70 - 130
			Tetrahydrofuran	2022/12/06		102	%	70 - 130
			1,4-Dioxane	2022/12/06		95	%	70 - 130
			Vinyl Bromide	2022/12/06		102	%	70 - 130
			Propene	2022/12/06		99	%	70 - 130
			2,2,4-Trimethylpentane	2022/12/06		103	%	70 - 130
			Carbon Disulfide	2022/12/06		100	%	70 - 130
			Vinyl Acetate	2022/12/06		101	%	70 - 130
8387443	TIM	Method Blank	Bromochloromethane	2022/12/06		106	%	60 - 140
			D5-Chlorobenzene	2022/12/06		94	%	60 - 140
			Difluorobenzene	2022/12/06		103	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2022/12/06	<0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2022/12/06	<0.17		ppbv	
			Chloromethane	2022/12/06	<0.30		ppbv	
			Chloroethane	2022/12/06	<0.30		ppbv	
			1,3-Butadiene	2022/12/06	<0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2022/12/06	<0.20		ppbv	
			Ethanol (ethyl alcohol)	2022/12/06	<1.0		ppbv	
			Trichlorotrifluoroethane	2022/12/06	<0.15		ppbv	
			2-propanol	2022/12/06	<1.0		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2022/12/06	<1.0		ppbv	
			Ethyl Acetate	2022/12/06	<1.0		ppbv	
			Bromodichloromethane	2022/12/06	<0.20		ppbv	
			Dibromochloromethane	2022/12/06	<0.20		ppbv	
			4-ethyltoluene	2022/12/06	<0.50		ppbv	
			1,3,5-Trimethylbenzene	2022/12/06	<0.50		ppbv	
			1,2,4-Trimethylbenzene	2022/12/06	<0.50		ppbv	
			Benzyl chloride	2022/12/06	<0.50		ppbv	
			1,3-Dichlorobenzene	2022/12/06	<0.40		ppbv	

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Heptane	2022/12/06	<0.30		ppbv	
			Cyclohexane	2022/12/06	<0.20		ppbv	
			Tetrahydrofuran	2022/12/06	<0.40		ppbv	
			1,4-Dioxane	2022/12/06	<1.0		ppbv	
			Vinyl Bromide	2022/12/06	<0.20		ppbv	
			Propene	2022/12/06	<0.50		ppbv	
			2,2,4-Trimethylpentane	2022/12/06	<0.20		ppbv	
			Carbon Disulfide	2022/12/06	<0.50		ppbv	
			Vinyl Acetate	2022/12/06	<0.20		ppbv	
8387443	TIM	RPD [ULY435-01]	Dichlorodifluoromethane (FREON 12)	2022/12/06	3.3		%	25
			1,2-Dichlorotetrafluoroethane	2022/12/06	NC		%	25
			Chloromethane	2022/12/06	2.1		%	25
			Chloroethane	2022/12/06	NC		%	25
			1,3-Butadiene	2022/12/06	NC		%	25
			Trichlorofluoromethane (FREON 11)	2022/12/06	2.1		%	25
			Ethanol (ethyl alcohol)	2022/12/06	4.1		%	25
			Trichlorotrifluoroethane	2022/12/06	NC		%	25
			2-propanol	2022/12/06	NC		%	25
			Methyl Butyl Ketone (2-Hexanone)	2022/12/06	NC		%	25
			Ethyl Acetate	2022/12/06	NC		%	25
			Bromodichloromethane	2022/12/06	NC		%	25
			Dibromochloromethane	2022/12/06	NC		%	25
			4-ethyltoluene	2022/12/06	NC		%	25
			1,3,5-Trimethylbenzene	2022/12/06	NC		%	25
			1,2,4-Trimethylbenzene	2022/12/06	NC		%	25
			Benzyl chloride	2022/12/06	NC		%	25
			1,3-Dichlorobenzene	2022/12/06	NC		%	25
			Heptane	2022/12/06	NC		%	25
			Cyclohexane	2022/12/06	NC		%	25
			Tetrahydrofuran	2022/12/06	NC		%	25
			1,4-Dioxane	2022/12/06	NC		%	25
			Vinyl Bromide	2022/12/06	NC		%	25
			Propene	2022/12/06	NC		%	25
			2,2,4-Trimethylpentane	2022/12/06	NC		%	25
			Carbon Disulfide	2022/12/06	NC		%	25
			Vinyl Acetate	2022/12/06	NC		%	25
8387729	TIM	Spiked Blank	2-Propanone	2022/12/06		97	%	70 - 130
			Bromochloromethane	2022/12/06		104	%	60 - 140
			D5-Chlorobenzene	2022/12/06		109	%	60 - 140
			Difluorobenzene	2022/12/06		111	%	60 - 140
			Vinyl Chloride	2022/12/06		100	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2022/12/06		115	%	70 - 130
			Methyl Isobutyl Ketone	2022/12/06		98	%	70 - 130
			Methyl t-butyl ether (MTBE)	2022/12/06		94	%	70 - 130
			1,1-Dichloroethylene	2022/12/06		99	%	70 - 130
			cis-1,2-Dichloroethylene	2022/12/06		103	%	70 - 130
			trans-1,2-Dichloroethylene	2022/12/06		96	%	70 - 130
			Methylene Chloride(Dichloromethane)	2022/12/06		93	%	70 - 130
			Chloroform	2022/12/06		100	%	70 - 130
			Carbon Tetrachloride	2022/12/06		91	%	70 - 130
			1,1-Dichloroethane	2022/12/06		94	%	70 - 130

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,2-Dichloroethane	2022/12/06		97	%	70 - 130
			Ethylene Dibromide	2022/12/06		101	%	70 - 130
			1,1,1-Trichloroethane	2022/12/06		92	%	70 - 130
			1,1,2-Trichloroethane	2022/12/06		98	%	70 - 130
			1,1,2,2-Tetrachloroethane	2022/12/06		90	%	70 - 130
			cis-1,3-Dichloropropene	2022/12/06		104	%	70 - 130
			trans-1,3-Dichloropropene	2022/12/06		110	%	70 - 130
			1,2-Dichloropropane	2022/12/06		101	%	70 - 130
			Bromomethane	2022/12/06		92	%	70 - 130
			Bromoform	2022/12/06		96	%	70 - 130
			Trichloroethylene	2022/12/06		98	%	70 - 130
			Tetrachloroethylene	2022/12/06		97	%	70 - 130
			Benzene	2022/12/06		98	%	70 - 130
			Toluene	2022/12/06		104	%	70 - 130
			Ethylbenzene	2022/12/06		109	%	70 - 130
			p+m-Xylene	2022/12/06		107	%	70 - 130
			o-Xylene	2022/12/06		102	%	70 - 130
			Styrene	2022/12/06		104	%	70 - 130
			Chlorobenzene	2022/12/06		99	%	70 - 130
			1,4-Dichlorobenzene	2022/12/06		101	%	70 - 130
			1,2-Dichlorobenzene	2022/12/06		99	%	70 - 130
			1,2,4-Trichlorobenzene	2022/12/06		119	%	70 - 130
			Hexachlorobutadiene	2022/12/06		124	%	70 - 130
			Hexane	2022/12/06		102	%	70 - 130
			Naphthalene	2022/12/06		138 (1)	%	70 - 130
			Total Xylenes	2022/12/06		106	%	70 - 130
			1,1,1,2-Tetrachloroethane	2022/12/06		96	%	70 - 130
8387729	TIM	Method Blank	2-Propanone	2022/12/06	<0.10		ppbv	
			Bromochloromethane	2022/12/06		106	%	60 - 140
			D5-Chlorobenzene	2022/12/06		94	%	60 - 140
			Difluorobenzene	2022/12/06		103	%	60 - 140
			Vinyl Chloride	2022/12/06	<0.020		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2022/12/06	<0.10		ppbv	
			Methyl Isobutyl Ketone	2022/12/06	<0.10		ppbv	
			Methyl t-butyl ether (MTBE)	2022/12/06	<0.10		ppbv	
			1,1-Dichloroethylene	2022/12/06	<0.050		ppbv	
			cis-1,2-Dichloroethylene	2022/12/06	<0.050		ppbv	
			trans-1,2-Dichloroethylene	2022/12/06	<0.10		ppbv	
			Methylene Chloride(Dichloromethane)	2022/12/06	<0.050		ppbv	
			Chloroform	2022/12/06	<0.040		ppbv	
			Carbon Tetrachloride	2022/12/06	<0.050		ppbv	
			1,1-Dichloroethane	2022/12/06	<0.050		ppbv	
			1,2-Dichloroethane	2022/12/06	<0.010		ppbv	
			Ethylene Dibromide	2022/12/06	<0.010		ppbv	
			1,1,1-Trichloroethane	2022/12/06	<0.050		ppbv	
			1,1,2-Trichloroethane	2022/12/06	<0.012		ppbv	
			1,1,2,2-Tetrachloroethane	2022/12/06	<0.0027		ppbv	
			cis-1,3-Dichloropropene	2022/12/06	<0.050		ppbv	
			trans-1,3-Dichloropropene	2022/12/06	<0.050		ppbv	
			1,2-Dichloropropane	2022/12/06	<0.050		ppbv	
			Bromomethane	2022/12/06	<0.050		ppbv	

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Bromoform	2022/12/06	<0.10		ppbv	
			Trichloroethylene	2022/12/06	<0.050		ppbv	
			Tetrachloroethylene	2022/12/06	<0.050		ppbv	
			Benzene	2022/12/06	<0.050		ppbv	
			Toluene	2022/12/06	<0.050		ppbv	
			Ethylbenzene	2022/12/06	<0.050		ppbv	
			p+m-Xylene	2022/12/06	<0.10		ppbv	
			o-Xylene	2022/12/06	<0.050		ppbv	
			Styrene	2022/12/06	<0.050		ppbv	
			Chlorobenzene	2022/12/06	<0.050		ppbv	
			1,4-Dichlorobenzene	2022/12/06	<0.050		ppbv	
			1,2-Dichlorobenzene	2022/12/06	<0.050		ppbv	
			1,2,4-Trichlorobenzene	2022/12/06	<0.10		ppbv	
			Hexachlorobutadiene	2022/12/06	<0.0047		ppbv	
			Hexane	2022/12/06	<0.10		ppbv	
			Naphthalene	2022/12/06	<0.10		ppbv	
			Total Xylenes	2022/12/06	<0.15		ppbv	
			1,1,1,2-Tetrachloroethane	2022/12/06	<0.021		ppbv	
8387729	TIM	RPD [ULY435-01]	2-Propanone	2022/12/06	NC		%	N/A
			Vinyl Chloride	2022/12/06	NC		%	25
			Methyl Ethyl Ketone (2-Butanone)	2022/12/06	2.5		%	25
			Methyl Isobutyl Ketone	2022/12/06	NC		%	25
			Methyl t-butyl ether (MTBE)	2022/12/06	NC		%	25
			1,1-Dichloroethylene	2022/12/06	NC		%	25
			cis-1,2-Dichloroethylene	2022/12/06	NC		%	25
			trans-1,2-Dichloroethylene	2022/12/06	NC		%	25
			Methylene Chloride(Dichloromethane)	2022/12/06	8.3		%	25
			Chloroform	2022/12/06	NC		%	25
			Carbon Tetrachloride	2022/12/06	2.0		%	25
			1,1-Dichloroethane	2022/12/06	NC		%	25
			1,2-Dichloroethane	2022/12/06	4.3		%	25
			Ethylene Dibromide	2022/12/06	NC		%	25
			1,1,1-Trichloroethane	2022/12/06	NC		%	25
			1,1,2-Trichloroethane	2022/12/06	NC		%	25
			1,1,2,2-Tetrachloroethane	2022/12/06	NC		%	25
			cis-1,3-Dichloropropene	2022/12/06	NC		%	25
			trans-1,3-Dichloropropene	2022/12/06	NC		%	25
			1,2-Dichloropropane	2022/12/06	NC		%	25
			Bromomethane	2022/12/06	NC		%	25
			Bromoform	2022/12/06	NC		%	25
			Trichloroethylene	2022/12/06	NC		%	25
			Tetrachloroethylene	2022/12/06	NC		%	25
			Benzene	2022/12/06	1.3		%	25
			Toluene	2022/12/06	1.2		%	25
			Ethylbenzene	2022/12/06	NC		%	25
			p+m-Xylene	2022/12/06	0.72		%	25
			o-Xylene	2022/12/06	1.7		%	25
			Styrene	2022/12/06	NC		%	25
			Chlorobenzene	2022/12/06	NC		%	25
			1,4-Dichlorobenzene	2022/12/06	NC		%	25
			1,2-Dichlorobenzene	2022/12/06	NC		%	25

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,2,4-Trichlorobenzene	2022/12/06	NC		%	25
			Hexachlorobutadiene	2022/12/06	NC		%	25
			Hexane	2022/12/06	1.7		%	25
			Naphthalene	2022/12/06	NC		%	25
			Total Xylenes	2022/12/06	0.028		%	25
			1,1,1,2-Tetrachloroethane	2022/12/06	NC		%	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C2Z4083
Report Date: 2022/12/07

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Your P.O. #: C02600346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Yujie Yan

Yujie Yan, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Your P.O. #: C026200346
Your Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/23
Report #: R7519742
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C338603
Received: 2023/02/09, 13:30

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/02/13	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/02/13	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/02/13	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

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Your P.O. #: C026200346
Your Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/02/23
Report #: R7519742
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C338603
Received: 2023/02/09, 13:30

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VAD079		
Sampling Date		2023/01/26		
COC Number		NA		
	UNITS	**CRAWFORD VOC-JAN.26**	**RDL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	0	N/A	8501100
2-Propanone	ppbv	0.76	0.13	8501098
Dichlorodifluoromethane (FREON 12)	ppbv	0.53	0.20	8501096
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8501096
Chloromethane	ppbv	0.46	0.30	8501096
Vinyl Chloride	ppbv	<0.020	0.020	8501098
Chloroethane	ppbv	<0.30	0.30	8501096
1,3-Butadiene	ppbv	<0.50	0.50	8501096
Trichlorofluoromethane (FREON 11)	ppbv	0.28	0.20	8501096
Ethanol (ethyl alcohol)	ppbv	<1.0	1.0	8501096
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8501096
2-propanol	ppbv	<1.0	1.0	8501096
Methyl Ethyl Ketone (2-Butanone)	ppbv	<0.10	0.10	8501098
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8501098
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8501096
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8501098
Ethyl Acetate	ppbv	<1.0	1.0	8501096
1,1-Dichloroethylene	ppbv	<0.050	0.050	8501098
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8501098
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8501098
Methylene Chloride(Dichloromethane)	ppbv	0.146	0.050	8501098
Chloroform	ppbv	<0.040	0.040	8501098
Carbon Tetrachloride	ppbv	0.118	0.050	8501098
1,1-Dichloroethane	ppbv	<0.050	0.050	8501098
1,2-Dichloroethane	ppbv	0.021	0.010	8501098
Ethylene Dibromide	ppbv	<0.010	0.010	8501098
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8501098
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8501098
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8501098

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VAD079		
Sampling Date		2023/01/26		
COC Number		NA		
	UNITS	**CRAWFORD VOC-JAN.26**	**RDL**	**QC Batch**
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8501098
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8501098
1,2-Dichloropropane	ppbv	<0.050	0.050	8501098
Bromomethane	ppbv	<0.050	0.050	8501098
Bromoform	ppbv	<0.10	0.10	8501098
Bromodichloromethane	ppbv	<0.20	0.20	8501096
Dibromochloromethane	ppbv	<0.20	0.20	8501096
Trichloroethylene	ppbv	<0.050	0.050	8501098
Tetrachloroethylene	ppbv	<0.050	0.050	8501098
Benzene	ppbv	0.132	0.050	8501098
Toluene	ppbv	0.062	0.050	8501098
Ethylbenzene	ppbv	<0.050	0.050	8501098
p+m-Xylene	ppbv	<0.10	0.10	8501098
o-Xylene	ppbv	<0.050	0.050	8501098
Styrene	ppbv	<0.050	0.050	8501098
4-ethyltoluene	ppbv	<0.50	0.50	8501096
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8501096
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8501096
Chlorobenzene	ppbv	<0.050	0.050	8501098
Benzyl chloride	ppbv	<0.50	0.50	8501096
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8501096
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8501098
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8501098
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8501098
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8501098
Hexane	ppbv	<0.10	0.10	8501098
Heptane	ppbv	<0.30	0.30	8501096
Cyclohexane	ppbv	<0.20	0.20	8501096
Tetrahydrofuran	ppbv	<0.40	0.40	8501096
1,4-Dioxane	ppbv	<1.0	1.0	8501096
Naphthalene	ppbv	<0.10	0.10	8501098

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C338603
Report Date: 2023/02/23

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VAD079		
Sampling Date		2023/01/26		
COC Number		NA		
	UNITS	**CRAWFORD VOC-JAN.26**	**RDL**	**QC Batch**
Total Xylenes	ppbv	<0.15	0.15	8501098
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8501098
Vinyl Bromide	ppbv	<0.20	0.20	8501096
Propene	ppbv	<0.50	0.50	8501096
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8501096
Carbon Disulfide	ppbv	<0.50	0.50	8501096
Vinyl Acetate	ppbv	<0.20	0.20	8501096
Surrogate Recovery (%)				
Bromochloromethane	%	96	N/A	8501098
D5-Chlorobenzene	%	88	N/A	8501098
Difluorobenzene	%	86	N/A	8501098
Bromochloromethane	%	96	N/A	8501096
D5-Chlorobenzene	%	88	N/A	8501096
Difluorobenzene	%	86	N/A	8501096

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas Job #: C338603
Report Date: 2023/02/23

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VAD079
Sample ID: CRAWFORD VOC- JAN.26
Matrix: Air

Collected: 2023/01/26
Shipped:
Received: 2023/02/09

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8501100	N/A	2023/02/13	Pratima Patel
Volatile Organics in Air by GC/MS/SIM	GC/MS	8501098	N/A	2023/02/13	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8501096	N/A	2023/02/13	Pratima Patel

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Bureau Veritas Job #: C338603
Report Date: 2023/02/23

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8501096	Bromochloromethane	2023/02/13	107	60 - 140	107	%		
8501096	D5-Chlorobenzene	2023/02/13	110	60 - 140	95	%		
8501096	Difluorobenzene	2023/02/13	111	60 - 140	96	%		
8501098	Bromochloromethane	2023/02/13	107	60 - 140	107	%		
8501098	D5-Chlorobenzene	2023/02/13	110	60 - 140	95	%		
8501098	Difluorobenzene	2023/02/13	111	60 - 140	96	%		
8501096	1,2,4-Trimethylbenzene	2023/02/13	90	70 - 130	<0.50	ppbv	NC (1)	25
8501096	1,2-Dichlorotetrafluoroethane	2023/02/13	89	70 - 130	<0.17	ppbv	NC (1)	25
8501096	1,3,5-Trimethylbenzene	2023/02/13	91	70 - 130	<0.50	ppbv	NC (1)	25
8501096	1,3-Butadiene	2023/02/13	101	70 - 130	<0.50	ppbv	NC (1)	25
8501096	1,3-Dichlorobenzene	2023/02/13	84	70 - 130	<0.40	ppbv	NC (1)	25
8501096	1,4-Dioxane	2023/02/13	96	70 - 130	<1.0	ppbv	NC (1)	25
8501096	2,2,4-Trimethylpentane	2023/02/13	99	70 - 130	<0.20	ppbv	NC (1)	25
8501096	2-propanol	2023/02/13	93	70 - 130	<1.0	ppbv	0.94 (1)	25
8501096	4-ethyltoluene	2023/02/13	90	70 - 130	<0.50	ppbv	NC (1)	25
8501096	Benzyl chloride	2023/02/13	107	70 - 130	<0.50	ppbv	NC (1)	25
8501096	Bromodichloromethane	2023/02/13	84	70 - 130	<0.20	ppbv	0.41 (1)	25
8501096	Carbon Disulfide	2023/02/13	91	70 - 130	<0.50	ppbv	NC (1)	25
8501096	Chloroethane	2023/02/13	101	70 - 130	<0.30	ppbv	NC (1)	25
8501096	Chloromethane	2023/02/13	97	70 - 130	<0.30	ppbv	2.9 (1)	25
8501096	Cyclohexane	2023/02/13	97	70 - 130	<0.20	ppbv	NC (1)	25
8501096	Dibromochloromethane	2023/02/13	90	70 - 130	<0.20	ppbv	NC (1)	25
8501096	Dichlorodifluoromethane (FREON 12)	2023/02/13	92	70 - 130	<0.20	ppbv	0.38 (1)	25
8501096	Ethanol (ethyl alcohol)	2023/02/13	96	70 - 130	<1.0	ppbv	2.5 (1)	25
8501096	Ethyl Acetate	2023/02/13	97	70 - 130	<1.0	ppbv	NC (1)	25
8501096	Heptane	2023/02/13	96	70 - 130	<0.30	ppbv	NC (1)	25
8501096	Methyl Butyl Ketone (2-Hexanone)	2023/02/13	93	70 - 130	<1.0	ppbv	NC (1)	25
8501096	Propene	2023/02/13	96	70 - 130	<0.50	ppbv	NC (1)	25
8501096	Tetrahydrofuran	2023/02/13	98	70 - 130	<0.40	ppbv	2.8 (1)	25
8501096	Trichlorofluoromethane (FREON 11)	2023/02/13	86	70 - 130	<0.20	ppbv	0.40 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8501096	Trichlorotrifluoroethane	2023/02/13	88	70 - 130	<0.15	ppbv	NC (1)	25
8501096	Vinyl Acetate	2023/02/13	97	70 - 130	<0.20	ppbv	NC (1)	25
8501096	Vinyl Bromide	2023/02/13	87	70 - 130	<0.20	ppbv	NC (1)	25
8501098	1,1,1,2-Tetrachloroethane	2023/02/13	93	70 - 130	<0.021	ppbv	NC (1)	25
8501098	1,1,1-Trichloroethane	2023/02/13	86	70 - 130	<0.050	ppbv	0.76 (1)	25
8501098	1,1,2,2-Tetrachloroethane	2023/02/13	83	70 - 130	<0.0027	ppbv	NC (1)	25
8501098	1,1,2-Trichloroethane	2023/02/13	91	70 - 130	<0.012	ppbv	NC (1)	25
8501098	1,1-Dichloroethane	2023/02/13	87	70 - 130	<0.050	ppbv	NC (1)	25
8501098	1,1-Dichloroethylene	2023/02/13	85	70 - 130	<0.050	ppbv	NC (1)	25
8501098	1,2,4-Trichlorobenzene	2023/02/13	71	70 - 130	<0.10	ppbv	NC (1)	25
8501098	1,2-Dichlorobenzene	2023/02/13	80	70 - 130	<0.050	ppbv	NC (1)	25
8501098	1,2-Dichloroethane	2023/02/13	88	70 - 130	<0.010	ppbv	3.4 (1)	25
8501098	1,2-Dichloropropane	2023/02/13	92	70 - 130	<0.050	ppbv	NC (1)	25
8501098	1,4-Dichlorobenzene	2023/02/13	84	70 - 130	<0.050	ppbv	NC (1)	25
8501098	2-Propanone	2023/02/13	96	70 - 130	<0.13	ppbv	NC (1)	N/A
8501098	Benzene	2023/02/13	93	70 - 130	<0.050	ppbv	1.7 (1)	25
8501098	Bromoform	2023/02/13	90	70 - 130	<0.10	ppbv	NC (1)	25
8501098	Bromomethane	2023/02/13	90	70 - 130	<0.050	ppbv	NC (1)	25
8501098	Carbon Tetrachloride	2023/02/13	89	70 - 130	<0.050	ppbv	1.7 (1)	25
8501098	Chlorobenzene	2023/02/13	90	70 - 130	<0.050	ppbv	NC (1)	25
8501098	Chloroform	2023/02/13	90	70 - 130	<0.040	ppbv	2.6 (1)	25
8501098	cis-1,2-Dichloroethylene	2023/02/13	89	70 - 130	<0.050	ppbv	3.2 (1)	25
8501098	cis-1,3-Dichloropropene	2023/02/13	93	70 - 130	<0.050	ppbv	NC (1)	25
8501098	Ethylbenzene	2023/02/13	95	70 - 130	<0.050	ppbv	NC (1)	25
8501098	Ethylene Dibromide	2023/02/13	91	70 - 130	<0.010	ppbv	NC (1)	25
8501098	Hexachlorobutadiene	2023/02/13	62 (2)	70 - 130	<0.0047	ppbv	NC (1)	25
8501098	Hexane	2023/02/13	90	70 - 130	<0.10	ppbv	NC (1)	25
8501098	Methyl Ethyl Ketone (2-Butanone)	2023/02/13	93	70 - 130	<0.10	ppbv	2.3 (1)	25
8501098	Methyl Isobutyl Ketone	2023/02/13	92	70 - 130	<0.10	ppbv	NC (1)	25
8501098	Methyl t-butyl ether (MTBE)	2023/02/13	85	70 - 130	<0.10	ppbv	NC (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8501098	Methylene Chloride(Dichloromethane)	2023/02/13	105	70 - 130	<0.050	ppbv	1.7 (1)	25
8501098	Naphthalene	2023/02/13	77	70 - 130	<0.10	ppbv	NC (1)	25
8501098	o-Xylene	2023/02/13	90	70 - 130	<0.050	ppbv	NC (1)	25
8501098	p+m-Xylene	2023/02/13	94	70 - 130	<0.10	ppbv	NC (1)	25
8501098	Styrene	2023/02/13	92	70 - 130	<0.050	ppbv	NC (1)	25
8501098	Tetrachloroethylene	2023/02/13	92	70 - 130	<0.050	ppbv	NC (1)	25
8501098	Toluene	2023/02/13	94	70 - 130	<0.050	ppbv	0.60 (1)	25
8501098	Total Xylenes	2023/02/13	93	70 - 130	<0.15	ppbv	NC (1)	25
8501098	trans-1,2-Dichloroethylene	2023/02/13	89	70 - 130	<0.10	ppbv	NC (1)	25
8501098	trans-1,3-Dichloropropene	2023/02/13	101	70 - 130	<0.050	ppbv	NC (1)	25
8501098	Trichloroethylene	2023/02/13	93	70 - 130	<0.050	ppbv	1.7 (1)	25
8501098	Vinyl Chloride	2023/02/13	98	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

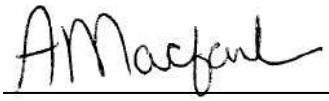
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Bureau Veritas Job #: C338603
Report Date: 2023/02/23

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anke Macfarlane, Laboratory Manager, VOC

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

CAM FCD-01302 /3

BUREAU VERITAS

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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC - Jan.26	SX1903	FX760	26-Jan-23	24hr	-27.5	-1	X	X

09-Feb-23 13:30
Gina Baybayan
C338603
BSU AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation: WSP
Date/Time: 9-Feb-23

Received by: Bamisha Suman
Affiliation:
Date/Time: 2023/02/09 13:30

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Your P.O. #: C026200346
Your Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/03
Report #: R7531031
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C347704
Received: 2023/02/17, 09:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/03/01	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/03/01	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/03/01	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

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Your P.O. #: C026200346
Your Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/03/03
Report #: R7531031
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C347704
Received: 2023/02/17, 09:00

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email: Marinela.Sim@bureauveritas.com
Phone# (905)817-5828

==========

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VBZ227		
Sampling Date		2023/02/08		
COC Number		NA		
	UNITS	**CRAWFORD VOC-FEB.8**	**RDL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	(-2.5)	N/A	8528326
2-Propanone	ppbv	0.69	0.10	8528324
Dichlorodifluoromethane (FREON 12)	ppbv	0.49	0.20	8528319
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8528319
Chloromethane	ppbv	0.42	0.30	8528319
Vinyl Chloride	ppbv	<0.020	0.020	8528324
Chloroethane	ppbv	<0.30	0.30	8528319
1,3-Butadiene	ppbv	<0.50	0.50	8528319
Trichlorofluoromethane (FREON 11)	ppbv	0.28	0.20	8528319
Ethanol (ethyl alcohol)	ppbv	<1.0	1.0	8528319
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8528319
2-propanol	ppbv	<1.0	1.0	8528319
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.15	0.10	8528324
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8528324
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8528319
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8528324
Ethyl Acetate	ppbv	<1.0	1.0	8528319
1,1-Dichloroethylene	ppbv	<0.050	0.050	8528324
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8528324
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8528324
Methylene Chloride(Dichloromethane)	ppbv	0.127	0.050	8528324
Chloroform	ppbv	<0.040	0.040	8528324
Carbon Tetrachloride	ppbv	0.121	0.050	8528324
1,1-Dichloroethane	ppbv	<0.050	0.050	8528324
1,2-Dichloroethane	ppbv	0.022	0.010	8528324
Ethylene Dibromide	ppbv	<0.010	0.010	8528324
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8528324
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8528324
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8528324
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8528324

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VBZ227		
Sampling Date		2023/02/08		
COC Number		NA		
	UNITS	CRAWFORD VOC-FEB.8	RDL	QC Batch
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8528324
1,2-Dichloropropane	ppbv	<0.050	0.050	8528324
Bromomethane	ppbv	<0.050	0.050	8528324
Bromoform	ppbv	<0.10	0.10	8528324
Bromodichloromethane	ppbv	<0.20	0.20	8528319
Dibromochloromethane	ppbv	<0.20	0.20	8528319
Trichloroethylene	ppbv	<0.050	0.050	8528324
Tetrachloroethylene	ppbv	<0.050	0.050	8528324
Benzene	ppbv	0.135	0.050	8528324
Toluene	ppbv	0.174	0.050	8528324
Ethylbenzene	ppbv	<0.050	0.050	8528324
p+m-Xylene	ppbv	<0.10	0.10	8528324
o-Xylene	ppbv	<0.050	0.050	8528324
Styrene	ppbv	<0.050	0.050	8528324
4-ethyltoluene	ppbv	<0.50	0.50	8528319
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8528319
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8528319
Chlorobenzene	ppbv	<0.050	0.050	8528324
Benzyl chloride	ppbv	<0.50	0.50	8528319
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8528319
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8528324
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8528324
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8528324
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8528324
Hexane	ppbv	<0.10	0.10	8528324
Heptane	ppbv	<0.30	0.30	8528319
Cyclohexane	ppbv	<0.20	0.20	8528319
Tetrahydrofuran	ppbv	<0.40	0.40	8528319
1,4-Dioxane	ppbv	<1.0	1.0	8528319
Naphthalene	ppbv	<0.10	0.10	8528324
Total Xylenes	ppbv	<0.15	0.15	8528324
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8528324

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C347704
Report Date: 2023/03/03

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VBZ227		
Sampling Date		2023/02/08		
COC Number		NA		
	UNITS	**CRAWFORD VOC-FEB.8**	**RDL**	**QC Batch**
Vinyl Bromide	ppbv	<0.20	0.20	8528319
Propene	ppbv	<0.50	0.50	8528319
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8528319
Carbon Disulfide	ppbv	<0.50	0.50	8528319
Vinyl Acetate	ppbv	<0.20	0.20	8528319
Surrogate Recovery (%)				
Bromochloromethane	%	90	N/A	8528324
D5-Chlorobenzene	%	77	N/A	8528324
Difluorobenzene	%	75	N/A	8528324
Bromochloromethane	%	90	N/A	8528319
D5-Chlorobenzene	%	77	N/A	8528319
Difluorobenzene	%	75	N/A	8528319

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C347704
Report Date: 2023/03/03

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VBZ227
Sample ID: CRAWFORD VOC-FEB.8
Matrix: Air

Collected: 2023/02/08
Shipped:
Received: 2023/02/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8528326	N/A	2023/03/01	Pratima Patel
Volatile Organics in Air by GC/MS/SIM	GC/MS	8528324	N/A	2023/03/01	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8528319	N/A	2023/03/01	Pratima Patel

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Bureau Veritas Job #: C347704
Report Date: 2023/03/03

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8528319	Bromochloromethane	2023/03/01	104	60 - 140	104	%		
8528319	D5-Chlorobenzene	2023/03/01	107	60 - 140	88	%		
8528319	Difluorobenzene	2023/03/01	110	60 - 140	91	%		
8528324	Bromochloromethane	2023/03/01	104	60 - 140	104	%		
8528324	D5-Chlorobenzene	2023/03/01	107	60 - 140	88	%		
8528324	Difluorobenzene	2023/03/01	110	60 - 140	91	%		
8528319	1,2,4-Trimethylbenzene	2023/03/01	99	70 - 130	<0.50	ppbv	NC (1)	25
8528319	1,2-Dichlorotetrafluoroethane	2023/03/01	91	70 - 130	<0.17	ppbv	NC (1)	25
8528319	1,3,5-Trimethylbenzene	2023/03/01	97	70 - 130	<0.50	ppbv	NC (1)	25
8528319	1,3-Butadiene	2023/03/01	99	70 - 130	<0.50	ppbv	NC (1)	25
8528319	1,3-Dichlorobenzene	2023/03/01	92	70 - 130	<0.40	ppbv	NC (1)	25
8528319	1,4-Dioxane	2023/03/01	96	70 - 130	<1.0	ppbv	NC (1)	25
8528319	2,2,4-Trimethylpentane	2023/03/01	96	70 - 130	<0.20	ppbv	NC (1)	25
8528319	2-propanol	2023/03/01	89	70 - 130	<1.0	ppbv	NC (1)	25
8528319	4-ethyltoluene	2023/03/01	99	70 - 130	<0.50	ppbv	NC (1)	25
8528319	Benzyl chloride	2023/03/01	100	70 - 130	<0.50	ppbv	NC (1)	25
8528319	Bromodichloromethane	2023/03/01	80	70 - 130	<0.20	ppbv	NC (1)	25
8528319	Carbon Disulfide	2023/03/01	91	70 - 130	<0.50	ppbv	NC (1)	25
8528319	Chloroethane	2023/03/01	99	70 - 130	<0.30	ppbv	NC (1)	25
8528319	Chloromethane	2023/03/01	97	70 - 130	<0.30	ppbv	NC (1)	25
8528319	Cyclohexane	2023/03/01	98	70 - 130	<0.20	ppbv	NC (1)	25
8528319	Dibromochloromethane	2023/03/01	87	70 - 130	<0.20	ppbv	NC (1)	25
8528319	Dichlorodifluoromethane (FREON 12)	2023/03/01	93	70 - 130	<0.20	ppbv	3.0 (1)	25
8528319	Ethanol (ethyl alcohol)	2023/03/01	87	70 - 130	<1.0	ppbv	3.3 (1)	25
8528319	Ethyl Acetate	2023/03/01	102	70 - 130	<1.0	ppbv	NC (1)	25
8528319	Heptane	2023/03/01	99	70 - 130	<0.30	ppbv	1.7 (1)	25
8528319	Methyl Butyl Ketone (2-Hexanone)	2023/03/01	92	70 - 130	<1.0	ppbv	NC (1)	25
8528319	Propene	2023/03/01	102	70 - 130	<0.50	ppbv	NC (1)	25
8528319	Tetrahydrofuran	2023/03/01	106	70 - 130	<0.40	ppbv	NC (1)	25
8528319	Trichlorofluoromethane (FREON 11)	2023/03/01	86	70 - 130	<0.20	ppbv	0.49 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8528319	Trichlorotrifluoroethane	2023/03/01	93	70 - 130	<0.15	ppbv	NC (1)	25
8528319	Vinyl Acetate	2023/03/01	106	70 - 130	<0.20	ppbv	NC (1)	25
8528319	Vinyl Bromide	2023/03/01	86	70 - 130	<0.20	ppbv	NC (1)	25
8528324	1,1,1,2-Tetrachloroethane	2023/03/01	83	70 - 130	<0.021	ppbv	NC (1)	25
8528324	1,1,1-Trichloroethane	2023/03/01	81	70 - 130	<0.050	ppbv	NC (1)	25
8528324	1,1,2,2-Tetrachloroethane	2023/03/01	84	70 - 130	<0.0027	ppbv	NC (1)	25
8528324	1,1,2-Trichloroethane	2023/03/01	89	70 - 130	<0.012	ppbv	NC (1)	25
8528324	1,1-Dichloroethane	2023/03/01	90	70 - 130	<0.050	ppbv	NC (1)	25
8528324	1,1-Dichloroethylene	2023/03/01	94	70 - 130	<0.050	ppbv	NC (1)	25
8528324	1,2,4-Trichlorobenzene	2023/03/01	83	70 - 130	<0.10	ppbv	NC (1)	25
8528324	1,2-Dichlorobenzene	2023/03/01	86	70 - 130	<0.050	ppbv	NC (1)	25
8528324	1,2-Dichloroethane	2023/03/01	91	70 - 130	<0.010	ppbv	8.4 (1)	25
8528324	1,2-Dichloropropane	2023/03/01	90	70 - 130	<0.050	ppbv	NC (1)	25
8528324	1,4-Dichlorobenzene	2023/03/01	92	70 - 130	<0.050	ppbv	NC (1)	25
8528324	2-Propanone	2023/03/01	80	70 - 130	<0.10	ppbv	NC (1)	N/A
8528324	Benzene	2023/03/01	94	70 - 130	<0.050	ppbv	2.0 (1)	25
8528324	Bromoform	2023/03/01	90	70 - 130	<0.10	ppbv	NC (1)	25
8528324	Bromomethane	2023/03/01	89	70 - 130	<0.050	ppbv	NC (1)	25
8528324	Carbon Tetrachloride	2023/03/01	85	70 - 130	<0.050	ppbv	1.1 (1)	25
8528324	Chlorobenzene	2023/03/01	94	70 - 130	<0.050	ppbv	NC (1)	25
8528324	Chloroform	2023/03/01	94	70 - 130	<0.040	ppbv	NC (1)	25
8528324	cis-1,2-Dichloroethylene	2023/03/01	97	70 - 130	<0.050	ppbv	NC (1)	25
8528324	cis-1,3-Dichloropropene	2023/03/01	93	70 - 130	<0.050	ppbv	NC (1)	25
8528324	Ethylbenzene	2023/03/01	104	70 - 130	<0.050	ppbv	NC (1)	25
8528324	Ethylene Dibromide	2023/03/01	91	70 - 130	<0.010	ppbv	NC (1)	25
8528324	Hexachlorobutadiene	2023/03/01	64 (2)	70 - 130	<0.0047	ppbv	NC (1)	25
8528324	Hexane	2023/03/01	99	70 - 130	<0.10	ppbv	NC (1)	25
8528324	Methyl Ethyl Ketone (2-Butanone)	2023/03/01	98	70 - 130	<0.10	ppbv	2.1 (1)	25
8528324	Methyl Isobutyl Ketone	2023/03/01	91	70 - 130	<0.10	ppbv	NC (1)	25
8528324	Methyl t-butyl ether (MTBE)	2023/03/01	91	70 - 130	<0.10	ppbv	NC (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8528324	Methylene Chloride(Dichloromethane)	2023/03/01	89	70 - 130	<0.050	ppbv	5.4 (1)	25
8528324	Naphthalene	2023/03/01	97	70 - 130	<0.10	ppbv	NC (1)	25
8528324	o-Xylene	2023/03/01	93	70 - 130	<0.050	ppbv	NC (1)	25
8528324	p+m-Xylene	2023/03/01	103	70 - 130	<0.10	ppbv	NC (1)	25
8528324	Styrene	2023/03/01	101	70 - 130	<0.050	ppbv	NC (1)	25
8528324	Tetrachloroethylene	2023/03/01	92	70 - 130	<0.050	ppbv	NC (1)	25
8528324	Toluene	2023/03/01	99	70 - 130	<0.050	ppbv	2.1 (1)	25
8528324	Total Xylenes	2023/03/01	100	70 - 130	<0.15	ppbv	NC (1)	25
8528324	trans-1,2-Dichloroethylene	2023/03/01	93	70 - 130	<0.10	ppbv	1.4 (1)	25
8528324	trans-1,3-Dichloropropene	2023/03/01	102	70 - 130	<0.050	ppbv	NC (1)	25
8528324	Trichloroethylene	2023/03/01	93	70 - 130	<0.050	ppbv	NC (1)	25
8528324	Vinyl Chloride	2023/03/01	95	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Bureau Veritas Job #: C347704
Report Date: 2023/03/03

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

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CAM FCD-01302 /3

BUREAU VERITAS

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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC - Feb. 8	SX0132	FX0141	Feb. 8, 2023	24hr	-27.5	-1	X	X

17-Feb-23 09:00
Gina Baybayan
C347704
BSU AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature:
Affiliation: WSP
Date/Time: Feb. 16, 2023

Received by: Bernisha Suman
Affiliation:
Date/Time: 2023/02/17 09:10

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Your P.O. #: C026200346
Your Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/04/28
Report #: R7606750
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3A6055
Received: 2023/04/17, 08:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/04/19	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/04/19	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/04/19	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

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(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Marinela Sim, Project Manager
Email:
Phone# (905)817-5828

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VOG531	VOG531		
Sampling Date		2023/04/04	2023/04/04		
COC Number		na	na		
	UNITS	CRAWFORD VOC-APRIL 4/2926	CRAWFORD VOC-APRIL 4/2926 Lab-Dup	RDL	QC Batch
Volatile Organics					
Pressure on Receipt	psig	(-2.0)	N/A	N/A	8616129
2-Propanone	ppbv	6.51	6.67	0.10	8616126
Dichlorodifluoromethane (FREON 12)	ppbv	0.48	0.48	0.20	8616125
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	<0.17	0.17	8616125
Chloromethane	ppbv	0.53	0.55	0.30	8616125
Vinyl Chloride	ppbv	<0.020	<0.020	0.020	8616126
Chloroethane	ppbv	<0.30	<0.30	0.30	8616125
1,3-Butadiene	ppbv	<0.50	<0.50	0.50	8616125
Trichlorofluoromethane (FREON 11)	ppbv	0.27	0.28	0.20	8616125
Ethanol (ethyl alcohol)	ppbv	4.2	4.2	1.0	8616125
Trichlorotrifluoroethane	ppbv	<0.15	<0.15	0.15	8616125
2-propanol	ppbv	<1.0	<1.0	1.0	8616125
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.38	0.38	0.10	8616126
Methyl Isobutyl Ketone	ppbv	<0.10	<0.10	0.10	8616126
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	<1.0	1.0	8616125
Methyl t-butyl ether (MTBE)	ppbv	<0.10	<0.10	0.10	8616126
Ethyl Acetate	ppbv	<1.0	<1.0	1.0	8616125
1,1-Dichloroethylene	ppbv	<0.050	<0.050	0.050	8616126
cis-1,2-Dichloroethylene	ppbv	<0.050	<0.050	0.050	8616126
trans-1,2-Dichloroethylene	ppbv	<0.10	<0.10	0.10	8616126
Methylene Chloride(Dichloromethane)	ppbv	0.209	0.221	0.050	8616126
Chloroform	ppbv	<0.040	<0.040	0.040	8616126
Carbon Tetrachloride	ppbv	0.110	0.116	0.050	8616126
1,1-Dichloroethane	ppbv	<0.050	<0.050	0.050	8616126
1,2-Dichloroethane	ppbv	0.028	0.028	0.010	8616126
Ethylene Dibromide	ppbv	<0.010	<0.010	0.010	8616126
1,1,1-Trichloroethane	ppbv	<0.050	<0.050	0.050	8616126

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VOG531	VOG531		
Sampling Date		2023/04/04	2023/04/04		
COC Number		na	na		
	UNITS	CRAWFORD VOC-APRIL 4/2926	CRAWFORD VOC-APRIL 4/2926 Lab-Dup	RDL	QC Batch
1,1,2-Trichloroethane	ppbv	<0.012	<0.012	0.012	8616126
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	<0.0027	0.0027	8616126
cis-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	8616126
trans-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	8616126
1,2-Dichloropropane	ppbv	<0.050	<0.050	0.050	8616126
Bromomethane	ppbv	<0.050	<0.050	0.050	8616126
Bromoform	ppbv	<0.10	<0.10	0.10	8616126
Bromodichloromethane	ppbv	<0.20	<0.20	0.20	8616125
Dibromochloromethane	ppbv	<0.20	<0.20	0.20	8616125
Trichloroethylene	ppbv	<0.050	<0.050	0.050	8616126
Tetrachloroethylene	ppbv	<0.050	<0.050	0.050	8616126
Benzene	ppbv	0.180	0.183	0.050	8616126
Toluene	ppbv	1.10	1.11	0.050	8616126
Ethylbenzene	ppbv	0.089	0.088	0.050	8616126
p+m-Xylene	ppbv	0.28	0.28	0.10	8616126
o-Xylene	ppbv	0.090	0.093	0.050	8616126
Styrene	ppbv	<0.050	<0.050	0.050	8616126
4-ethyltoluene	ppbv	<0.50	<0.50	0.50	8616125
1,3,5-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	8616125
1,2,4-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	8616125
Chlorobenzene	ppbv	<0.050	<0.050	0.050	8616126
Benzyl chloride	ppbv	<0.50	<0.50	0.50	8616125
1,3-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	8616125
1,4-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	8616126
1,2-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	8616126
1,2,4-Trichlorobenzene	ppbv	<0.10	<0.10	0.10	8616126
Hexachlorobutadiene	ppbv	<0.0047	<0.0047	0.0047	8616126
Hexane	ppbv	0.14	0.15	0.10	8616126
Heptane	ppbv	<0.30	<0.30	0.30	8616125

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VOG531	VOG531		
Sampling Date		2023/04/04	2023/04/04		
COC Number		na	na		
	UNITS	**CRAWFORD VOC-APRIL 4/2926**	**CRAWFORD VOC-APRIL 4/2926 Lab-Dup**	**RDL**	**QC Batch**
Cyclohexane	ppbv	<0.20	<0.20	0.20	8616125
Tetrahydrofuran	ppbv	<0.40	<0.40	0.40	8616125
1,4-Dioxane	ppbv	<1.0	<1.0	1.0	8616125
Naphthalene	ppbv	<0.10	<0.10	0.10	8616126
Total Xylenes	ppbv	0.37	0.38	0.15	8616126
1,1,1,2-Tetrachloroethane	ppbv	<0.021	<0.021	0.021	8616126
Vinyl Bromide	ppbv	<0.20	<0.20	0.20	8616125
Propene	ppbv	<1.0	<1.0	1.0	8616125
2,2,4-Trimethylpentane	ppbv	<0.20	<0.20	0.20	8616125
Carbon Disulfide	ppbv	<0.50	<0.50	0.50	8616125
Vinyl Acetate	ppbv	<0.20	<0.20	0.20	8616125
Surrogate Recovery (%)					
Bromochloromethane	%	91	88	N/A	8616126
D5-Chlorobenzene	%	85	80	N/A	8616126
Difluorobenzene	%	82	78	N/A	8616126
Bromochloromethane	%	91	88	N/A	8616125
D5-Chlorobenzene	%	85	80	N/A	8616125
Difluorobenzene	%	82	78	N/A	8616125

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3A6055
Report Date: 2023/04/28

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VOG531
Sample ID: CRAWFORD VOC-APRIL 4/2926
Matrix: Air

Collected: 2023/04/04
Shipped:
Received: 2023/04/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8616129	N/A	2023/04/19	Pratima Patel
Volatile Organics in Air by GC/MS/SIM	GC/MS	8616126	N/A	2023/04/19	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8616125	N/A	2023/04/19	Pratima Patel

Bureau Veritas ID: VOG531 Dup
Sample ID: CRAWFORD VOC-APRIL 4/2926
Matrix: Air

Collected: 2023/04/04
Shipped:
Received: 2023/04/17

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organics in Air by GC/MS/SIM	GC/MS	8616126	N/A	2023/04/19	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8616125	N/A	2023/04/19	Pratima Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Sample VOG531 [CRAWFORD VOC-APRIL 4/2926] : Increased DL for propene due to interference from propane.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8616125	Bromochloromethane	2023/04/19	101	60 - 140	101	%		
8616125	D5-Chlorobenzene	2023/04/19	104	60 - 140	89	%		
8616125	Difluorobenzene	2023/04/19	104	60 - 140	92	%		
8616126	Bromochloromethane	2023/04/19	101	60 - 140	101	%		
8616126	D5-Chlorobenzene	2023/04/19	104	60 - 140	89	%		
8616126	Difluorobenzene	2023/04/19	104	60 - 140	92	%		
8616125	1,2,4-Trimethylbenzene	2023/04/19	101	70 - 130	<0.50	ppbv	NC (1)	25
8616125	1,2-Dichlorotetrafluoroethane	2023/04/19	87	70 - 130	<0.17	ppbv	NC (1)	25
8616125	1,3,5-Trimethylbenzene	2023/04/19	99	70 - 130	<0.50	ppbv	NC (1)	25
8616125	1,3-Butadiene	2023/04/19	98	70 - 130	<0.50	ppbv	NC (1)	25
8616125	1,3-Dichlorobenzene	2023/04/19	94	70 - 130	<0.40	ppbv	NC (1)	25
8616125	1,4-Dioxane	2023/04/19	101	70 - 130	<1.0	ppbv	NC (1)	25
8616125	2,2,4-Trimethylpentane	2023/04/19	98	70 - 130	<0.20	ppbv	NC (1)	25
8616125	2-propanol	2023/04/19	93	70 - 130	<1.0	ppbv	NC (1)	25
8616125	4-ethyltoluene	2023/04/19	105	70 - 130	<0.50	ppbv	NC (1)	25
8616125	Benzyl chloride	2023/04/19	114	70 - 130	<0.50	ppbv	NC (1)	25
8616125	Bromodichloromethane	2023/04/19	85	70 - 130	<0.20	ppbv	NC (1)	25
8616125	Carbon Disulfide	2023/04/19	94	70 - 130	<0.50	ppbv	NC (1)	25
8616125	Chloroethane	2023/04/19	96	70 - 130	<0.30	ppbv	NC (1)	25
8616125	Chloromethane	2023/04/19	92	70 - 130	<0.30	ppbv	4.5 (1)	25
8616125	Cyclohexane	2023/04/19	97	70 - 130	<0.20	ppbv	NC (1)	25
8616125	Dibromochloromethane	2023/04/19	93	70 - 130	<0.20	ppbv	NC (1)	25
8616125	Dichlorodifluoromethane (FREON 12)	2023/04/19	91	70 - 130	<0.20	ppbv	0.42 (1)	25
8616125	Ethanol (ethyl alcohol)	2023/04/19	91	70 - 130	<1.0	ppbv	1.8 (1)	25
8616125	Ethyl Acetate	2023/04/19	99	70 - 130	<1.0	ppbv	NC (1)	25
8616125	Heptane	2023/04/19	96	70 - 130	<0.30	ppbv	NC (1)	25
8616125	Methyl Butyl Ketone (2-Hexanone)	2023/04/19	92	70 - 130	<1.0	ppbv	NC (1)	25
8616125	Propene	2023/04/19	89	70 - 130	<0.50	ppbv	NC (1)	25
8616125	Tetrahydrofuran	2023/04/19	99	70 - 130	<0.40	ppbv	NC (1)	25
8616125	Trichlorofluoromethane (FREON 11)	2023/04/19	88	70 - 130	<0.20	ppbv	2.6 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8616125	Trichlorotrifluoroethane	2023/04/19	100	70 - 130	<0.15	ppbv	NC (1)	25
8616125	Vinyl Acetate	2023/04/19	100	70 - 130	<0.20	ppbv	NC (1)	25
8616125	Vinyl Bromide	2023/04/19	88	70 - 130	<0.20	ppbv	NC (1)	25
8616126	1,1,1,2-Tetrachloroethane	2023/04/19	98	70 - 130	<0.021	ppbv	NC (1)	25
8616126	1,1,1-Trichloroethane	2023/04/19	88	70 - 130	<0.050	ppbv	NC (1)	25
8616126	1,1,2,2-Tetrachloroethane	2023/04/19	88	70 - 130	<0.0027	ppbv	NC (1)	25
8616126	1,1,2-Trichloroethane	2023/04/19	93	70 - 130	<0.012	ppbv	NC (1)	25
8616126	1,1-Dichloroethane	2023/04/19	89	70 - 130	<0.050	ppbv	NC (1)	25
8616126	1,1-Dichloroethylene	2023/04/19	100	70 - 130	<0.050	ppbv	NC (1)	25
8616126	1,2,4-Trichlorobenzene	2023/04/19	92	70 - 130	<0.10	ppbv	NC (1)	25
8616126	1,2-Dichlorobenzene	2023/04/19	90	70 - 130	<0.050	ppbv	NC (1)	25
8616126	1,2-Dichloroethane	2023/04/19	90	70 - 130	<0.010	ppbv	1.6 (1)	25
8616126	1,2-Dichloropropane	2023/04/19	93	70 - 130	<0.050	ppbv	NC (1)	25
8616126	1,4-Dichlorobenzene	2023/04/19	94	70 - 130	<0.050	ppbv	NC (1)	25
8616126	2-Propanone	2023/04/19	97	70 - 130	<0.10	ppbv	NC (1)	N/A
8616126	Benzene	2023/04/19	97	70 - 130	<0.050	ppbv	1.4 (1)	25
8616126	Bromoform	2023/04/19	99	70 - 130	<0.10	ppbv	NC (1)	25
8616126	Bromomethane	2023/04/19	88	70 - 130	<0.050	ppbv	NC (1)	25
8616126	Carbon Tetrachloride	2023/04/19	94	70 - 130	<0.050	ppbv	5.2 (1)	25
8616126	Chlorobenzene	2023/04/19	98	70 - 130	<0.050	ppbv	NC (1)	25
8616126	Chloroform	2023/04/19	96	70 - 130	<0.040	ppbv	NC (1)	25
8616126	cis-1,2-Dichloroethylene	2023/04/19	95	70 - 130	<0.050	ppbv	NC (1)	25
8616126	cis-1,3-Dichloropropene	2023/04/19	96	70 - 130	<0.050	ppbv	NC (1)	25
8616126	Ethylbenzene	2023/04/19	104	70 - 130	<0.050	ppbv	0.27 (1)	25
8616126	Ethylene Dibromide	2023/04/19	94	70 - 130	<0.010	ppbv	NC (1)	25
8616126	Hexachlorobutadiene	2023/04/19	97	70 - 130	<0.0047	ppbv	NC (1)	25
8616126	Hexane	2023/04/19	96	70 - 130	<0.10	ppbv	4.5 (1)	25
8616126	Methyl Ethyl Ketone (2-Butanone)	2023/04/19	94	70 - 130	<0.10	ppbv	1.5 (1)	25
8616126	Methyl Isobutyl Ketone	2023/04/19	90	70 - 130	<0.10	ppbv	NC (1)	25
8616126	Methyl t-butyl ether (MTBE)	2023/04/19	89	70 - 130	<0.10	ppbv	NC (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8616126	Methylene Chloride(Dichloromethane)	2023/04/19	107	70 - 130	<0.050	ppbv	5.4 (1)	25
8616126	Naphthalene	2023/04/19	97	70 - 130	<0.10	ppbv	NC (1)	25
8616126	o-Xylene	2023/04/19	97	70 - 130	<0.050	ppbv	3.3 (1)	25
8616126	p+m-Xylene	2023/04/19	102	70 - 130	<0.10	ppbv	0.69 (1)	25
8616126	Styrene	2023/04/19	100	70 - 130	<0.050	ppbv	NC (1)	25
8616126	Tetrachloroethylene	2023/04/19	96	70 - 130	<0.050	ppbv	NC (1)	25
8616126	Toluene	2023/04/19	100	70 - 130	<0.050	ppbv	0.96 (1)	25
8616126	Total Xylenes	2023/04/19	100	70 - 130	<0.15	ppbv	0.28 (1)	25
8616126	trans-1,2-Dichloroethylene	2023/04/19	92	70 - 130	<0.10	ppbv	NC (1)	25
8616126	trans-1,3-Dichloropropene	2023/04/19	106	70 - 130	<0.050	ppbv	NC (1)	25
8616126	Trichloroethylene	2023/04/19	98	70 - 130	<0.050	ppbv	NC (1)	25
8616126	Vinyl Chloride	2023/04/19	97	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID [VOG531-01]

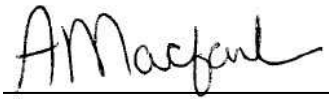
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Bureau Veritas Job #: C3A6055
Report Date: 2023/04/28

WSP E & I Canada Limited
Client Project #: OMEMA.2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anke Macfarlane, Laboratory Manager, VOC

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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BUREAU VERITAS

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Phone: (905) 817-5700
Fax: (905) 817-5777

CAM FCD-01302 /3

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7
Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

SECTION

ANALYSIS REQUESTED

17-Apr-23 08:00
Gina Baybayan
C3A6055
WKK AIR-001

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC - April 4	2926	FX416	04-Apr-23	24hr	-28	-2.5	X	X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 06-Apr-23

Received by: Paul Thorndyke Kane Kuhar
Affiliation:
Date/Time: 2023/04/17 8:50

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/05/02
Report #: R7611534
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3B0793
Received: 2023/04/20, 12:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/04/24	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/04/24	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/04/24	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCC, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/05/02
Report #: R7611534
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3B0793
Received: 2023/04/20, 12:00

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

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Bureau Veritas Job #: C3B0793
Report Date: 2023/05/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VPF070	VPF070		
Sampling Date		2023/04/11	2023/04/11		
COC Number		na	na		
	UNITS	CRAWFORD VOC-APRIL 11	CRAWFORD VOC-APRIL 11 Lab-Dup	RDL	QC Batch
Volatile Organics					
Pressure on Receipt	psig	(-3.0)	N/A	N/A	8624718
2-Propanone	ppbv	4.02	4.06	0.10	8624716
Dichlorodifluoromethane (FREON 12)	ppbv	0.50	0.49	0.20	8624715
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	<0.17	0.17	8624715
Chloromethane	ppbv	0.53	0.53	0.30	8624715
Vinyl Chloride	ppbv	<0.020	<0.020	0.020	8624716
Chloroethane	ppbv	<0.30	<0.30	0.30	8624715
1,3-Butadiene	ppbv	<0.50	<0.50	0.50	8624715
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.30	0.20	8624715
Ethanol (ethyl alcohol)	ppbv	4.2	4.1	1.0	8624715
Trichlorotrifluoroethane	ppbv	<0.15	<0.15	0.15	8624715
2-propanol	ppbv	<1.0	<1.0	1.0	8624715
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.28	0.27	0.10	8624716
Methyl Isobutyl Ketone	ppbv	<0.10	<0.10	0.10	8624716
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	<1.0	1.0	8624715
Methyl t-butyl ether (MTBE)	ppbv	<0.10	<0.10	0.10	8624716
Ethyl Acetate	ppbv	<1.0	<1.0	1.0	8624715
1,1-Dichloroethylene	ppbv	<0.050	<0.050	0.050	8624716
cis-1,2-Dichloroethylene	ppbv	<0.050	<0.050	0.050	8624716
trans-1,2-Dichloroethylene	ppbv	<0.10	<0.10	0.10	8624716
Methylene Chloride(Dichloromethane)	ppbv	0.225	0.229	0.050	8624716
Chloroform	ppbv	<0.040	<0.040	0.040	8624716
Carbon Tetrachloride	ppbv	0.136	0.137	0.050	8624716
1,1-Dichloroethane	ppbv	<0.050	<0.050	0.050	8624716
1,2-Dichloroethane	ppbv	0.027	0.028	0.010	8624716
Ethylene Dibromide	ppbv	<0.010	<0.010	0.010	8624716
1,1,1-Trichloroethane	ppbv	<0.050	<0.050	0.050	8624716
1,1,2-Trichloroethane	ppbv	<0.012	<0.012	0.012	8624716

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VPF070	VPF070		
Sampling Date		2023/04/11	2023/04/11		
COC Number		na	na		
	UNITS	**CRAWFORD VOC-APRIL 11**	**CRAWFORD VOC-APRIL 11 Lab-Dup**	**RDL**	**QC Batch**
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	<0.0027	0.0027	8624716
cis-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	8624716
trans-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	8624716
1,2-Dichloropropane	ppbv	<0.050	<0.050	0.050	8624716
Bromomethane	ppbv	<0.050	<0.050	0.050	8624716
Bromoform	ppbv	<0.10	<0.10	0.10	8624716
Bromodichloromethane	ppbv	<0.20	<0.20	0.20	8624715
Dibromochloromethane	ppbv	<0.20	<0.20	0.20	8624715
Trichloroethylene	ppbv	<0.050	<0.050	0.050	8624716
Tetrachloroethylene	ppbv	<0.050	<0.050	0.050	8624716
Benzene	ppbv	0.136	0.137	0.050	8624716
Toluene	ppbv	0.695	0.690	0.050	8624716
Ethylbenzene	ppbv	0.199	0.197	0.050	8624716
p+m-Xylene	ppbv	0.91	0.91	0.10	8624716
o-Xylene	ppbv	0.308	0.306	0.050	8624716
Styrene	ppbv	<0.050	<0.050	0.050	8624716
4-ethyltoluene	ppbv	<0.50	<0.50	0.50	8624715
1,3,5-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	8624715
1,2,4-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	8624715
Chlorobenzene	ppbv	<0.050	<0.050	0.050	8624716
Benzyl chloride	ppbv	<0.50	<0.50	0.50	8624715
1,3-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	8624715
1,4-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	8624716
1,2-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	8624716
1,2,4-Trichlorobenzene	ppbv	<0.10	<0.10	0.10	8624716
Hexachlorobutadiene	ppbv	<0.0047	<0.0047	0.0047	8624716
Hexane	ppbv	0.11	0.11	0.10	8624716
Heptane	ppbv	<0.30	<0.30	0.30	8624715
Cyclohexane	ppbv	<0.20	<0.20	0.20	8624715
Tetrahydrofuran	ppbv	<0.40	<0.40	0.40	8624715

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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Bureau Veritas Job #: C3B0793
Report Date: 2023/05/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VPF070	VPF070		
Sampling Date		2023/04/11	2023/04/11		
COC Number		na	na		
	UNITS	**CRAWFORD VOC-APRIL 11**	**CRAWFORD VOC-APRIL 11 Lab-Dup**	**RDL**	**QC Batch**
1,4-Dioxane	ppbv	<1.0	<1.0	1.0	8624715
Naphthalene	ppbv	<0.10	<0.10	0.10	8624716
Total Xylenes	ppbv	1.22	1.22	0.15	8624716
1,1,1,2-Tetrachloroethane	ppbv	<0.021	<0.021	0.021	8624716
Vinyl Bromide	ppbv	<0.20	<0.20	0.20	8624715
Propene	ppbv	<0.50	<0.50	0.50	8624715
2,2,4-Trimethylpentane	ppbv	<0.20	<0.20	0.20	8624715
Carbon Disulfide	ppbv	<0.50	<0.50	0.50	8624715
Vinyl Acetate	ppbv	<0.20	<0.20	0.20	8624715
Surrogate Recovery (%)					
Bromochloromethane	%	92	92	N/A	8624716
D5-Chlorobenzene	%	83	83	N/A	8624716
Difluorobenzene	%	81	81	N/A	8624716
Bromochloromethane	%	92	92	N/A	8624715
D5-Chlorobenzene	%	83	83	N/A	8624715
Difluorobenzene	%	81	81	N/A	8624715

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3B0793
Report Date: 2023/05/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VPF070
Sample ID: CRAWFORD VOC-APRIL 11
Matrix: Air

Collected: 2023/04/11
Shipped:
Received: 2023/04/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8624718	N/A	2023/04/24	Pratima Patel
Volatile Organics in Air by GC/MS/SIM	GC/MS	8624716	N/A	2023/04/24	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8624715	N/A	2023/04/24	Pratima Patel

Bureau Veritas ID: VPF070 Dup
Sample ID: CRAWFORD VOC-APRIL 11
Matrix: Air

Collected: 2023/04/11
Shipped:
Received: 2023/04/20

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organics in Air by GC/MS/SIM	GC/MS	8624716	N/A	2023/04/24	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8624715	N/A	2023/04/24	Pratima Patel

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8624715	Bromochloromethane	2023/04/24	100	60 - 140	105	%		
8624715	D5-Chlorobenzene	2023/04/24	106	60 - 140	91	%		
8624715	Difluorobenzene	2023/04/24	105	60 - 140	93	%		
8624716	Bromochloromethane	2023/04/24	100	60 - 140	105	%		
8624716	D5-Chlorobenzene	2023/04/24	106	60 - 140	91	%		
8624716	Difluorobenzene	2023/04/24	105	60 - 140	93	%		
8624715	1,2,4-Trimethylbenzene	2023/04/24	108	70 - 130	<0.50	ppbv	NC (1)	25
8624715	1,2-Dichlorotetrafluoroethane	2023/04/24	91	70 - 130	<0.17	ppbv	NC (1)	25
8624715	1,3,5-Trimethylbenzene	2023/04/24	108	70 - 130	<0.50	ppbv	NC (1)	25
8624715	1,3-Butadiene	2023/04/24	102	70 - 130	<0.50	ppbv	NC (1)	25
8624715	1,3-Dichlorobenzene	2023/04/24	102	70 - 130	<0.40	ppbv	NC (1)	25
8624715	1,4-Dioxane	2023/04/24	104	70 - 130	<1.0	ppbv	NC (1)	25
8624715	2,2,4-Trimethylpentane	2023/04/24	106	70 - 130	<0.20	ppbv	NC (1)	25
8624715	2-propanol	2023/04/24	96	70 - 130	<1.0	ppbv	NC (1)	25
8624715	4-ethyltoluene	2023/04/24	114	70 - 130	<0.50	ppbv	NC (1)	25
8624715	Benzyl chloride	2023/04/24	127	70 - 130	<0.50	ppbv	NC (1)	25
8624715	Bromodichloromethane	2023/04/24	96	70 - 130	<0.20	ppbv	NC (1)	25
8624715	Carbon Disulfide	2023/04/24	98	70 - 130	<0.50	ppbv	NC (1)	25
8624715	Chloroethane	2023/04/24	100	70 - 130	<0.30	ppbv	NC (1)	25
8624715	Chloromethane	2023/04/24	94	70 - 130	<0.30	ppbv	0.60 (1)	25
8624715	Cyclohexane	2023/04/24	103	70 - 130	<0.20	ppbv	NC (1)	25
8624715	Dibromochloromethane	2023/04/24	106	70 - 130	<0.20	ppbv	NC (1)	25
8624715	Dichlorodifluoromethane (FREON 12)	2023/04/24	97	70 - 130	<0.20	ppbv	1.7 (1)	25
8624715	Ethanol (ethyl alcohol)	2023/04/24	98	70 - 130	<1.0	ppbv	4.4 (1)	25
8624715	Ethyl Acetate	2023/04/24	101	70 - 130	<1.0	ppbv	NC (1)	25
8624715	Heptane	2023/04/24	104	70 - 130	<0.30	ppbv	NC (1)	25
8624715	Methyl Butyl Ketone (2-Hexanone)	2023/04/24	101	70 - 130	<1.0	ppbv	NC (1)	25
8624715	Propene	2023/04/24	93	70 - 130	<0.50	ppbv	NC (1)	25
8624715	Tetrahydrofuran	2023/04/24	99	70 - 130	<0.40	ppbv	NC (1)	25
8624715	Trichlorofluoromethane (FREON 11)	2023/04/24	95	70 - 130	<0.20	ppbv	0.88 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8624715	Trichlorotrifluoroethane	2023/04/24	106	70 - 130	<0.15	ppbv	NC (1)	25
8624715	Vinyl Acetate	2023/04/24	102	70 - 130	<0.20	ppbv	NC (1)	25
8624715	Vinyl Bromide	2023/04/24	92	70 - 130	<0.20	ppbv	NC (1)	25
8624716	1,1,1,2-Tetrachloroethane	2023/04/24	107	70 - 130	<0.021	ppbv	NC (1)	25
8624716	1,1,1-Trichloroethane	2023/04/24	101	70 - 130	<0.050	ppbv	NC (1)	25
8624716	1,1,2,2-Tetrachloroethane	2023/04/24	96	70 - 130	<0.0027	ppbv	NC (1)	25
8624716	1,1,2-Trichloroethane	2023/04/24	105	70 - 130	<0.012	ppbv	NC (1)	25
8624716	1,1-Dichloroethane	2023/04/24	94	70 - 130	<0.050	ppbv	NC (1)	25
8624716	1,1-Dichloroethylene	2023/04/24	104	70 - 130	<0.050	ppbv	NC (1)	25
8624716	1,2,4-Trichlorobenzene	2023/04/24	98	70 - 130	<0.10	ppbv	NC (1)	25
8624716	1,2-Dichlorobenzene	2023/04/24	98	70 - 130	<0.050	ppbv	NC (1)	25
8624716	1,2-Dichloroethane	2023/04/24	96	70 - 130	<0.010	ppbv	3.1 (1)	25
8624716	1,2-Dichloropropane	2023/04/24	102	70 - 130	<0.050	ppbv	NC (1)	25
8624716	1,4-Dichlorobenzene	2023/04/24	103	70 - 130	<0.050	ppbv	NC (1)	25
8624716	2-Propanone	2023/04/24	104	70 - 130	<0.10	ppbv	NC (1)	N/A
8624716	Benzene	2023/04/24	104	70 - 130	<0.050	ppbv	0.10 (1)	25
8624716	Bromoform	2023/04/24	107	70 - 130	<0.10	ppbv	NC (1)	25
8624716	Bromomethane	2023/04/24	93	70 - 130	<0.050	ppbv	NC (1)	25
8624716	Carbon Tetrachloride	2023/04/24	108	70 - 130	<0.050	ppbv	0.22 (1)	25
8624716	Chlorobenzene	2023/04/24	104	70 - 130	<0.050	ppbv	NC (1)	25
8624716	Chloroform	2023/04/24	100	70 - 130	<0.040	ppbv	NC (1)	25
8624716	cis-1,2-Dichloroethylene	2023/04/24	95	70 - 130	<0.050	ppbv	NC (1)	25
8624716	cis-1,3-Dichloropropene	2023/04/24	104	70 - 130	<0.050	ppbv	NC (1)	25
8624716	Ethylbenzene	2023/04/24	107	70 - 130	<0.050	ppbv	0.71 (1)	25
8624716	Ethylene Dibromide	2023/04/24	104	70 - 130	<0.010	ppbv	NC (1)	25
8624716	Hexachlorobutadiene	2023/04/24	108	70 - 130	<0.0047	ppbv	NC (1)	25
8624716	Hexane	2023/04/24	97	70 - 130	<0.10	ppbv	2.5 (1)	25
8624716	Methyl Ethyl Ketone (2-Butanone)	2023/04/24	99	70 - 130	<0.10	ppbv	2.1 (1)	25
8624716	Methyl Isobutyl Ketone	2023/04/24	99	70 - 130	<0.10	ppbv	NC (1)	25
8624716	Methyl t-butyl ether (MTBE)	2023/04/24	92	70 - 130	<0.10	ppbv	NC (1)	25

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8624716	Methylene Chloride(Dichloromethane)	2023/04/24	113	70 - 130	<0.050	ppbv	2.0 (1)	25
8624716	Naphthalene	2023/04/24	100	70 - 130	<0.10	ppbv	NC (1)	25
8624716	o-Xylene	2023/04/24	105	70 - 130	<0.050	ppbv	0.55 (1)	25
8624716	p+m-Xylene	2023/04/24	109	70 - 130	<0.10	ppbv	0.13 (1)	25
8624716	Styrene	2023/04/24	105	70 - 130	<0.050	ppbv	NC (1)	25
8624716	Tetrachloroethylene	2023/04/24	106	70 - 130	<0.050	ppbv	NC (1)	25
8624716	Toluene	2023/04/24	108	70 - 130	<0.050	ppbv	0.66 (1)	25
8624716	Total Xylenes	2023/04/24	107	70 - 130	<0.15	ppbv	0.039 (1)	25
8624716	trans-1,2-Dichloroethylene	2023/04/24	96	70 - 130	<0.10	ppbv	NC (1)	25
8624716	trans-1,3-Dichloropropene	2023/04/24	114	70 - 130	<0.050	ppbv	NC (1)	25
8624716	Trichloroethylene	2023/04/24	106	70 - 130	<0.050	ppbv	NC (1)	25
8624716	Vinyl Chloride	2023/04/24	100	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID [VPF070-01]

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3B0793
Report Date: 2023/05/02

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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CAM FCD-01302 /3

BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
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Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7
Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

SECTION

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC - April 11	2772	FX1394	11-Apr-23	24hr	-28	-5	X	X

20-Apr-23 12:00
Gina Baybayan
C3B0793
BSU AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 18-Apr-23

Received by: Bruinda Simeon
Affiliation:
Date/Time: 2023/04/20 12:00

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/05/24
Report #: R7641616
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3D3546
Received: 2023/05/11, 08:56

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/05/16	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/05/16	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/05/16	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/05/24
Report #: R7641616
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3D3546
Received: 2023/05/11, 08:56

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VTX292		
Sampling Date		2023/05/08		
COC Number		na		
	UNITS	**CRAWFORD VOC-MAY 8/1240**	**RDL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	(-2.7)	N/A	8667275
2-Propanone	ppbv	2.73	0.13	8667268
Dichlorodifluoromethane (FREON 12)	ppbv	0.58	0.20	8667267
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8667267
Chloromethane	ppbv	0.52	0.30	8667267
Vinyl Chloride	ppbv	<0.020	0.020	8667268
Chloroethane	ppbv	<0.30	0.30	8667267
1,3-Butadiene	ppbv	<0.50	0.50	8667267
Trichlorofluoromethane (FREON 11)	ppbv	0.32	0.20	8667267
Ethanol (ethyl alcohol)	ppbv	2.7	1.0	8667267
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8667267
2-propanol	ppbv	<1.0	1.0	8667267
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.36	0.10	8667268
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8667268
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8667267
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8667268
Ethyl Acetate	ppbv	<1.0	1.0	8667267
1,1-Dichloroethylene	ppbv	<0.050	0.050	8667268
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8667268
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8667268
Methylene Chloride(Dichloromethane)	ppbv	0.195	0.050	8667268
Chloroform	ppbv	<0.040	0.040	8667268
Carbon Tetrachloride	ppbv	0.136	0.050	8667268
1,1-Dichloroethane	ppbv	<0.050	0.050	8667268
1,2-Dichloroethane	ppbv	0.031	0.010	8667268
Ethylene Dibromide	ppbv	<0.010	0.010	8667268
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8667268
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8667268
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8667268

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VTX292		
Sampling Date		2023/05/08		
COC Number		na		
	UNITS	**CRAWFORD VOC-MAY 8/1240**	**RDL**	**QC Batch**
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8667268
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8667268
1,2-Dichloropropane	ppbv	<0.050	0.050	8667268
Bromomethane	ppbv	<0.050	0.050	8667268
Bromoform	ppbv	<0.10	0.10	8667268
Bromodichloromethane	ppbv	<0.20	0.20	8667267
Dibromochloromethane	ppbv	<0.20	0.20	8667267
Trichloroethylene	ppbv	<0.050	0.050	8667268
Tetrachloroethylene	ppbv	<0.050	0.050	8667268
Benzene	ppbv	0.061	0.050	8667268
Toluene	ppbv	0.354	0.050	8667268
Ethylbenzene	ppbv	<0.050	0.050	8667268
p+m-Xylene	ppbv	0.11	0.10	8667268
o-Xylene	ppbv	<0.050	0.050	8667268
Styrene	ppbv	<0.050	0.050	8667268
4-ethyltoluene	ppbv	<0.50	0.50	8667267
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8667267
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8667267
Chlorobenzene	ppbv	<0.050	0.050	8667268
Benzyl chloride	ppbv	<0.50	0.50	8667267
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8667267
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8667268
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8667268
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8667268
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8667268
Hexane	ppbv	<0.10	0.10	8667268
Heptane	ppbv	<0.30	0.30	8667267
Cyclohexane	ppbv	<0.20	0.20	8667267
Tetrahydrofuran	ppbv	<0.40	0.40	8667267
1,4-Dioxane	ppbv	<1.0	1.0	8667267
Naphthalene	ppbv	<0.10	0.10	8667268

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3D3546
Report Date: 2023/05/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		VTX292		
Sampling Date		2023/05/08		
COC Number		na		
	UNITS	**CRAWFORD VOC-MAY 8/1240**	**RDL**	**QC Batch**
Total Xylenes	ppbv	<0.15	0.15	8667268
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8667268
Vinyl Bromide	ppbv	<0.20	0.20	8667267
Propene	ppbv	<0.50	0.50	8667267
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8667267
Carbon Disulfide	ppbv	<0.50	0.50	8667267
Vinyl Acetate	ppbv	<0.20	0.20	8667267
Surrogate Recovery (%)				
Bromochloromethane	%	89	N/A	8667268
D5-Chlorobenzene	%	87	N/A	8667268
Difluorobenzene	%	83	N/A	8667268
Bromochloromethane	%	89	N/A	8667267
D5-Chlorobenzene	%	87	N/A	8667267
Difluorobenzene	%	83	N/A	8667267

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3D3546
Report Date: 2023/05/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: VTX292
Sample ID: CRAWFORD VOC- MAY 8/1240
Matrix: Air

Collected: 2023/05/08
Shipped:
Received: 2023/05/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8667275	N/A	2023/05/16	Pratima Patel
Volatile Organics in Air by GC/MS/SIM	GC/MS	8667268	N/A	2023/05/16	Pratima Patel
Volatile Organics in Air (TO-15)	GC/MS	8667267	N/A	2023/05/16	Pratima Patel

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Bureau Veritas Job #: C3D3546
Report Date: 2023/05/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8667267	Bromochloromethane	2023/05/16	103	60 - 140	109	%		
8667267	D5-Chlorobenzene	2023/05/16	101	60 - 140	96	%		
8667267	Difluorobenzene	2023/05/16	102	60 - 140	101	%		
8667268	Bromochloromethane	2023/05/16	103	60 - 140	109	%		
8667268	D5-Chlorobenzene	2023/05/16	101	60 - 140	96	%		
8667268	Difluorobenzene	2023/05/16	102	60 - 140	101	%		
8667267	1,2,4-Trimethylbenzene	2023/05/16	96	70 - 130	<0.50	ppbv		
8667267	1,2-Dichlorotetrafluoroethane	2023/05/16	100	70 - 130	<0.17	ppbv		
8667267	1,3,5-Trimethylbenzene	2023/05/16	97	70 - 130	<0.50	ppbv		
8667267	1,3-Butadiene	2023/05/16	100	70 - 130	<0.50	ppbv		
8667267	1,3-Dichlorobenzene	2023/05/16	96	70 - 130	<0.40	ppbv		
8667267	1,4-Dioxane	2023/05/16	98	70 - 130	<1.0	ppbv		
8667267	2,2,4-Trimethylpentane	2023/05/16	97	70 - 130	<0.20	ppbv		
8667267	2-propanol	2023/05/16	99	70 - 130	<1.0	ppbv		
8667267	4-ethyltoluene	2023/05/16	96	70 - 130	<0.50	ppbv		
8667267	Benzyl chloride	2023/05/16	129	70 - 130	<0.50	ppbv		
8667267	Bromodichloromethane	2023/05/16	99	70 - 130	<0.20	ppbv		
8667267	Carbon Disulfide	2023/05/16	95	70 - 130	<0.50	ppbv		
8667267	Chloroethane	2023/05/16	105	70 - 130	<0.30	ppbv		
8667267	Chloromethane	2023/05/16	107	70 - 130	<0.30	ppbv		
8667267	Cyclohexane	2023/05/16	96	70 - 130	<0.20	ppbv		
8667267	Dibromochloromethane	2023/05/16	111	70 - 130	<0.20	ppbv		
8667267	Dichlorodifluoromethane (FREON 12)	2023/05/16	107	70 - 130	<0.20	ppbv		
8667267	Ethanol (ethyl alcohol)	2023/05/16	95	70 - 130	<1.0	ppbv		
8667267	Ethyl Acetate	2023/05/16	107	70 - 130	<1.0	ppbv		
8667267	Heptane	2023/05/16	100	70 - 130	<0.30	ppbv		
8667267	Methyl Butyl Ketone (2-Hexanone)	2023/05/16	98	70 - 130	<1.0	ppbv		
8667267	Propene	2023/05/16	98	70 - 130	<0.50	ppbv		
8667267	Tetrahydrofuran	2023/05/16	99	70 - 130	<0.40	ppbv		
8667267	Trichlorofluoromethane (FREON 11)	2023/05/16	102	70 - 130	<0.20	ppbv		

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8667267	Trichlorotrifluoroethane	2023/05/16	97	70 - 130	<0.15	ppbv		
8667267	Vinyl Acetate	2023/05/16	109	70 - 130	<0.20	ppbv		
8667267	Vinyl Bromide	2023/05/16	90	70 - 130	<0.20	ppbv		
8667268	1,1,1,2-Tetrachloroethane	2023/05/16	106	70 - 130	<0.021	ppbv		
8667268	1,1,1-Trichloroethane	2023/05/16	104	70 - 130	<0.050	ppbv		
8667268	1,1,2,2-Tetrachloroethane	2023/05/16	97	70 - 130	<0.0027	ppbv		
8667268	1,1,2-Trichloroethane	2023/05/16	103	70 - 130	<0.012	ppbv		
8667268	1,1-Dichloroethane	2023/05/16	96	70 - 130	<0.050	ppbv	NC (1)	25
8667268	1,1-Dichloroethylene	2023/05/16	99	70 - 130	<0.050	ppbv	NC (1)	25
8667268	1,2,4-Trichlorobenzene	2023/05/16	87	70 - 130	<0.10	ppbv		
8667268	1,2-Dichlorobenzene	2023/05/16	92	70 - 130	<0.050	ppbv		
8667268	1,2-Dichloroethane	2023/05/16	104	70 - 130	<0.010	ppbv		
8667268	1,2-Dichloropropane	2023/05/16	100	70 - 130	<0.050	ppbv		
8667268	1,4-Dichlorobenzene	2023/05/16	95	70 - 130	<0.050	ppbv		
8667268	2-Propanone	2023/05/16	99	70 - 130	<0.13	ppbv		
8667268	Benzene	2023/05/16	98	70 - 130	<0.050	ppbv	1.7 (1)	25
8667268	Bromoform	2023/05/16	116	70 - 130	<0.10	ppbv		
8667268	Bromomethane	2023/05/16	95	70 - 130	<0.050	ppbv		
8667268	Carbon Tetrachloride	2023/05/16	114	70 - 130	<0.050	ppbv		
8667268	Chlorobenzene	2023/05/16	101	70 - 130	<0.050	ppbv		
8667268	Chloroform	2023/05/16	106	70 - 130	<0.040	ppbv		
8667268	cis-1,2-Dichloroethylene	2023/05/16	100	70 - 130	<0.050	ppbv		
8667268	cis-1,3-Dichloropropene	2023/05/16	106	70 - 130	<0.050	ppbv		
8667268	Ethylbenzene	2023/05/16	101	70 - 130	<0.050	ppbv		
8667268	Ethylene Dibromide	2023/05/16	105	70 - 130	<0.010	ppbv		
8667268	Hexachlorobutadiene	2023/05/16	85	70 - 130	<0.0047	ppbv		
8667268	Hexane	2023/05/16	93	70 - 130	<0.10	ppbv		
8667268	Methyl Ethyl Ketone (2-Butanone)	2023/05/16	101	70 - 130	<0.10	ppbv		
8667268	Methyl Isobutyl Ketone	2023/05/16	95	70 - 130	<0.10	ppbv		
8667268	Methyl t-butyl ether (MTBE)	2023/05/16	89	70 - 130	<0.10	ppbv		

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8667268	Methylene Chloride(Dichloromethane)	2023/05/16	97	70 - 130	<0.050	ppbv		
8667268	Naphthalene	2023/05/16	89	70 - 130	<0.10	ppbv		
8667268	o-Xylene	2023/05/16	97	70 - 130	<0.050	ppbv		
8667268	p+m-Xylene	2023/05/16	100	70 - 130	<0.10	ppbv		
8667268	Styrene	2023/05/16	96	70 - 130	<0.050	ppbv		
8667268	Tetrachloroethylene	2023/05/16	103	70 - 130	<0.050	ppbv	NC (1)	25
8667268	Toluene	2023/05/16	98	70 - 130	<0.050	ppbv		
8667268	Total Xylenes	2023/05/16	99	70 - 130	<0.15	ppbv		
8667268	trans-1,2-Dichloroethylene	2023/05/16	97	70 - 130	<0.10	ppbv		
8667268	trans-1,3-Dichloropropene	2023/05/16	125	70 - 130	<0.050	ppbv		
8667268	Trichloroethylene	2023/05/16	103	70 - 130	<0.050	ppbv	NC (1)	25
8667268	Vinyl Chloride	2023/05/16	98	70 - 130	<0.020	ppbv	NC (1)	25

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

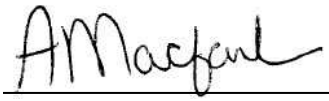
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Bureau Veritas Job #: C3D3546
Report Date: 2023/05/24

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anke Macfarlane, Laboratory Manager, VOC

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Mississauga Ontario ,L5N 2L8
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Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC - May 8,	1240	FX1147	08-May-23	24hr	-28.5	-5	X	X

11-May-23 08:56
Gina Baybayan
C3D3546
AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 09-May-23

Received by: Barisha Suman
Affiliation:
Date/Time: 2023/05/11 08:56

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/07/12
Report #: R7711142
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3I9748
Received: 2023/06/28, 14:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/07/07	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/07/07	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/07/07	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/07/12
Report #: R7711142
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3I9748
Received: 2023/06/28, 14:00

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

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Bureau Veritas Job #: C3I9748
Report Date: 2023/07/12

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WFU297		
Sampling Date		2023/06/21		
COC Number		NA		
	UNITS	CRAWFORD VOC 21 JUNE/36811	RDL	QC Batch
Volatile Organics				
Pressure on Receipt	psig	(-5.3)	N/A	8779505
2-Propanone	ppbv	5.20	0.13	8779503
Dichlorodifluoromethane (FREON 12)	ppbv	0.47	0.20	8774642
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8774642
Chloromethane	ppbv	0.52	0.30	8774642
Vinyl Chloride	ppbv	<0.020	0.020	8779503
Chloroethane	ppbv	<0.30	0.30	8774642
1,3-Butadiene	ppbv	<0.50	0.50	8774642
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.20	8774642
Ethanol (ethyl alcohol)	ppbv	2.2	1.0	8774642
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8774642
2-propanol	ppbv	<1.0	1.0	8774642
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.54	0.10	8779503
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8779503
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8774642
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8779503
Ethyl Acetate	ppbv	<1.0	1.0	8774642
1,1-Dichloroethylene	ppbv	<0.050	0.050	8779503
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8779503
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8779503
Methylene Chloride(Dichloromethane)	ppbv	0.187	0.050	8779503
Chloroform	ppbv	<0.040	0.040	8779503
Carbon Tetrachloride	ppbv	0.125	0.050	8779503
1,1-Dichloroethane	ppbv	<0.050	0.050	8779503
1,2-Dichloroethane	ppbv	0.021	0.010	8779503
Ethylene Dibromide	ppbv	<0.010	0.010	8779503
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8779503
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8779503
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8779503

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WFU297		
Sampling Date		2023/06/21		
COC Number		NA		
	UNITS	CRAWFORD VOC 21 JUNE/36811	RDL	QC Batch
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8779503
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8779503
1,2-Dichloropropane	ppbv	<0.050	0.050	8779503
Bromomethane	ppbv	<0.050	0.050	8779503
Bromoform	ppbv	<0.10	0.10	8779503
Bromodichloromethane	ppbv	<0.20	0.20	8774642
Dibromochloromethane	ppbv	<0.20	0.20	8774642
Trichloroethylene	ppbv	<0.050	0.050	8779503
Tetrachloroethylene	ppbv	<0.050	0.050	8779503
Benzene	ppbv	0.138	0.050	8779503
Toluene	ppbv	0.345	0.050	8779503
Ethylbenzene	ppbv	<0.050	0.050	8779503
p+m-Xylene	ppbv	<0.10	0.10	8779503
o-Xylene	ppbv	<0.050	0.050	8779503
Styrene	ppbv	<0.050	0.050	8779503
4-ethyltoluene	ppbv	<0.50	0.50	8774642
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8774642
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8774642
Chlorobenzene	ppbv	<0.050	0.050	8779503
Benzyl chloride	ppbv	<0.50	0.50	8774642
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8774642
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8779503
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8779503
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8779503
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8779503
Hexane	ppbv	<0.10	0.10	8779503
Heptane	ppbv	<0.30	0.30	8774642
Cyclohexane	ppbv	<0.20	0.20	8774642
Tetrahydrofuran	ppbv	<0.40	0.40	8774642
1,4-Dioxane	ppbv	<1.0	1.0	8774642
Naphthalene	ppbv	<0.10	0.10	8779503

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I9748
Report Date: 2023/07/12

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WFU297		
Sampling Date		2023/06/21		
COC Number		NA		
	UNITS	**CRAWFORD VOC 21 JUNE/36811**	**RDL**	**QC Batch**
Total Xylenes	ppbv	<0.15	0.15	8779503
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8779503
Vinyl Bromide	ppbv	<0.20	0.20	8774642
Propene	ppbv	<0.50	0.50	8774642
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8774642
Carbon Disulfide	ppbv	<0.50	0.50	8774642
Vinyl Acetate	ppbv	<0.20	0.20	8774642
Surrogate Recovery (%)				
Bromochloromethane	%	94	N/A	8779503
D5-Chlorobenzene	%	86	N/A	8779503
Difluorobenzene	%	84	N/A	8779503
Bromochloromethane	%	94	N/A	8774642
D5-Chlorobenzene	%	86	N/A	8774642
Difluorobenzene	%	84	N/A	8774642

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3I9748
Report Date: 2023/07/12

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: WFU297
Sample ID: CRAWFORD VOC 21 JUNE/36811
Matrix: Air

Collected: 2023/06/21
Shipped:
Received: 2023/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8779505	N/A	2023/07/07	Ana Nunes
Volatile Organics in Air by GC/MS/SIM	GC/MS	8779503	N/A	2023/07/07	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	8774642	N/A	2023/07/07	Ana Nunes

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8774642	Bromochloromethane	2023/07/07	103	60 - 140	109	%		
8774642	D5-Chlorobenzene	2023/07/07	105	60 - 140	95	%		
8774642	Difluorobenzene	2023/07/07	106	60 - 140	96	%		
8779503	Bromochloromethane	2023/07/07	103	60 - 140	109	%		
8779503	D5-Chlorobenzene	2023/07/07	105	60 - 140	95	%		
8779503	Difluorobenzene	2023/07/07	106	60 - 140	96	%		
8774642	1,2,4-Trimethylbenzene	2023/07/07	95	70 - 130	<0.50	ppbv	NC (1)	25
8774642	1,2-Dichlorotetrafluoroethane	2023/07/07	89	70 - 130	<0.17	ppbv	NC (1)	25
8774642	1,3,5-Trimethylbenzene	2023/07/07	93	70 - 130	<0.50	ppbv	NC (1)	25
8774642	1,3-Butadiene	2023/07/07	97	70 - 130	<0.50	ppbv	NC (1)	25
8774642	1,3-Dichlorobenzene	2023/07/07	91	70 - 130	<0.40	ppbv	NC (1)	25
8774642	1,4-Dioxane	2023/07/07	90	70 - 130	<1.0	ppbv	NC (1)	25
8774642	2,2,4-Trimethylpentane	2023/07/07	101	70 - 130	<0.20	ppbv	NC (1)	25
8774642	2-propanol	2023/07/07	90	70 - 130	<1.0	ppbv	1.2 (1)	25
8774642	4-ethyltoluene	2023/07/07	101	70 - 130	<0.50	ppbv	NC (1)	25
8774642	Benzyl chloride	2023/07/07	100	70 - 130	<0.50	ppbv	NC (1)	25
8774642	Bromodichloromethane	2023/07/07	89	70 - 130	<0.20	ppbv	NC (1)	25
8774642	Carbon Disulfide	2023/07/07	92	70 - 130	<0.50	ppbv	NC (1)	25
8774642	Chloroethane	2023/07/07	95	70 - 130	<0.30	ppbv	NC (1)	25
8774642	Chloromethane	2023/07/07	89	70 - 130	<0.30	ppbv	1.0 (1)	25
8774642	Cyclohexane	2023/07/07	97	70 - 130	<0.20	ppbv	NC (1)	25
8774642	Dibromochloromethane	2023/07/07	94	70 - 130	<0.20	ppbv	NC (1)	25
8774642	Dichlorodifluoromethane (FREON 12)	2023/07/07	86	70 - 130	<0.20	ppbv	1.8 (1)	25
8774642	Ethanol (ethyl alcohol)	2023/07/07	89	70 - 130	<1.0	ppbv	0.11 (1)	25
8774642	Ethyl Acetate	2023/07/07	100	70 - 130	<1.0	ppbv	NC (1)	25
8774642	Heptane	2023/07/07	100	70 - 130	<0.30	ppbv	NC (1)	25
8774642	Methyl Butyl Ketone (2-Hexanone)	2023/07/07	95	70 - 130	<1.0	ppbv	NC (1)	25
8774642	Propene	2023/07/07	95	70 - 130	<0.50	ppbv	NC (1)	25
8774642	Tetrahydrofuran	2023/07/07	99	70 - 130	<0.40	ppbv	NC (1)	25
8774642	Trichlorofluoromethane (FREON 11)	2023/07/07	93	70 - 130	<0.20	ppbv	0.038 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8774642	Trichlorotrifluoroethane	2023/07/07	97	70 - 130	<0.15	ppbv	NC (1)	25
8774642	Vinyl Acetate	2023/07/07	99	70 - 130	<0.20	ppbv	NC (1)	25
8774642	Vinyl Bromide	2023/07/07	88	70 - 130	<0.20	ppbv	NC (1)	25
8779503	1,1,1,2-Tetrachloroethane	2023/07/07	97	70 - 130	<0.021	ppbv	NC (1)	25
8779503	1,1,1-Trichloroethane	2023/07/07	91	70 - 130	<0.050	ppbv	NC (1)	25
8779503	1,1,2,2-Tetrachloroethane	2023/07/07	86	70 - 130	<0.0027	ppbv	NC (1)	25
8779503	1,1,2-Trichloroethane	2023/07/07	92	70 - 130	<0.012	ppbv	NC (1)	25
8779503	1,1-Dichloroethane	2023/07/07	88	70 - 130	<0.050	ppbv	NC (1)	25
8779503	1,1-Dichloroethylene	2023/07/07	97	70 - 130	<0.050	ppbv	NC (1)	25
8779503	1,2,4-Trichlorobenzene	2023/07/07	71	70 - 130	<0.10	ppbv	NC (1)	25
8779503	1,2-Dichlorobenzene	2023/07/07	87	70 - 130	<0.050	ppbv	NC (1)	25
8779503	1,2-Dichloroethane	2023/07/07	94	70 - 130	<0.010	ppbv	0.43 (1)	25
8779503	1,2-Dichloropropane	2023/07/07	92	70 - 130	<0.050	ppbv	NC (1)	25
8779503	1,4-Dichlorobenzene	2023/07/07	91	70 - 130	<0.050	ppbv	1.0 (1)	25
8779503	2-Propanone	2023/07/07	101	70 - 130	<0.13	ppbv	NC (1)	N/A
8779503	Benzene	2023/07/07	96	70 - 130	<0.050	ppbv	0.17 (1)	25
8779503	Bromoform	2023/07/07	93	70 - 130	<0.10	ppbv	NC (1)	25
8779503	Bromomethane	2023/07/07	88	70 - 130	<0.050	ppbv	NC (1)	25
8779503	Carbon Tetrachloride	2023/07/07	94	70 - 130	<0.050	ppbv	0.77 (1)	25
8779503	Chlorobenzene	2023/07/07	93	70 - 130	<0.050	ppbv	NC (1)	25
8779503	Chloroform	2023/07/07	96	70 - 130	<0.040	ppbv	1.2 (1)	25
8779503	cis-1,2-Dichloroethylene	2023/07/07	93	70 - 130	<0.050	ppbv	NC (1)	25
8779503	cis-1,3-Dichloropropene	2023/07/07	93	70 - 130	<0.050	ppbv	NC (1)	25
8779503	Ethylbenzene	2023/07/07	99	70 - 130	<0.050	ppbv	0 (1)	25
8779503	Ethylene Dibromide	2023/07/07	94	70 - 130	<0.010	ppbv	NC (1)	25
8779503	Hexachlorobutadiene	2023/07/07	81	70 - 130	<0.0047	ppbv	NC (1)	25
8779503	Hexane	2023/07/07	92	70 - 130	<0.10	ppbv	1.8 (1)	25
8779503	Methyl Ethyl Ketone (2-Butanone)	2023/07/07	97	70 - 130	<0.10	ppbv	0.65 (1)	25
8779503	Methyl Isobutyl Ketone	2023/07/07	94	70 - 130	<0.10	ppbv	1.7 (1)	25
8779503	Methyl t-butyl ether (MTBE)	2023/07/07	87	70 - 130	<0.10	ppbv	NC (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8779503	Methylene Chloride(Dichloromethane)	2023/07/07	86	70 - 130	<0.050	ppbv	0.61 (1)	25
8779503	Naphthalene	2023/07/07	66 (2)	70 - 130	<0.10	ppbv	NC (1)	25
8779503	o-Xylene	2023/07/07	92	70 - 130	<0.050	ppbv	2.2 (1)	25
8779503	p+m-Xylene	2023/07/07	98	70 - 130	<0.10	ppbv	0.96 (1)	25
8779503	Styrene	2023/07/07	92	70 - 130	<0.050	ppbv	2.7 (1)	25
8779503	Tetrachloroethylene	2023/07/07	95	70 - 130	<0.050	ppbv	1.1 (1)	25
8779503	Toluene	2023/07/07	97	70 - 130	<0.050	ppbv	0.56 (1)	25
8779503	Total Xylenes	2023/07/07	96	70 - 130	<0.15	ppbv	1.3 (1)	25
8779503	trans-1,2-Dichloroethylene	2023/07/07	92	70 - 130	<0.10	ppbv	NC (1)	25
8779503	trans-1,3-Dichloropropene	2023/07/07	102	70 - 130	<0.050	ppbv	NC (1)	25
8779503	Trichloroethylene	2023/07/07	97	70 - 130	<0.050	ppbv	0.56 (1)	25
8779503	Vinyl Chloride	2023/07/07	93	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

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Bureau Veritas Job #: C3I9748
Report Date: 2023/07/12

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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CAM FCD-01302 /3

BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
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Toll Free: 1-800-668-0639
Phone: (905) 817-5700
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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC 21 June	36811	FX1670	21-Jun-23	22hr	-28	-9	X	X

28-Jun-23 14:00
Gina Baybayan
C319748
AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 27-Jun-23

Received by:
Affiliation:
Date/Time: 2023/06/28 14:00

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/07/26
Report #: R7735048
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3K6701
Received: 2023/07/13, 09:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/07/19	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/07/19	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/07/19	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/07/26
Report #: R7735048
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3K6701
Received: 2023/07/13, 09:00

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3K6701
Report Date: 2023/07/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WJH112		
Sampling Date		2023/06/22		
COC Number		NA		
	UNITS	CRAWFORD VOC 22 JUNE	RDL	QC Batch
Volatile Organics				
Pressure on Receipt	psig	(-4.1)	N/A	8798805
2-Propanone	ppbv	2.28	0.10	8798797
Dichlorodifluoromethane (FREON 12)	ppbv	0.47	0.20	8798791
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8798791
Chloromethane	ppbv	0.49	0.30	8798791
Vinyl Chloride	ppbv	<0.020	0.020	8798797
Chloroethane	ppbv	<0.30	0.30	8798791
1,3-Butadiene	ppbv	<0.50	0.50	8798791
Trichlorofluoromethane (FREON 11)	ppbv	0.33	0.20	8798791
Ethanol (ethyl alcohol)	ppbv	4.5	1.0	8798791
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8798791
2-propanol	ppbv	<1.0	1.0	8798791
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.23	0.10	8798797
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8798797
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8798791
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8798797
Ethyl Acetate	ppbv	<1.0	1.0	8798791
1,1-Dichloroethylene	ppbv	<0.050	0.050	8798797
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8798797
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8798797
Methylene Chloride(Dichloromethane)	ppbv	0.136	0.050	8798797
Chloroform	ppbv	<0.040	0.040	8798797
Carbon Tetrachloride	ppbv	0.139	0.050	8798797
1,1-Dichloroethane	ppbv	<0.050	0.050	8798797
1,2-Dichloroethane	ppbv	0.022	0.010	8798797
Ethylene Dibromide	ppbv	<0.010	0.010	8798797
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8798797
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8798797
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8798797

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WJH112		
Sampling Date		2023/06/22		
COC Number		NA		
	UNITS	**CRAWFORD VOC 22 JUNE**	**RDL**	**QC Batch**
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8798797
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8798797
1,2-Dichloropropane	ppbv	<0.050	0.050	8798797
Bromomethane	ppbv	<0.050	0.050	8798797
Bromoform	ppbv	<0.10	0.10	8798797
Bromodichloromethane	ppbv	<0.20	0.20	8798791
Dibromochloromethane	ppbv	<0.20	0.20	8798791
Trichloroethylene	ppbv	<0.050	0.050	8798797
Tetrachloroethylene	ppbv	<0.050	0.050	8798797
Benzene	ppbv	0.124	0.050	8798797
Toluene	ppbv	1.55	0.050	8798797
Ethylbenzene	ppbv	0.087	0.050	8798797
p+m-Xylene	ppbv	0.35	0.10	8798797
o-Xylene	ppbv	0.129	0.050	8798797
Styrene	ppbv	<0.050	0.050	8798797
4-ethyltoluene	ppbv	<0.50	0.50	8798791
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8798791
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8798791
Chlorobenzene	ppbv	<0.050	0.050	8798797
Benzyl chloride	ppbv	<0.50	0.50	8798791
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8798791
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8798797
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8798797
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8798797
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8798797
Hexane	ppbv	0.21	0.10	8798797
Heptane	ppbv	<0.30	0.30	8798791
Cyclohexane	ppbv	<0.20	0.20	8798791
Tetrahydrofuran	ppbv	<0.40	0.40	8798791
1,4-Dioxane	ppbv	<1.0	1.0	8798791
Naphthalene	ppbv	<0.10	0.10	8798797

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K6701
Report Date: 2023/07/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WJH112		
Sampling Date		2023/06/22		
COC Number		NA		
	UNITS	**CRAWFORD VOC 22 JUNE**	**RDL**	**QC Batch**
Total Xylenes	ppbv	0.48	0.15	8798797
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8798797
Vinyl Bromide	ppbv	<0.20	0.20	8798791
Propene	ppbv	<0.50	0.50	8798791
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8798791
Carbon Disulfide	ppbv	<0.50	0.50	8798791
Vinyl Acetate	ppbv	<0.20	0.20	8798791
Surrogate Recovery (%)				
Bromochloromethane	%	90	N/A	8798797
D5-Chlorobenzene	%	83	N/A	8798797
Difluorobenzene	%	79	N/A	8798797
Bromochloromethane	%	90	N/A	8798791
D5-Chlorobenzene	%	83	N/A	8798791
Difluorobenzene	%	79	N/A	8798791

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Bureau Veritas Job #: C3K6701
Report Date: 2023/07/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: WJH112
Sample ID: CRAWFORD VOC 22 JUNE
Matrix: Air

Collected: 2023/06/22
Shipped:
Received: 2023/07/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8798805	N/A	2023/07/19	Ana Nunes
Volatile Organics in Air by GC/MS/SIM	GC/MS	8798797	N/A	2023/07/19	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	8798791	N/A	2023/07/19	Ana Nunes

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Bureau Veritas Job #: C3K6701
Report Date: 2023/07/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8798791	Bromochloromethane	2023/07/19	103	60 - 140	106	%		
8798791	D5-Chlorobenzene	2023/07/19	106	60 - 140	89	%		
8798791	Difluorobenzene	2023/07/19	105	60 - 140	92	%		
8798797	Bromochloromethane	2023/07/19	103	60 - 140	106	%		
8798797	D5-Chlorobenzene	2023/07/19	106	60 - 140	89	%		
8798797	Difluorobenzene	2023/07/19	105	60 - 140	92	%		
8798791	1,2,4-Trimethylbenzene	2023/07/19	107	70 - 130	<0.50	ppbv	NC (2)	25
8798791	1,2-Dichlorotetrafluoroethane	2023/07/19	95	70 - 130	<0.17	ppbv	NC (2)	25
8798791	1,3,5-Trimethylbenzene	2023/07/19	105	70 - 130	<0.50	ppbv	NC (2)	25
8798791	1,3-Butadiene	2023/07/19	100	70 - 130	<0.50	ppbv	NC (2)	25
8798791	1,3-Dichlorobenzene	2023/07/19	103	70 - 130	<0.40	ppbv	NC (2)	25
8798791	1,4-Dioxane	2023/07/19	107	70 - 130	<1.0	ppbv	NC (2)	25
8798791	2,2,4-Trimethylpentane	2023/07/19	100	70 - 130	<0.20	ppbv	NC (2)	25
8798791	2-propanol	2023/07/19	102	70 - 130	<1.0	ppbv	NC (2)	25
8798791	4-ethyltoluene	2023/07/19	107	70 - 130	<0.50	ppbv	NC (2)	25
8798791	Benzyl chloride	2023/07/19	131 (1)	70 - 130	<0.50	ppbv	NC (2)	25
8798791	Bromodichloromethane	2023/07/19	96	70 - 130	<0.20	ppbv	NC (2)	25
8798791	Carbon Disulfide	2023/07/19	93	70 - 130	<0.50	ppbv	NC (2)	25
8798791	Chloroethane	2023/07/19	102	70 - 130	<0.30	ppbv	NC (2)	25
8798791	Chloromethane	2023/07/19	97	70 - 130	<0.30	ppbv	3.3 (2)	25
8798791	Cyclohexane	2023/07/19	99	70 - 130	<0.20	ppbv	NC (2)	25
8798791	Dibromochloromethane	2023/07/19	103	70 - 130	<0.20	ppbv	NC (2)	25
8798791	Dichlorodifluoromethane (FREON 12)	2023/07/19	99	70 - 130	<0.20	ppbv	1.3 (2)	25
8798791	Ethanol (ethyl alcohol)	2023/07/19	111	70 - 130	<1.0	ppbv	5.2 (2)	25
8798791	Ethyl Acetate	2023/07/19	104	70 - 130	<1.0	ppbv	NC (2)	25
8798791	Heptane	2023/07/19	104	70 - 130	<0.30	ppbv	NC (2)	25
8798791	Methyl Butyl Ketone (2-Hexanone)	2023/07/19	106	70 - 130	<1.0	ppbv	NC (2)	25
8798791	Propene	2023/07/19	93	70 - 130	<0.50	ppbv	NC (2)	25
8798791	Tetrahydrofuran	2023/07/19	102	70 - 130	<0.40	ppbv	NC (2)	25
8798791	Trichlorofluoromethane (FREON 11)	2023/07/19	103	70 - 130	<0.20	ppbv	0.80 (2)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8798791	Trichlorotrifluoroethane	2023/07/19	103	70 - 130	<0.15	ppbv	NC (2)	25
8798791	Vinyl Acetate	2023/07/19	102	70 - 130	<0.20	ppbv	NC (2)	25
8798791	Vinyl Bromide	2023/07/19	91	70 - 130	<0.20	ppbv	NC (2)	25
8798797	1,1,1,2-Tetrachloroethane	2023/07/19	103	70 - 130	<0.021	ppbv	NC (2)	25
8798797	1,1,1-Trichloroethane	2023/07/19	102	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,1,2,2-Tetrachloroethane	2023/07/19	92	70 - 130	<0.0027	ppbv	NC (2)	25
8798797	1,1,2-Trichloroethane	2023/07/19	99	70 - 130	<0.012	ppbv	NC (2)	25
8798797	1,1-Dichloroethane	2023/07/19	92	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,1-Dichloroethylene	2023/07/19	92	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,2,4-Trichlorobenzene	2023/07/19	95	70 - 130	<0.10	ppbv	NC (2)	25
8798797	1,2-Dichlorobenzene	2023/07/19	99	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,2-Dichloroethane	2023/07/19	104	70 - 130	<0.010	ppbv	0.85 (2)	25
8798797	1,2-Dichloropropane	2023/07/19	96	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,4-Dichlorobenzene	2023/07/19	106	70 - 130	<0.050	ppbv	NC (2)	25
8798797	2-Propanone	2023/07/19	119	70 - 130	<0.10	ppbv	NC (2)	N/A
8798797	Benzene	2023/07/19	99	70 - 130	<0.050	ppbv	2.1 (2)	25
8798797	Bromoform	2023/07/19	106	70 - 130	<0.10	ppbv	NC (2)	25
8798797	Bromomethane	2023/07/19	94	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Carbon Tetrachloride	2023/07/19	107	70 - 130	<0.050	ppbv	1.6 (2)	25
8798797	Chlorobenzene	2023/07/19	101	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Chloroform	2023/07/19	103	70 - 130	<0.040	ppbv	3.9 (2)	25
8798797	cis-1,2-Dichloroethylene	2023/07/19	99	70 - 130	<0.050	ppbv	NC (2)	25
8798797	cis-1,3-Dichloropropene	2023/07/19	103	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Ethylbenzene	2023/07/19	107	70 - 130	<0.050	ppbv	2.7 (2)	25
8798797	Ethylene Dibromide	2023/07/19	104	70 - 130	<0.010	ppbv	NC (2)	25
8798797	Hexachlorobutadiene	2023/07/19	109	70 - 130	<0.0047	ppbv	NC (2)	25
8798797	Hexane	2023/07/19	95	70 - 130	<0.10	ppbv	8.5 (2)	25
8798797	Methyl Ethyl Ketone (2-Butanone)	2023/07/19	102	70 - 130	<0.10	ppbv	0.38 (2)	25
8798797	Methyl Isobutyl Ketone	2023/07/19	100	70 - 130	<0.10	ppbv	NC (2)	25
8798797	Methyl t-butyl ether (MTBE)	2023/07/19	89	70 - 130	<0.10	ppbv	NC (2)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8798797	Methylene Chloride(Dichloromethane)	2023/07/19	98	70 - 130	<0.050	ppbv	1.3 (2)	25
8798797	Naphthalene	2023/07/19	96	70 - 130	<0.10	ppbv	NC (2)	25
8798797	o-Xylene	2023/07/19	101	70 - 130	<0.050	ppbv	0.62 (2)	25
8798797	p+m-Xylene	2023/07/19	106	70 - 130	<0.10	ppbv	3.3 (2)	25
8798797	Styrene	2023/07/19	104	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Tetrachloroethylene	2023/07/19	101	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Toluene	2023/07/19	103	70 - 130	<0.050	ppbv	3.5 (2)	25
8798797	Total Xylenes	2023/07/19	105	70 - 130	<0.15	ppbv	2.2 (2)	25
8798797	trans-1,2-Dichloroethylene	2023/07/19	93	70 - 130	<0.10	ppbv	NC (2)	25
8798797	trans-1,3-Dichloropropene	2023/07/19	116	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Trichloroethylene	2023/07/19	103	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Vinyl Chloride	2023/07/19	89	70 - 130	<0.020	ppbv	NC (2)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Duplicate Parent ID

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Bureau Veritas Job #: C3K6701
Report Date: 2023/07/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC 22 June	SX1594	FX1533	22-Jun-23	23hr	-29	-7.5	X	X

13-Jul-23 09:00
Gina Baybayan
C3K6701
BSU AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 10-Jul-23

Received by: Bernishe Samson
Affiliation:
Date/Time: 2023|07|13 09:00

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/07/26
Report #: R7735045
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3K6706
Received: 2023/07/13, 09:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/07/19	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/07/19	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/07/19	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/07/26
Report #: R7735045
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3K6706
Received: 2023/07/13, 09:00

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

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Bureau Veritas Job #: C3K6706
Report Date: 2023/07/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WJH160		
Sampling Date		2023/07/04		
COC Number		NA		
	UNITS	**CRAWFORD VOC 04 JULY**	**RDL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	(-3.5)	N/A	8798805
2-Propanone	ppbv	5.07	0.10	8798797
Dichlorodifluoromethane (FREON 12)	ppbv	0.48	0.20	8798791
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8798791
Chloromethane	ppbv	0.58	0.30	8798791
Vinyl Chloride	ppbv	<0.020	0.020	8798797
Chloroethane	ppbv	<0.30	0.30	8798791
1,3-Butadiene	ppbv	<0.50	0.50	8798791
Trichlorofluoromethane (FREON 11)	ppbv	0.32	0.20	8798791
Ethanol (ethyl alcohol)	ppbv	1.8	1.0	8798791
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8798791
2-propanol	ppbv	<1.0	1.0	8798791
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.48	0.10	8798797
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8798797
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8798791
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8798797
Ethyl Acetate	ppbv	<1.0	1.0	8798791
1,1-Dichloroethylene	ppbv	<0.050	0.050	8798797
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8798797
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8798797
Methylene Chloride(Dichloromethane)	ppbv	0.172	0.050	8798797
Chloroform	ppbv	<0.040	0.040	8798797
Carbon Tetrachloride	ppbv	0.135	0.050	8798797
1,1-Dichloroethane	ppbv	<0.050	0.050	8798797
1,2-Dichloroethane	ppbv	0.021	0.010	8798797
Ethylene Dibromide	ppbv	<0.010	0.010	8798797
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8798797
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8798797
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8798797

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WJH160		
Sampling Date		2023/07/04		
COC Number		NA		
	UNITS	**CRAWFORD VOC 04 JULY**	**RDL**	**QC Batch**
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8798797
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8798797
1,2-Dichloropropane	ppbv	<0.050	0.050	8798797
Bromomethane	ppbv	<0.050	0.050	8798797
Bromoform	ppbv	<0.10	0.10	8798797
Bromodichloromethane	ppbv	<0.20	0.20	8798791
Dibromochloromethane	ppbv	<0.20	0.20	8798791
Trichloroethylene	ppbv	<0.050	0.050	8798797
Tetrachloroethylene	ppbv	<0.050	0.050	8798797
Benzene	ppbv	0.105	0.050	8798797
Toluene	ppbv	0.258	0.050	8798797
Ethylbenzene	ppbv	<0.050	0.050	8798797
p+m-Xylene	ppbv	<0.10	0.10	8798797
o-Xylene	ppbv	<0.050	0.050	8798797
Styrene	ppbv	<0.050	0.050	8798797
4-ethyltoluene	ppbv	<0.50	0.50	8798791
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8798791
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8798791
Chlorobenzene	ppbv	<0.050	0.050	8798797
Benzyl chloride	ppbv	<0.50	0.50	8798791
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8798791
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8798797
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8798797
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8798797
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8798797
Hexane	ppbv	0.11	0.10	8798797
Heptane	ppbv	<0.30	0.30	8798791
Cyclohexane	ppbv	<0.20	0.20	8798791
Tetrahydrofuran	ppbv	<0.40	0.40	8798791
1,4-Dioxane	ppbv	<1.0	1.0	8798791
Naphthalene	ppbv	<0.10	0.10	8798797

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WJH160		
Sampling Date		2023/07/04		
COC Number		NA		
	UNITS	**CRAWFORD VOC 04 JULY**	**RDL**	**QC Batch**
Total Xylenes	ppbv	<0.15	0.15	8798797
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8798797
Vinyl Bromide	ppbv	<0.20	0.20	8798791
Propene	ppbv	<0.50	0.50	8798791
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8798791
Carbon Disulfide	ppbv	<0.50	0.50	8798791
Vinyl Acetate	ppbv	<0.20	0.20	8798791
Surrogate Recovery (%)				
Bromochloromethane	%	91	N/A	8798797
D5-Chlorobenzene	%	86	N/A	8798797
Difluorobenzene	%	81	N/A	8798797
Bromochloromethane	%	91	N/A	8798791
D5-Chlorobenzene	%	86	N/A	8798791
Difluorobenzene	%	81	N/A	8798791

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3K6706
Report Date: 2023/07/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: WJH160
Sample ID: CRAWFORD VOC 04 JULY
Matrix: Air

Collected: 2023/07/04
Shipped:
Received: 2023/07/13

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8798805	N/A	2023/07/19	Ana Nunes
Volatile Organics in Air by GC/MS/SIM	GC/MS	8798797	N/A	2023/07/19	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	8798791	N/A	2023/07/19	Ana Nunes

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8798791	Bromochloromethane	2023/07/19	103	60 - 140	106	%		
8798791	D5-Chlorobenzene	2023/07/19	106	60 - 140	89	%		
8798791	Difluorobenzene	2023/07/19	105	60 - 140	92	%		
8798797	Bromochloromethane	2023/07/19	103	60 - 140	106	%		
8798797	D5-Chlorobenzene	2023/07/19	106	60 - 140	89	%		
8798797	Difluorobenzene	2023/07/19	105	60 - 140	92	%		
8798791	1,2,4-Trimethylbenzene	2023/07/19	107	70 - 130	<0.50	ppbv	NC (2)	25
8798791	1,2-Dichlorotetrafluoroethane	2023/07/19	95	70 - 130	<0.17	ppbv	NC (2)	25
8798791	1,3,5-Trimethylbenzene	2023/07/19	105	70 - 130	<0.50	ppbv	NC (2)	25
8798791	1,3-Butadiene	2023/07/19	100	70 - 130	<0.50	ppbv	NC (2)	25
8798791	1,3-Dichlorobenzene	2023/07/19	103	70 - 130	<0.40	ppbv	NC (2)	25
8798791	1,4-Dioxane	2023/07/19	107	70 - 130	<1.0	ppbv	NC (2)	25
8798791	2,2,4-Trimethylpentane	2023/07/19	100	70 - 130	<0.20	ppbv	NC (2)	25
8798791	2-propanol	2023/07/19	102	70 - 130	<1.0	ppbv	NC (2)	25
8798791	4-ethyltoluene	2023/07/19	107	70 - 130	<0.50	ppbv	NC (2)	25
8798791	Benzyl chloride	2023/07/19	131 (1)	70 - 130	<0.50	ppbv	NC (2)	25
8798791	Bromodichloromethane	2023/07/19	96	70 - 130	<0.20	ppbv	NC (2)	25
8798791	Carbon Disulfide	2023/07/19	93	70 - 130	<0.50	ppbv	NC (2)	25
8798791	Chloroethane	2023/07/19	102	70 - 130	<0.30	ppbv	NC (2)	25
8798791	Chloromethane	2023/07/19	97	70 - 130	<0.30	ppbv	3.3 (2)	25
8798791	Cyclohexane	2023/07/19	99	70 - 130	<0.20	ppbv	NC (2)	25
8798791	Dibromochloromethane	2023/07/19	103	70 - 130	<0.20	ppbv	NC (2)	25
8798791	Dichlorodifluoromethane (FREON 12)	2023/07/19	99	70 - 130	<0.20	ppbv	1.3 (2)	25
8798791	Ethanol (ethyl alcohol)	2023/07/19	111	70 - 130	<1.0	ppbv	5.2 (2)	25
8798791	Ethyl Acetate	2023/07/19	104	70 - 130	<1.0	ppbv	NC (2)	25
8798791	Heptane	2023/07/19	104	70 - 130	<0.30	ppbv	NC (2)	25
8798791	Methyl Butyl Ketone (2-Hexanone)	2023/07/19	106	70 - 130	<1.0	ppbv	NC (2)	25
8798791	Propene	2023/07/19	93	70 - 130	<0.50	ppbv	NC (2)	25
8798791	Tetrahydrofuran	2023/07/19	102	70 - 130	<0.40	ppbv	NC (2)	25
8798791	Trichlorofluoromethane (FREON 11)	2023/07/19	103	70 - 130	<0.20	ppbv	0.80 (2)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8798791	Trichlorotrifluoroethane	2023/07/19	103	70 - 130	<0.15	ppbv	NC (2)	25
8798791	Vinyl Acetate	2023/07/19	102	70 - 130	<0.20	ppbv	NC (2)	25
8798791	Vinyl Bromide	2023/07/19	91	70 - 130	<0.20	ppbv	NC (2)	25
8798797	1,1,1,2-Tetrachloroethane	2023/07/19	103	70 - 130	<0.021	ppbv	NC (2)	25
8798797	1,1,1-Trichloroethane	2023/07/19	102	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,1,2,2-Tetrachloroethane	2023/07/19	92	70 - 130	<0.0027	ppbv	NC (2)	25
8798797	1,1,2-Trichloroethane	2023/07/19	99	70 - 130	<0.012	ppbv	NC (2)	25
8798797	1,1-Dichloroethane	2023/07/19	92	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,1-Dichloroethylene	2023/07/19	92	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,2,4-Trichlorobenzene	2023/07/19	95	70 - 130	<0.10	ppbv	NC (2)	25
8798797	1,2-Dichlorobenzene	2023/07/19	99	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,2-Dichloroethane	2023/07/19	104	70 - 130	<0.010	ppbv	0.85 (2)	25
8798797	1,2-Dichloropropane	2023/07/19	96	70 - 130	<0.050	ppbv	NC (2)	25
8798797	1,4-Dichlorobenzene	2023/07/19	106	70 - 130	<0.050	ppbv	NC (2)	25
8798797	2-Propanone	2023/07/19	119	70 - 130	<0.10	ppbv	NC (2)	N/A
8798797	Benzene	2023/07/19	99	70 - 130	<0.050	ppbv	2.1 (2)	25
8798797	Bromoform	2023/07/19	106	70 - 130	<0.10	ppbv	NC (2)	25
8798797	Bromomethane	2023/07/19	94	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Carbon Tetrachloride	2023/07/19	107	70 - 130	<0.050	ppbv	1.6 (2)	25
8798797	Chlorobenzene	2023/07/19	101	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Chloroform	2023/07/19	103	70 - 130	<0.040	ppbv	3.9 (2)	25
8798797	cis-1,2-Dichloroethylene	2023/07/19	99	70 - 130	<0.050	ppbv	NC (2)	25
8798797	cis-1,3-Dichloropropene	2023/07/19	103	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Ethylbenzene	2023/07/19	107	70 - 130	<0.050	ppbv	2.7 (2)	25
8798797	Ethylene Dibromide	2023/07/19	104	70 - 130	<0.010	ppbv	NC (2)	25
8798797	Hexachlorobutadiene	2023/07/19	109	70 - 130	<0.0047	ppbv	NC (2)	25
8798797	Hexane	2023/07/19	95	70 - 130	<0.10	ppbv	8.5 (2)	25
8798797	Methyl Ethyl Ketone (2-Butanone)	2023/07/19	102	70 - 130	<0.10	ppbv	0.38 (2)	25
8798797	Methyl Isobutyl Ketone	2023/07/19	100	70 - 130	<0.10	ppbv	NC (2)	25
8798797	Methyl t-butyl ether (MTBE)	2023/07/19	89	70 - 130	<0.10	ppbv	NC (2)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8798797	Methylene Chloride(Dichloromethane)	2023/07/19	98	70 - 130	<0.050	ppbv	1.3 (2)	25
8798797	Naphthalene	2023/07/19	96	70 - 130	<0.10	ppbv	NC (2)	25
8798797	o-Xylene	2023/07/19	101	70 - 130	<0.050	ppbv	0.62 (2)	25
8798797	p+m-Xylene	2023/07/19	106	70 - 130	<0.10	ppbv	3.3 (2)	25
8798797	Styrene	2023/07/19	104	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Tetrachloroethylene	2023/07/19	101	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Toluene	2023/07/19	103	70 - 130	<0.050	ppbv	3.5 (2)	25
8798797	Total Xylenes	2023/07/19	105	70 - 130	<0.15	ppbv	2.2 (2)	25
8798797	trans-1,2-Dichloroethylene	2023/07/19	93	70 - 130	<0.10	ppbv	NC (2)	25
8798797	trans-1,3-Dichloropropene	2023/07/19	116	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Trichloroethylene	2023/07/19	103	70 - 130	<0.050	ppbv	NC (2)	25
8798797	Vinyl Chloride	2023/07/19	89	70 - 130	<0.020	ppbv	NC (2)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

(2) Duplicate Parent ID

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Bureau Veritas Job #: C3K6706
Report Date: 2023/07/26

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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CAM FCD-01302 /3

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Mississauga Ontario ,L5N 2L8
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Phone: (905) 817-5700
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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:

Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC 04 July	7852	FX1656	04-Jul-23	25hr	-29.5	-11.5	X	X

13-Jul-23 09:00
Gina Baybayan
C3K6706
ISU AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 10-Jul-23

Received by:
Affiliation:
Date/Time: 2023/07/13 09:00

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/08/10
Report #: R7758205
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3M4060
Received: 2023/07/27, 08:35

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/08/03	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/08/03	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/08/03	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/08/10
Report #: R7758205
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3M4060
Received: 2023/07/27, 08:35

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

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Bureau Veritas Job #: C3M4060
Report Date: 2023/08/10

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WMY273	WMY273		
Sampling Date		2023/07/19	2023/07/19		
COC Number		na	na		
	UNITS	CRAWFORD VOC 19 JULY	CRAWFORD VOC 19 JULY Lab-Dup	RDL	QC Batch
Volatile Organics					
Pressure on Receipt	psig	(-3.5)	N/A	N/A	8830505
2-Propanone	ppbv	2.59	2.64	0.10	8830504
Dichlorodifluoromethane (FREON 12)	ppbv	0.46	0.45	0.20	8830503
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	<0.17	0.17	8830503
Chloromethane	ppbv	0.49	0.52	0.30	8830503
Vinyl Chloride	ppbv	<0.020	<0.020	0.020	8830504
Chloroethane	ppbv	<0.30	<0.30	0.30	8830503
1,3-Butadiene	ppbv	<0.50	<0.50	0.50	8830503
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.29	0.20	8830503
Ethanol (ethyl alcohol)	ppbv	1.8	1.7	1.0	8830503
Trichlorotrifluoroethane	ppbv	<0.15	<0.15	0.15	8830503
2-propanol	ppbv	<1.0	<1.0	1.0	8830503
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.26	0.26	0.10	8830504
Methyl Isobutyl Ketone	ppbv	<0.10	<0.10	0.10	8830504
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	<1.0	1.0	8830503
Methyl t-butyl ether (MTBE)	ppbv	<0.10	<0.10	0.10	8830504
Ethyl Acetate	ppbv	<1.0	<1.0	1.0	8830503
1,1-Dichloroethylene	ppbv	<0.050	<0.050	0.050	8830504
cis-1,2-Dichloroethylene	ppbv	<0.050	<0.050	0.050	8830504
trans-1,2-Dichloroethylene	ppbv	<0.10	<0.10	0.10	8830504
Methylene Chloride(Dichloromethane)	ppbv	0.235	0.246	0.050	8830504
Chloroform	ppbv	0.043	0.045	0.040	8830504
Carbon Tetrachloride	ppbv	0.116	0.126	0.050	8830504
1,1-Dichloroethane	ppbv	<0.050	<0.050	0.050	8830504
1,2-Dichloroethane	ppbv	0.016	0.016	0.010	8830504
Ethylene Dibromide	ppbv	<0.010	<0.010	0.010	8830504
1,1,1-Trichloroethane	ppbv	<0.050	<0.050	0.050	8830504
1,1,2-Trichloroethane	ppbv	<0.012	<0.012	0.012	8830504

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3M4060
Report Date: 2023/08/10

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WMY273	WMY273		
Sampling Date		2023/07/19	2023/07/19		
COC Number		na	na		
	UNITS	CRAWFORD VOC 19 JULY	CRAWFORD VOC 19 JULY Lab-Dup	RDL	QC Batch
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	<0.0027	0.0027	8830504
cis-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	8830504
trans-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	8830504
1,2-Dichloropropane	ppbv	<0.050	<0.050	0.050	8830504
Bromomethane	ppbv	<0.050	<0.050	0.050	8830504
Bromoform	ppbv	<0.10	<0.10	0.10	8830504
Bromodichloromethane	ppbv	<0.20	<0.20	0.20	8830503
Dibromochloromethane	ppbv	<0.20	<0.20	0.20	8830503
Trichloroethylene	ppbv	<0.050	<0.050	0.050	8830504
Tetrachloroethylene	ppbv	<0.050	<0.050	0.050	8830504
Benzene	ppbv	0.134	0.139	0.050	8830504
Toluene	ppbv	0.224	0.227	0.050	8830504
Ethylbenzene	ppbv	<0.050	<0.050	0.050	8830504
p+m-Xylene	ppbv	<0.10	<0.10	0.10	8830504
o-Xylene	ppbv	<0.050	<0.050	0.050	8830504
Styrene	ppbv	<0.050	<0.050	0.050	8830504
4-ethyltoluene	ppbv	<0.50	<0.50	0.50	8830503
1,3,5-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	8830503
1,2,4-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	8830503
Chlorobenzene	ppbv	<0.050	<0.050	0.050	8830504
Benzyl chloride	ppbv	<0.50	<0.50	0.50	8830503
1,3-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	8830503
1,4-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	8830504
1,2-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	8830504
1,2,4-Trichlorobenzene	ppbv	<0.10	<0.10	0.10	8830504
Hexachlorobutadiene	ppbv	<0.0047	<0.0047	0.0047	8830504
Hexane	ppbv	0.13	0.13	0.10	8830504
Heptane	ppbv	<0.30	<0.30	0.30	8830503
Cyclohexane	ppbv	<0.20	<0.20	0.20	8830503
Tetrahydrofuran	ppbv	<0.40	<0.40	0.40	8830503

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

Bureau Veritas Job #: C3M4060
Report Date: 2023/08/10

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WMY273	WMY273		
Sampling Date		2023/07/19	2023/07/19		
COC Number		na	na		
	UNITS	**CRAWFORD VOC 19 JULY**	**CRAWFORD VOC 19 JULY Lab-Dup**	**RDL**	**QC Batch**
1,4-Dioxane	ppbv	<1.0	<1.0	1.0	8830503
Naphthalene	ppbv	<0.10	<0.10	0.10	8830504
Total Xylenes	ppbv	<0.15	<0.15	0.15	8830504
1,1,1,2-Tetrachloroethane	ppbv	<0.021	<0.021	0.021	8830504
Vinyl Bromide	ppbv	<0.20	<0.20	0.20	8830503
Propene	ppbv	<0.50	<0.50	0.50	8830503
2,2,4-Trimethylpentane	ppbv	<0.20	<0.20	0.20	8830503
Carbon Disulfide	ppbv	<0.50	<0.50	0.50	8830503
Vinyl Acetate	ppbv	<0.20	<0.20	0.20	8830503
Surrogate Recovery (%)					
Bromochloromethane	%	97	95	N/A	8830504
D5-Chlorobenzene	%	88	84	N/A	8830504
Difluorobenzene	%	87	83	N/A	8830504
Bromochloromethane	%	97	95	N/A	8830503
D5-Chlorobenzene	%	88	84	N/A	8830503
Difluorobenzene	%	87	83	N/A	8830503

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3M4060
Report Date: 2023/08/10

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: WMY273
Sample ID: CRAWFORD VOC 19 JULY
Matrix: Air

Collected: 2023/07/19
Shipped:
Received: 2023/07/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8830505	N/A	2023/08/03	Ana Nunes
Volatile Organics in Air by GC/MS/SIM	GC/MS	8830504	N/A	2023/08/03	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	8830503	N/A	2023/08/03	Ana Nunes

Bureau Veritas ID: WMY273 Dup
Sample ID: CRAWFORD VOC 19 JULY
Matrix: Air

Collected: 2023/07/19
Shipped:
Received: 2023/07/27

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organics in Air by GC/MS/SIM	GC/MS	8830504	N/A	2023/08/03	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	8830503	N/A	2023/08/03	Ana Nunes

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8830503	Bromochloromethane	2023/08/03	96	60 - 140	104	%		
8830503	D5-Chlorobenzene	2023/08/03	99	60 - 140	87	%		
8830503	Difluorobenzene	2023/08/03	99	60 - 140	87	%		
8830504	Bromochloromethane	2023/08/03	96	60 - 140	104	%		
8830504	D5-Chlorobenzene	2023/08/03	99	60 - 140	87	%		
8830504	Difluorobenzene	2023/08/03	99	60 - 140	87	%		
8830503	1,2,4-Trimethylbenzene	2023/08/03	119	70 - 130	<0.50	ppbv	NC (1)	25
8830503	1,2-Dichlorotetrafluoroethane	2023/08/03	104	70 - 130	<0.17	ppbv	NC (1)	25
8830503	1,3,5-Trimethylbenzene	2023/08/03	114	70 - 130	<0.50	ppbv	NC (1)	25
8830503	1,3-Butadiene	2023/08/03	117	70 - 130	<0.50	ppbv	NC (1)	25
8830503	1,3-Dichlorobenzene	2023/08/03	108	70 - 130	<0.40	ppbv	NC (1)	25
8830503	1,4-Dioxane	2023/08/03	125	70 - 130	<1.0	ppbv	NC (1)	25
8830503	2,2,4-Trimethylpentane	2023/08/03	121	70 - 130	<0.20	ppbv	NC (1)	25
8830503	2-propanol	2023/08/03	112	70 - 130	<1.0	ppbv	NC (1)	25
8830503	4-ethyltoluene	2023/08/03	125	70 - 130	<0.50	ppbv	NC (1)	25
8830503	Benzyl chloride	2023/08/03	118	70 - 130	<0.50	ppbv	NC (1)	25
8830503	Bromodichloromethane	2023/08/03	101	70 - 130	<0.20	ppbv	NC (1)	25
8830503	Carbon Disulfide	2023/08/03	110	70 - 130	<0.50	ppbv	NC (1)	25
8830503	Chloroethane	2023/08/03	115	70 - 130	<0.30	ppbv	NC (1)	25
8830503	Chloromethane	2023/08/03	111	70 - 130	<0.30	ppbv	6.2 (1)	25
8830503	Cyclohexane	2023/08/03	118	70 - 130	<0.20	ppbv	NC (1)	25
8830503	Dibromochloromethane	2023/08/03	107	70 - 130	<0.20	ppbv	NC (1)	25
8830503	Dichlorodifluoromethane (FREON 12)	2023/08/03	95	70 - 130	<0.20	ppbv	3.1 (1)	25
8830503	Ethanol (ethyl alcohol)	2023/08/03	128	70 - 130	<1.0	ppbv	4.2 (1)	25
8830503	Ethyl Acetate	2023/08/03	118	70 - 130	<1.0	ppbv	NC (1)	25
8830503	Heptane	2023/08/03	121	70 - 130	<0.30	ppbv	NC (1)	25
8830503	Methyl Butyl Ketone (2-Hexanone)	2023/08/03	116	70 - 130	<1.0	ppbv	NC (1)	25
8830503	Propene	2023/08/03	112	70 - 130	<0.50	ppbv	NC (1)	25
8830503	Tetrahydrofuran	2023/08/03	119	70 - 130	<0.40	ppbv	NC (1)	25
8830503	Trichlorofluoromethane (FREON 11)	2023/08/03	103	70 - 130	<0.20	ppbv	2.0 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8830503	Trichlorotrifluoroethane	2023/08/03	109	70 - 130	<0.15	ppbv	NC (1)	25
8830503	Vinyl Acetate	2023/08/03	121	70 - 130	<0.20	ppbv	NC (1)	25
8830503	Vinyl Bromide	2023/08/03	100	70 - 130	<0.20	ppbv	NC (1)	25
8830504	1,1,1,2-Tetrachloroethane	2023/08/03	107	70 - 130	<0.021	ppbv	NC (1)	25
8830504	1,1,1-Trichloroethane	2023/08/03	100	70 - 130	<0.050	ppbv	NC (1)	25
8830504	1,1,2,2-Tetrachloroethane	2023/08/03	100	70 - 130	<0.0027	ppbv	NC (1)	25
8830504	1,1,2-Trichloroethane	2023/08/03	106	70 - 130	<0.012	ppbv	NC (1)	25
8830504	1,1-Dichloroethane	2023/08/03	102	70 - 130	<0.050	ppbv	NC (1)	25
8830504	1,1-Dichloroethylene	2023/08/03	102	70 - 130	<0.050	ppbv	NC (1)	25
8830504	1,2,4-Trichlorobenzene	2023/08/03	102	70 - 130	<0.10	ppbv	NC (1)	25
8830504	1,2-Dichlorobenzene	2023/08/03	103	70 - 130	<0.050	ppbv	NC (1)	25
8830504	1,2-Dichloroethane	2023/08/03	105	70 - 130	<0.010	ppbv	3.2 (1)	25
8830504	1,2-Dichloropropane	2023/08/03	109	70 - 130	<0.050	ppbv	NC (1)	25
8830504	1,4-Dichlorobenzene	2023/08/03	110	70 - 130	<0.050	ppbv	NC (1)	25
8830504	2-Propanone	2023/08/03	132 (2)	70 - 130	<0.10	ppbv	NC (1)	N/A
8830504	Benzene	2023/08/03	111	70 - 130	<0.050	ppbv	4.0 (1)	25
8830504	Bromoform	2023/08/03	107	70 - 130	<0.10	ppbv	NC (1)	25
8830504	Bromomethane	2023/08/03	104	70 - 130	<0.050	ppbv	NC (1)	25
8830504	Carbon Tetrachloride	2023/08/03	103	70 - 130	<0.050	ppbv	8.4 (1)	25
8830504	Chlorobenzene	2023/08/03	107	70 - 130	<0.050	ppbv	NC (1)	25
8830504	Chloroform	2023/08/03	108	70 - 130	<0.040	ppbv	3.4 (1)	25
8830504	cis-1,2-Dichloroethylene	2023/08/03	108	70 - 130	<0.050	ppbv	NC (1)	25
8830504	cis-1,3-Dichloropropene	2023/08/03	111	70 - 130	<0.050	ppbv	NC (1)	25
8830504	Ethylbenzene	2023/08/03	117	70 - 130	<0.050	ppbv	NC (1)	25
8830504	Ethylene Dibromide	2023/08/03	109	70 - 130	<0.010	ppbv	NC (1)	25
8830504	Hexachlorobutadiene	2023/08/03	104	70 - 130	<0.0047	ppbv	NC (1)	25
8830504	Hexane	2023/08/03	113	70 - 130	<0.10	ppbv	4.3 (1)	25
8830504	Methyl Ethyl Ketone (2-Butanone)	2023/08/03	119	70 - 130	<0.10	ppbv	1.0 (1)	25
8830504	Methyl Isobutyl Ketone	2023/08/03	111	70 - 130	<0.10	ppbv	NC (1)	25
8830504	Methyl t-butyl ether (MTBE)	2023/08/03	100	70 - 130	<0.10	ppbv	NC (1)	25

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8830504	Methylene Chloride(Dichloromethane)	2023/08/03	116	70 - 130	<0.050	ppbv	4.8 (1)	25
8830504	Naphthalene	2023/08/03	109	70 - 130	<0.10	ppbv	NC (1)	25
8830504	o-Xylene	2023/08/03	107	70 - 130	<0.050	ppbv	NC (1)	25
8830504	p+m-Xylene	2023/08/03	116	70 - 130	<0.10	ppbv	NC (1)	25
8830504	Styrene	2023/08/03	111	70 - 130	<0.050	ppbv	NC (1)	25
8830504	Tetrachloroethylene	2023/08/03	108	70 - 130	<0.050	ppbv	NC (1)	25
8830504	Toluene	2023/08/03	116	70 - 130	<0.050	ppbv	1.5 (1)	25
8830504	Total Xylenes	2023/08/03	104	70 - 130	<0.15	ppbv	NC (1)	25
8830504	trans-1,2-Dichloroethylene	2023/08/03	105	70 - 130	<0.10	ppbv	NC (1)	25
8830504	trans-1,3-Dichloropropene	2023/08/03	121	70 - 130	<0.050	ppbv	NC (1)	25
8830504	Trichloroethylene	2023/08/03	110	70 - 130	<0.050	ppbv	NC (1)	25
8830504	Vinyl Chloride	2023/08/03	112	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID [WMY273-01]

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

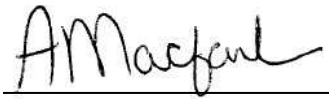
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Bureau Veritas Job #: C3M4060
Report Date: 2023/08/10

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anke Macfarlane, Laboratory Manager, VOC

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

CAM FCD-01302 /3

BUREAU VERITAS

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Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC 19 July	7784	FX096	19-Jul-23	24	-28	-7	X	X

27-Jul-23 08:35
Gina Baybayan
C3M4060
BSU AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 24-Jul-23

Received by: Roy Bruishe-Sumar
Affiliation:
Date/Time: 2023/07/27 08:35

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/08/18
Report #: R7770526
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3N4546
Received: 2023/08/04, 09:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/08/17	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/08/16	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/08/16	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/08/18
Report #: R7770526
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3N4546
Received: 2023/08/04, 09:00

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3N4546
Report Date: 2023/08/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WPE015		
Sampling Date		2023/08/02		
COC Number		na		
	UNITS	CRAWFORD VOC 02 AUGUST	RDL	QC Batch
Volatile Organics				
Pressure on Receipt	psig	(-4.5)	N/A	8856360
2-Propanone	ppbv	6.26	0.12	8856359
Dichlorodifluoromethane (FREON 12)	ppbv	0.45	0.20	8856358
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8856358
Chloromethane	ppbv	0.64	0.30	8856358
Vinyl Chloride	ppbv	<0.020	0.020	8856359
Chloroethane	ppbv	<0.30	0.30	8856358
1,3-Butadiene	ppbv	<0.50	0.50	8856358
Trichlorofluoromethane (FREON 11)	ppbv	0.33	0.20	8856358
Ethanol (ethyl alcohol)	ppbv	1.5	1.0	8856358
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8856358
2-propanol	ppbv	<1.0	1.0	8856358
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.80	0.10	8856359
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8856359
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8856358
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8856359
Ethyl Acetate	ppbv	<1.0	1.0	8856358
1,1-Dichloroethylene	ppbv	<0.050	0.050	8856359
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8856359
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8856359
Methylene Chloride(Dichloromethane)	ppbv	0.233	0.050	8856359
Chloroform	ppbv	<0.040	0.040	8856359
Carbon Tetrachloride	ppbv	0.076	0.050	8856359
1,1-Dichloroethane	ppbv	<0.050	0.050	8856359
1,2-Dichloroethane	ppbv	0.016	0.010	8856359
Ethylene Dibromide	ppbv	<0.010	0.010	8856359
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8856359
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8856359
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8856359

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WPE015		
Sampling Date		2023/08/02		
COC Number		na		
	UNITS	**CRAWFORD VOC 02 AUGUST**	**RDL**	**QC Batch**
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8856359
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8856359
1,2-Dichloropropane	ppbv	<0.050	0.050	8856359
Bromomethane	ppbv	<0.050	0.050	8856359
Bromoform	ppbv	<0.10	0.10	8856359
Bromodichloromethane	ppbv	<0.20	0.20	8856358
Dibromochloromethane	ppbv	<0.20	0.20	8856358
Trichloroethylene	ppbv	<0.050	0.050	8856359
Tetrachloroethylene	ppbv	<0.050	0.050	8856359
Benzene	ppbv	0.141	0.050	8856359
Toluene	ppbv	0.120	0.050	8856359
Ethylbenzene	ppbv	<0.050	0.050	8856359
p+m-Xylene	ppbv	<0.10	0.10	8856359
o-Xylene	ppbv	<0.050	0.050	8856359
Styrene	ppbv	<0.050	0.050	8856359
4-ethyltoluene	ppbv	<0.50	0.50	8856358
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8856358
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8856358
Chlorobenzene	ppbv	<0.050	0.050	8856359
Benzyl chloride	ppbv	<0.50	0.50	8856358
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8856358
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8856359
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8856359
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8856359
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8856359
Hexane	ppbv	0.11	0.10	8856359
Heptane	ppbv	<0.30	0.30	8856358
Cyclohexane	ppbv	<0.20	0.20	8856358
Tetrahydrofuran	ppbv	<0.40	0.40	8856358
1,4-Dioxane	ppbv	<1.0	1.0	8856358
Naphthalene	ppbv	<0.10	0.10	8856359

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N4546
Report Date: 2023/08/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WPE015		
Sampling Date		2023/08/02		
COC Number		na		
	UNITS	**CRAWFORD VOC 02 AUGUST**	**RDL**	**QC Batch**
Total Xylenes	ppbv	<0.15	0.15	8856359
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8856359
Vinyl Bromide	ppbv	<0.20	0.20	8856358
Propene	ppbv	<0.50	0.50	8856358
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8856358
Carbon Disulfide	ppbv	<0.50	0.50	8856358
Vinyl Acetate	ppbv	<0.20	0.20	8856358
Surrogate Recovery (%)				
Bromochloromethane	%	95	N/A	8856359
D5-Chlorobenzene	%	90	N/A	8856359
Difluorobenzene	%	88	N/A	8856359
Bromochloromethane	%	95	N/A	8856358
D5-Chlorobenzene	%	90	N/A	8856358
Difluorobenzene	%	88	N/A	8856358

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3N4546
Report Date: 2023/08/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: WPE015
Sample ID: CRAWFORD VOC 02 AUGUST
Matrix: Air

Collected: 2023/08/02
Shipped:
Received: 2023/08/04

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8856360	N/A	2023/08/17	Ana Nunes
Volatile Organics in Air by GC/MS/SIM	GC/MS	8856359	N/A	2023/08/16	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	8856358	N/A	2023/08/16	Ana Nunes

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Bureau Veritas Job #: C3N4546
Report Date: 2023/08/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8856358	Bromochloromethane	2023/08/16	100	60 - 140	104	%		
8856358	D5-Chlorobenzene	2023/08/16	100	60 - 140	95	%		
8856358	Difluorobenzene	2023/08/16	100	60 - 140	96	%		
8856359	Bromochloromethane	2023/08/16	100	60 - 140	104	%		
8856359	D5-Chlorobenzene	2023/08/16	100	60 - 140	95	%		
8856359	Difluorobenzene	2023/08/16	100	60 - 140	96	%		
8856358	1,2,4-Trimethylbenzene	2023/08/16	104	70 - 130	<0.50	ppbv	NC (1)	25
8856358	1,2-Dichlorotetrafluoroethane	2023/08/16	102	70 - 130	<0.17	ppbv	NC (1)	25
8856358	1,3,5-Trimethylbenzene	2023/08/16	103	70 - 130	<0.50	ppbv	NC (1)	25
8856358	1,3-Butadiene	2023/08/16	115	70 - 130	<0.50	ppbv	NC (1)	25
8856358	1,3-Dichlorobenzene	2023/08/16	100	70 - 130	<0.40	ppbv	NC (1)	25
8856358	1,4-Dioxane	2023/08/16	92	70 - 130	<1.0	ppbv	NC (1)	25
8856358	2,2,4-Trimethylpentane	2023/08/16	104	70 - 130	<0.20	ppbv	NC (1)	25
8856358	2-propanol	2023/08/16	97	70 - 130	<1.0	ppbv	NC (1)	25
8856358	4-ethyltoluene	2023/08/16	98	70 - 130	<0.50	ppbv	NC (1)	25
8856358	Benzyl chloride	2023/08/16	77	70 - 130	<0.50	ppbv	NC (1)	25
8856358	Bromodichloromethane	2023/08/16	102	70 - 130	<0.20	ppbv	NC (1)	25
8856358	Carbon Disulfide	2023/08/16	98	70 - 130	<0.50	ppbv	NC (1)	25
8856358	Chloroethane	2023/08/16	116	70 - 130	<0.30	ppbv	NC (1)	25
8856358	Chloromethane	2023/08/16	114	70 - 130	<0.30	ppbv	2.1 (1)	25
8856358	Cyclohexane	2023/08/16	104	70 - 130	<0.20	ppbv	NC (1)	25
8856358	Dibromochloromethane	2023/08/16	115	70 - 130	<0.20	ppbv	NC (1)	25
8856358	Dichlorodifluoromethane (FREON 12)	2023/08/16	101	70 - 130	<0.20	ppbv	4.2 (1)	25
8856358	Ethanol (ethyl alcohol)	2023/08/16	92	70 - 130	<1.0	ppbv	NC (1)	25
8856358	Ethyl Acetate	2023/08/16	104	70 - 130	<1.0	ppbv	NC (1)	25
8856358	Heptane	2023/08/16	109	70 - 130	<0.30	ppbv	NC (1)	25
8856358	Methyl Butyl Ketone (2-Hexanone)	2023/08/16	98	70 - 130	<1.0	ppbv	NC (1)	25
8856358	Propene	2023/08/16	127	70 - 130	<0.50	ppbv	NC (1)	25
8856358	Tetrahydrofuran	2023/08/16	103	70 - 130	<0.40	ppbv	NC (1)	25
8856358	Trichlorofluoromethane (FREON 11)	2023/08/16	105	70 - 130	<0.20	ppbv	3.1 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8856358	Trichlorotrifluoroethane	2023/08/16	104	70 - 130	<0.15	ppbv	NC (1)	25
8856358	Vinyl Acetate	2023/08/16	100	70 - 130	<0.20	ppbv	NC (1)	25
8856358	Vinyl Bromide	2023/08/16	93	70 - 130	<0.20	ppbv	NC (1)	25
8856359	1,1,1,2-Tetrachloroethane	2023/08/16	108	70 - 130	<0.021	ppbv	NC (1)	25
8856359	1,1,1-Trichloroethane	2023/08/16	92	70 - 130	<0.050	ppbv	NC (1)	25
8856359	1,1,2,2-Tetrachloroethane	2023/08/16	106	70 - 130	<0.0027	ppbv	NC (1)	25
8856359	1,1,2-Trichloroethane	2023/08/16	107	70 - 130	<0.012	ppbv	NC (1)	25
8856359	1,1-Dichloroethane	2023/08/16	99	70 - 130	<0.050	ppbv	NC (1)	25
8856359	1,1-Dichloroethylene	2023/08/16	89	70 - 130	<0.050	ppbv	NC (1)	25
8856359	1,2,4-Trichlorobenzene	2023/08/16	104	70 - 130	<0.10	ppbv	NC (1)	25
8856359	1,2-Dichlorobenzene	2023/08/16	99	70 - 130	<0.050	ppbv	NC (1)	25
8856359	1,2-Dichloroethane	2023/08/16	101	70 - 130	<0.010	ppbv	4.2 (1)	25
8856359	1,2-Dichloropropane	2023/08/16	108	70 - 130	<0.050	ppbv	NC (1)	25
8856359	1,4-Dichlorobenzene	2023/08/16	98	70 - 130	<0.050	ppbv	NC (1)	25
8856359	2-Propanone	2023/08/16	95	70 - 130	<0.12	ppbv	NC (1)	N/A
8856359	Benzene	2023/08/16	104	70 - 130	<0.050	ppbv	2.2 (1)	25
8856359	Bromoform	2023/08/16	119	70 - 130	<0.10	ppbv	NC (1)	25
8856359	Bromomethane	2023/08/16	105	70 - 130	<0.050	ppbv	NC (1)	25
8856359	Carbon Tetrachloride	2023/08/16	104	70 - 130	<0.050	ppbv	2.7 (1)	25
8856359	Chlorobenzene	2023/08/16	104	70 - 130	<0.050	ppbv	NC (1)	25
8856359	Chloroform	2023/08/16	104	70 - 130	<0.040	ppbv	NC (1)	25
8856359	cis-1,2-Dichloroethylene	2023/08/16	100	70 - 130	<0.050	ppbv	NC (1)	25
8856359	cis-1,3-Dichloropropene	2023/08/16	95	70 - 130	<0.050	ppbv	NC (1)	25
8856359	Ethylbenzene	2023/08/16	104	70 - 130	<0.050	ppbv	NC (1)	25
8856359	Ethylene Dibromide	2023/08/16	104	70 - 130	<0.010	ppbv	NC (1)	25
8856359	Hexachlorobutadiene	2023/08/16	116	70 - 130	<0.0047	ppbv	NC (1)	25
8856359	Hexane	2023/08/16	97	70 - 130	<0.10	ppbv	4.0 (1)	25
8856359	Methyl Ethyl Ketone (2-Butanone)	2023/08/16	100	70 - 130	<0.10	ppbv	2.1 (1)	25
8856359	Methyl Isobutyl Ketone	2023/08/16	100	70 - 130	<0.10	ppbv	NC (1)	25
8856359	Methyl t-butyl ether (MTBE)	2023/08/16	65 (2)	70 - 130	<0.10	ppbv	NC (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8856359	Methylene Chloride(Dichloromethane)	2023/08/16	103	70 - 130	<0.050	ppbv	3.4 (1)	25
8856359	Naphthalene	2023/08/16	105	70 - 130	<0.10	ppbv	NC (1)	25
8856359	o-Xylene	2023/08/16	103	70 - 130	<0.050	ppbv	NC (1)	25
8856359	p+m-Xylene	2023/08/16	104	70 - 130	<0.10	ppbv	NC (1)	25
8856359	Styrene	2023/08/16	101	70 - 130	<0.050	ppbv	NC (1)	25
8856359	Tetrachloroethylene	2023/08/16	102	70 - 130	<0.050	ppbv	NC (1)	25
8856359	Toluene	2023/08/16	100	70 - 130	<0.050	ppbv	2.8 (1)	25
8856359	Total Xylenes	2023/08/16	103	70 - 130	<0.15	ppbv	NC (1)	25
8856359	trans-1,2-Dichloroethylene	2023/08/16	96	70 - 130	<0.10	ppbv	NC (1)	25
8856359	trans-1,3-Dichloropropene	2023/08/16	91	70 - 130	<0.050	ppbv	NC (1)	25
8856359	Trichloroethylene	2023/08/16	106	70 - 130	<0.050	ppbv	NC (1)	25
8856359	Vinyl Chloride	2023/08/16	116	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

(2) Recovery or RPD for this parameter is outside control limits. The overall quality control for this analysis meets acceptability criteria.

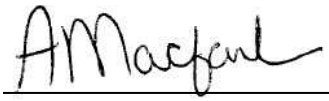
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Bureau Veritas Job #: C3N4546
Report Date: 2023/08/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anke Macfarlane, Laboratory Manager, VOC

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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC 02 August	SX0167	FX1367	02-Aug-23	23hr	-28.5	-9.5	X	X

04-Aug-23 09:00
Gina Baybayan
C3N4546
BSI AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 03-Aug-23

Received by:
Affiliation:
Date/Time: 2023/08/04 09:00

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/08/30
Report #: R7788933
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3P0563
Received: 2023/08/18, 08:45

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/08/24	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/08/24	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/08/24	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/08/30
Report #: R7788933
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3P0563
Received: 2023/08/18, 08:45

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WSN673		
Sampling Date		2023/08/14		
COC Number		NA		
	UNITS	**CRAWFORD VOC 14 AUGUST/14508**	**RDL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	(-3.7)	N/A	8873935
2-Propanone	ppbv	1.69	0.14	8873934
Dichlorodifluoromethane (FREON 12)	ppbv	0.47	0.20	8873929
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8873929
Chloromethane	ppbv	0.43	0.30	8873929
Vinyl Chloride	ppbv	<0.020	0.020	8873934
Chloroethane	ppbv	<0.30	0.30	8873929
1,3-Butadiene	ppbv	<0.50	0.50	8873929
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.20	8873929
Ethanol (ethyl alcohol)	ppbv	<1.0	1.0	8873929
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8873929
2-propanol	ppbv	<1.0	1.0	8873929
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.24	0.10	8873934
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8873934
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8873929
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8873934
Ethyl Acetate	ppbv	<1.0	1.0	8873929
1,1-Dichloroethylene	ppbv	<0.050	0.050	8873934
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8873934
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8873934
Methylene Chloride(Dichloromethane)	ppbv	0.125	0.050	8873934
Chloroform	ppbv	<0.040	0.040	8873934
Carbon Tetrachloride	ppbv	0.126	0.050	8873934
1,1-Dichloroethane	ppbv	<0.050	0.050	8873934
1,2-Dichloroethane	ppbv	0.015	0.010	8873934
Ethylene Dibromide	ppbv	<0.010	0.010	8873934
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8873934
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8873934
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8873934

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WSN673		
Sampling Date		2023/08/14		
COC Number		NA		
	UNITS	**CRAWFORD VOC 14 AUGUST/14508**	**RDL**	**QC Batch**
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8873934
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8873934
1,2-Dichloropropane	ppbv	<0.050	0.050	8873934
Bromomethane	ppbv	<0.050	0.050	8873934
Bromoform	ppbv	<0.10	0.10	8873934
Bromodichloromethane	ppbv	<0.20	0.20	8873929
Dibromochloromethane	ppbv	<0.20	0.20	8873929
Trichloroethylene	ppbv	<0.050	0.050	8873934
Tetrachloroethylene	ppbv	<0.050	0.050	8873934
Benzene	ppbv	0.108	0.050	8873934
Toluene	ppbv	0.393	0.050	8873934
Ethylbenzene	ppbv	<0.050	0.050	8873934
p+m-Xylene	ppbv	<0.10	0.10	8873934
o-Xylene	ppbv	<0.050	0.050	8873934
Styrene	ppbv	<0.050	0.050	8873934
4-ethyltoluene	ppbv	<0.50	0.50	8873929
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8873929
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8873929
Chlorobenzene	ppbv	<0.050	0.050	8873934
Benzyl chloride	ppbv	<0.50	0.50	8873929
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8873929
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8873934
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8873934
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8873934
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8873934
Hexane	ppbv	<0.10	0.10	8873934
Heptane	ppbv	<0.30	0.30	8873929
Cyclohexane	ppbv	<0.20	0.20	8873929
Tetrahydrofuran	ppbv	<0.40	0.40	8873929
1,4-Dioxane	ppbv	<1.0	1.0	8873929
Naphthalene	ppbv	<0.10	0.10	8873934

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0563
Report Date: 2023/08/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WSN673		
Sampling Date		2023/08/14		
COC Number		NA		
	UNITS	**CRAWFORD VOC 14 AUGUST/14508**	**RDL**	**QC Batch**
Total Xylenes	ppbv	<0.15	0.15	8873934
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8873934
Vinyl Bromide	ppbv	<0.20	0.20	8873929
Propene	ppbv	<0.50	0.50	8873929
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8873929
Carbon Disulfide	ppbv	<0.50	0.50	8873929
Vinyl Acetate	ppbv	<0.20	0.20	8873929
Surrogate Recovery (%)				
Bromochloromethane	%	94	N/A	8873934
D5-Chlorobenzene	%	86	N/A	8873934
Difluorobenzene	%	86	N/A	8873934
Bromochloromethane	%	94	N/A	8873929
D5-Chlorobenzene	%	86	N/A	8873929
Difluorobenzene	%	86	N/A	8873929

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas Job #: C3P0563
Report Date: 2023/08/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: WSN673
Sample ID: CRAWFORD VOC 14 AUGUST/14508
Matrix: Air

Collected: 2023/08/14
Shipped:
Received: 2023/08/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8873935	N/A	2023/08/24	Ana Nunes
Volatile Organics in Air by GC/MS/SIM	GC/MS	8873934	N/A	2023/08/24	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	8873929	N/A	2023/08/24	Ana Nunes

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8873929	Bromochloromethane	2023/08/24	101	60 - 140	105	%		
8873929	D5-Chlorobenzene	2023/08/24	105	60 - 140	95	%		
8873929	Difluorobenzene	2023/08/24	106	60 - 140	97	%		
8873934	Bromochloromethane	2023/08/24	101	60 - 140	105	%		
8873934	D5-Chlorobenzene	2023/08/24	105	60 - 140	95	%		
8873934	Difluorobenzene	2023/08/24	106	60 - 140	97	%		
8873929	1,2,4-Trimethylbenzene	2023/08/24	98	70 - 130	<0.50	ppbv	NC (1)	25
8873929	1,2-Dichlorotetrafluoroethane	2023/08/24	92	70 - 130	<0.17	ppbv	NC (1)	25
8873929	1,3,5-Trimethylbenzene	2023/08/24	96	70 - 130	<0.50	ppbv	NC (1)	25
8873929	1,3-Butadiene	2023/08/24	101	70 - 130	<0.50	ppbv	NC (1)	25
8873929	1,3-Dichlorobenzene	2023/08/24	94	70 - 130	<0.40	ppbv	NC (1)	25
8873929	1,4-Dioxane	2023/08/24	94	70 - 130	<1.0	ppbv	NC (1)	25
8873929	2,2,4-Trimethylpentane	2023/08/24	100	70 - 130	<0.20	ppbv	NC (1)	25
8873929	2-propanol	2023/08/24	93	70 - 130	<1.0	ppbv	NC (1)	25
8873929	4-ethyltoluene	2023/08/24	100	70 - 130	<0.50	ppbv	NC (1)	25
8873929	Benzyl chloride	2023/08/24	122	70 - 130	<0.50	ppbv	NC (1)	25
8873929	Bromodichloromethane	2023/08/24	90	70 - 130	<0.20	ppbv	NC (1)	25
8873929	Carbon Disulfide	2023/08/24	97	70 - 130	<0.50	ppbv	NC (1)	25
8873929	Chloroethane	2023/08/24	105	70 - 130	<0.30	ppbv	NC (1)	25
8873929	Chloromethane	2023/08/24	100	70 - 130	<0.30	ppbv	1.2 (1)	25
8873929	Cyclohexane	2023/08/24	101	70 - 130	<0.20	ppbv	NC (1)	25
8873929	Dibromochloromethane	2023/08/24	97	70 - 130	<0.20	ppbv	NC (1)	25
8873929	Dichlorodifluoromethane (FREON 12)	2023/08/24	90	70 - 130	<0.20	ppbv	3.2 (1)	25
8873929	Ethanol (ethyl alcohol)	2023/08/24	85	70 - 130	<1.0	ppbv	NC (1)	25
8873929	Ethyl Acetate	2023/08/24	103	70 - 130	<1.0	ppbv	NC (1)	25
8873929	Heptane	2023/08/24	103	70 - 130	<0.30	ppbv	NC (1)	25
8873929	Methyl Butyl Ketone (2-Hexanone)	2023/08/24	97	70 - 130	<1.0	ppbv	NC (1)	25
8873929	Propene	2023/08/24	121	70 - 130	<0.50	ppbv	NC (1)	25
8873929	Tetrahydrofuran	2023/08/24	101	70 - 130	<0.40	ppbv	NC (1)	25
8873929	Trichlorofluoromethane (FREON 11)	2023/08/24	94	70 - 130	<0.20	ppbv	3.0 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8873929	Trichlorotrifluoroethane	2023/08/24	92	70 - 130	<0.15	ppbv	NC (1)	25
8873929	Vinyl Acetate	2023/08/24	105	70 - 130	<0.20	ppbv	NC (1)	25
8873929	Vinyl Bromide	2023/08/24	89	70 - 130	<0.20	ppbv	NC (1)	25
8873934	1,1,1,2-Tetrachloroethane	2023/08/24	100	70 - 130	<0.021	ppbv	NC (1)	25
8873934	1,1,1-Trichloroethane	2023/08/24	96	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,1,2,2-Tetrachloroethane	2023/08/24	92	70 - 130	<0.0027	ppbv	NC (1)	25
8873934	1,1,2-Trichloroethane	2023/08/24	98	70 - 130	<0.012	ppbv	NC (1)	25
8873934	1,1-Dichloroethane	2023/08/24	95	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,1-Dichloroethylene	2023/08/24	83	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,2,4-Trichlorobenzene	2023/08/24	95	70 - 130	<0.10	ppbv	NC (1)	25
8873934	1,2-Dichlorobenzene	2023/08/24	91	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,2-Dichloroethane	2023/08/24	97	70 - 130	<0.010	ppbv	1.6 (1)	25
8873934	1,2-Dichloropropane	2023/08/24	100	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,4-Dichlorobenzene	2023/08/24	96	70 - 130	<0.050	ppbv	NC (1)	25
8873934	2-Propanone	2023/08/24	94	70 - 130	<0.14	ppbv	NC (1)	N/A
8873934	Benzene	2023/08/24	102	70 - 130	<0.050	ppbv	1.0 (1)	25
8873934	Bromoform	2023/08/24	99	70 - 130	<0.10	ppbv	NC (1)	25
8873934	Bromomethane	2023/08/24	92	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Carbon Tetrachloride	2023/08/24	102	70 - 130	<0.050	ppbv	2.1 (1)	25
8873934	Chlorobenzene	2023/08/24	97	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Chloroform	2023/08/24	100	70 - 130	<0.040	ppbv	NC (1)	25
8873934	cis-1,2-Dichloroethylene	2023/08/24	98	70 - 130	<0.050	ppbv	NC (1)	25
8873934	cis-1,3-Dichloropropene	2023/08/24	103	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Ethylbenzene	2023/08/24	101	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Ethylene Dibromide	2023/08/24	101	70 - 130	<0.010	ppbv	NC (1)	25
8873934	Hexachlorobutadiene	2023/08/24	83	70 - 130	<0.0047	ppbv	NC (1)	25
8873934	Hexane	2023/08/24	98	70 - 130	<0.10	ppbv	NC (1)	25
8873934	Methyl Ethyl Ketone (2-Butanone)	2023/08/24	99	70 - 130	<0.10	ppbv	2.8 (1)	25
8873934	Methyl Isobutyl Ketone	2023/08/24	95	70 - 130	<0.10	ppbv	NC (1)	25
8873934	Methyl t-butyl ether (MTBE)	2023/08/24	87	70 - 130	<0.10	ppbv	NC (1)	25

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8873934	Methylene Chloride(Dichloromethane)	2023/08/24	93	70 - 130	<0.050	ppbv	1.9 (1)	25
8873934	Naphthalene	2023/08/24	110	70 - 130	<0.10	ppbv	NC (1)	25
8873934	o-Xylene	2023/08/24	93	70 - 130	<0.050	ppbv	NC (1)	25
8873934	p+m-Xylene	2023/08/24	99	70 - 130	<0.10	ppbv	NC (1)	25
8873934	Styrene	2023/08/24	99	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Tetrachloroethylene	2023/08/24	98	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Toluene	2023/08/24	101	70 - 130	<0.050	ppbv	5.3 (1)	25
8873934	Total Xylenes	2023/08/24	97	70 - 130	<0.15	ppbv	NC (1)	25
8873934	trans-1,2-Dichloroethylene	2023/08/24	95	70 - 130	<0.10	ppbv	NC (1)	25
8873934	trans-1,3-Dichloropropene	2023/08/24	116	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Trichloroethylene	2023/08/24	102	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Vinyl Chloride	2023/08/24	99	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

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Bureau Veritas Job #: C3P0563
Report Date: 2023/08/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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BUREAU VERITAS

6740 Campobello Rd
Mississauga Ontario ,L5N 2L8
www.bvlabs.com

Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)									
Crawford VOC 14 August	14508	FX1653	14-Aug-23	23.5hr	-29.5	-7.5	X	X									

18-Aug-23 08:45
Gina Baybayan
C3P0563
VKK AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 14-Aug-23

Received by: Jaswinderdeep Kaur Kuhar
Affiliation:
Date/Time: 2023/08/18 8:45

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Ryan Fletcher
WSP E&I Canada
160 Traders Blvd E
Mississauga, ON
L4Z 3K7

AirZOne
Comprehensive Air Quality Services

SAMPLE ANALYSIS REPORT

Project Number:	J23044
Report Date:	September 25, 2023
Analysis Date:	September 21, 2023
Sample received Date	September 18, 2023
Instrument	Gas Chromatography/Mass Spectrometry (GC/MS)
Analytical Method:	PAH.1
Sample Media:	Passive PUF PAH sampler

Sample I.D.	CAS #	Average lab blank	J23044_PAH-1	J23044_PAH-1 Repeat
Results Unit		ng/sample	ng/sample	ng/sample
Naphthalene	91-20-3	20.6	82.8	83.1
Acenaphthylene	208-96-9	3.60	577	611
Acenaphthene	83-32-9	5.38	127	124
Fluorene	86-73-7	2.39	37.1	33.5
Phenanthrene	85-01-8	4.93	210	215
Anthracene	120-12-7	0.53	16.8	16.2
Acridine	260-94-6	0.190	1.21	1.27
Fluoranthene	206-44-0	2.00	48.6	53.3
Pyrene	129-00-0	1.08	45.1	49.7
Retene	483-65-8	3.40	330	328
Benzo(c)phenanthrene	195-19-7	0.359	3.63	3.54
Benz(a)anthrancene	56-55-3	0.839	56.4	51.3
Chrysene	218-01-9	0.788	39.5	40.5
7,12-Dimethylbenz(a)anthracene	57-97-6	0.317	1.82	1.92
Benzo(b)fluoranthene	205-99-2	0.634	10.3	11.4
Benzo(k)fluoranthene	207-08-9	0.161	10.8	12.4
Benzo(a)pyrene	50-32-8	0.236	3.26	3.15
3-Methylcholanthrene	56-49-5	0.447	1.61	1.83
Indeno(123-cd)pyrene	193-39-5	0.245	1.72	1.56
Dibenz(a,h)anthracene	53-70-3	0.251	2.48	2.95
Benzo(ghi)perylene	191-24-2	0.149	3.09	2.73
Dibenzo(a,l)pyrene	191-30-0	0.291	2.75	2.35
Dibenzo(a,i)pyrene	189-55-9	0.378	1.04	0.871
Dibenzo(a,h)pyrene	189-64-0	0.306	0.862	0.671
Recovery %				
PHENANTHRENE$_{d10}$		94%	107%	111%
CHRYSENE$_{d12}$		103%	106%	109%
FLUORANTHRENE$_{d10}$		117%	94%	97%
PYRENE$_{d10}$		97%	97%	90%

Comments:	The samples were extracted with hexane/acetone by ASE200; extracts were concentrated. 24 PAH were determined by GC/MS. Repeat denotes replicate analysis. The results apply to the samples as received. PHENANTHRENE-d10 and CHRYSENE-d12 are extraction effiency standards; FLUORANTHRENE-d10 and PYRENE-d10 are instrument performance internal standards.
QA/QC	Multipoint calibration curve, linear regression $r^2 \geq 0.99$. These samples were corrected with lab blank, internal standard and recovery, reported as ng/sample.
Analyst:	Margaret Matusik & Henrik Li
Manager	Phil Fellin

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ilac-MRA CALA Accreditation No. A 3300

Ryan Fletcher
WSP E&I Canada
160 Traders Blvd E
Mississauga, ON
L4Z 3K7

AirZOne
Comprehensive Air Quality Services

SAMPLE ANALYSIS REPORT

Project Number:	J23044-2
Report Date:	January 4, 2024
Analysis Date:	December 21, 2023
Sample received Date	December 14, 2023
Instrument	Gas Chromatography/Mass Spectrometry (GC/MS)
Analytical Method:	PAH.1
Sample Media:	Passive PUF PAH sampler

Sample I.D.	CAS #	Average lab blank	PAH-blank	J23044_PAH-1	J23044_PAH-1 Repeat
Results Unit		ng/sample	ng/sample	ng/sample	ng/sample
Naphthalene	91-20-3	20.6	21.2	144	135
Acenaphthylene	208-96-9	3.60	5.49	302	282
Acenaphthene	83-32-9	5.38	8.62	110	106
Fluorene	86-73-7	2.39	2.70	63.9	64.4
Phenanthrene	85-01-8	4.93	5.61	207	208
Anthracene	120-12-7	0.525	0.956	15.3	16.0
Acridine	260-94-6	0.190	0.404	1.86	1.76
Fluoranthene	206-44-0	2.00	1.44	113	110
Pyrene	129-00-0	1.08	1.53	94.6	92.5
Retene	483-65-8	3.40	4.23	378	360
Benzo(c)phenanthrene	195-19-7	0.359	0.560	4.87	5.11
Benz(a)anthrancene	56-55-3	0.839	1.25	70.6	69.9
Chrysene	218-01-9	0.788	0.831	33.3	31.9
7,12-Dimethylbenz(a)anthracene	57-97-6	0.317	0.418	2.54	2.45
Benzo(b)fluoranthene	205-99-2	0.634	0.837	17.1	15.3
Benzo(k)fluoranthene	207-08-9	0.661	0.837	17.1	15.2
Benzo(a)pyrene	50-32-8	0.236	0.246	5.39	5.00
3-Methylcholanthrene	56-49-5	0.447	1.05	2.06	2.00
Indeno(123-cd)pyrene	193-39-5	0.245	0.530	2.85	2.67
Dibenz(a,h)anthracene	53-70-3	0.251	0.421	2.72	2.53
Benzo(ghi)perylene	191-24-2	0.149	0.292	2.93	2.61
Dibenzo(a,l)pyrene	191-30-0	0.291	0.482	2.80	2.48
Dibenzo(a,i)pyrene	189-55-9	0.378	0.419	1.18	1.24
Dibenzo(a,h)pyrene	189-64-0	0.306	0.372	0.941	0.897
Recovery %					
PHENANTHRENE$_{d10}$		94.2%	88.7%	94.7%	98.1%
CHRYSENE-$_{d12}$		103%	92.5%	89.3%	93.4%
FLUORANTHRENE$_{d10}$		117%	91.5%	96.9%	90.3%
PYRENE$_{d10}$		96.8%	88.6%	92.3%	97.4%

Comments:	The samples were extracted with hexane/acetone by ASE200; extracts were concentrated. 24 PAH were determined by GC/MS. Repeat denotes replicate analysis. The results apply to the samples as received. PHENANTHRENE-d10 and CHRYSENE-d12 are extraction effiency standards; FLUORANTHRENE-d10 and PYRENE-d10 are instrument performance internal standards.
QA/QC	Multipoint calibration curve, linear regression $r^2 \geq 0.99$. These samples were corrected with lab blank, internal standard and recovery, reported as ng/sample.
Analyst:	Margaret Matusik & Henrik Li
Manager	Phil Fellin

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ilac-MRA CALA Accreditation No. A 3300

Your P.O. #: C026200346
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2024/01/04
Report #: R7977634
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3BH526
Received: 2023/12/14, 15:16

Sample Matrix: Filter
Samples Received: 6

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	6	2024/01/03	2024/01/03	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	5	2023/12/16	2024/01/02	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	6	2024/01/02	2024/01/03	CAM SOP-00447	EPA 6020B m
Particulate Calculation	5	N/A	2024/01/02	BRL SOP-00109	EPA IO-2mod
Total Particulate	6	N/A	2024/01/27	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	5	N/A	2023/12/16		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
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Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

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Your P.O. #: C026200346
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2024/01/04
Report #: R7977634
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3BH526
Received: 2023/12/14, 15:16

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763
==========

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3BH526
Report Date: 2024/01/04

WSP E & I Canada Limited
Your P.O. #: C026200346
Sampler Initials: RF

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		XWY149	XWY150	XWY151		XWY152		XWY154		
Sampling Date		2023/10/17	2023/10/21	2023/10/27		2023/11/20		2023/12/01		
COC Number		n/a	n/a	n/a		n/a		n/a		
	UNITS	TSP OCT 17	TSP OCT 21	TSP OCT 27	RDL	TSP NOV 20	RDL	TSP DEC 1	RDL	QC Batch
Particulate	ug/m3	6.56	1.70	2.16	0.62	14.7	0.78	3.32	0.62	9116502
Particulate Weight on Filter	ug	316	82	104	30	567	30	160	30	9138697
Volume	m3	48.06	48.07	48.07	N/A	38.61	N/A	48.08	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas ID		XWY155		
Sampling Date				
COC Number		n/a		
	UNITS	TSP BLANK	RDL	QC Batch
Particulate Weight on Filter	ug	38	30	9138697

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		XWY149	XWY150	XWY151		XWY152		
Sampling Date		2023/10/17	2023/10/21	2023/10/27		2023/11/20		
COC Number		n/a	n/a	n/a		n/a		
	UNITS	TSP OCT 17	TSP OCT 21	TSP OCT 27	RDL	TSP NOV 20	RDL	QC Batch
Metals								
Total Aluminum (Al)	ug/m3	0.22	0.17	0.19	0.042	0.36	0.052	9116501
Total Antimony (Sb)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	<0.0013	0.0013	9116501
Total Arsenic (As)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	<0.0013	0.0013	9116501
Total Barium (Ba)	ug/m3	0.0011	<0.0010	<0.0010	0.0010	0.0084	0.0013	9116501
Total Beryllium (Be)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	<0.00078	0.00078	9116501
Total Bismuth (Bi)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	<0.0013	0.0013	9116501
Total Boron (B)	ug/m3	<0.021	<0.021	<0.021	0.021	<0.026	0.026	9116501
Total Cadmium (Cd)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	<0.00026	0.00026	9116501
Total Calcium (Ca)	ug/m3	0.13	<0.10	<0.10	0.10	0.40	0.13	9116501
Total Chromium (Cr)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	0.0045	0.0013	9116501
Total Cobalt (Co)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	<0.00078	0.00078	9116501
Total Copper (Cu)	ug/m3	0.0015	<0.00062	<0.00062	0.00062	0.0030	0.00078	9116501
Total Iron (Fe)	ug/m3	<0.10	<0.10	<0.10	0.10	<0.13	0.13	9116501
Total Lead (Pb)	ug/m3	0.00089	<0.00062	<0.00062	0.00062	0.00093	0.00078	9116501
Total Magnesium (Mg)	ug/m3	0.031	0.021	<0.021	0.021	0.17	0.026	9116501
Total Manganese (Mn)	ug/m3	0.0017	<0.0010	<0.0010	0.0010	0.0050	0.0013	9116501
Total Molybdenum (Mo)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	<0.00078	0.00078	9116501
Total Nickel (Ni)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	0.0065	0.0013	9116501
Total Potassium (K)	ug/m3	<0.10	<0.10	<0.10	0.10	<0.13	0.13	9116501
Total Selenium (Se)	ug/m3	<0.0021	<0.0021	<0.0021	0.0021	<0.0026	0.0026	9116501
Total Silver (Ag)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	<0.00026	0.00026	9116501
Total Sodium (Na)	ug/m3	0.19	0.23	0.14	0.10	1.6	0.13	9116501
Total Strontium (Sr)	ug/m3	<0.0010	<0.0010	<0.0010	0.0010	<0.0013	0.0013	9116501
Total Thallium (Tl)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	<0.00026	0.00026	9116501
Total Tin (Sn)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	<0.00078	0.00078	9116501
Total Titanium (Ti)	ug/m3	0.0028	<0.0021	0.0022	0.0021	0.0031	0.0026	9116501
Total Uranium (U)	ug/m3	<0.00021	<0.00021	<0.00021	0.00021	<0.00026	0.00026	9116501
Total Vanadium (V)	ug/m3	<0.00062	<0.00062	<0.00062	0.00062	<0.00078	0.00078	9116501
Total Zinc (Zn)	ug/m3	0.014	<0.010	<0.010	0.010	0.016	0.013	9116501

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		XWY154		
Sampling Date		2023/12/01		
COC Number		n/a		
	UNITS	TSP DEC 1	RDL	QC Batch
Metals				
Total Aluminum (Al)	ug/m3	0.19	0.042	9116501
Total Antimony (Sb)	ug/m3	<0.0010	0.0010	9116501
Total Arsenic (As)	ug/m3	<0.0010	0.0010	9116501
Total Barium (Ba)	ug/m3	<0.0010	0.0010	9116501
Total Beryllium (Be)	ug/m3	<0.00062	0.00062	9116501
Total Bismuth (Bi)	ug/m3	<0.0010	0.0010	9116501
Total Boron (B)	ug/m3	<0.021	0.021	9116501
Total Cadmium (Cd)	ug/m3	<0.00021	0.00021	9116501
Total Calcium (Ca)	ug/m3	<0.10	0.10	9116501
Total Chromium (Cr)	ug/m3	<0.0010	0.0010	9116501
Total Cobalt (Co)	ug/m3	<0.00062	0.00062	9116501
Total Copper (Cu)	ug/m3	0.0014	0.00062	9116501
Total Iron (Fe)	ug/m3	<0.10	0.10	9116501
Total Lead (Pb)	ug/m3	0.0017	0.00062	9116501
Total Magnesium (Mg)	ug/m3	<0.021	0.021	9116501
Total Manganese (Mn)	ug/m3	<0.0010	0.0010	9116501
Total Molybdenum (Mo)	ug/m3	<0.00062	0.00062	9116501
Total Nickel (Ni)	ug/m3	<0.0010	0.0010	9116501
Total Potassium (K)	ug/m3	<0.10	0.10	9116501
Total Selenium (Se)	ug/m3	<0.0021	0.0021	9116501
Total Silver (Ag)	ug/m3	<0.00021	0.00021	9116501
Total Sodium (Na)	ug/m3	0.20	0.10	9116501
Total Strontium (Sr)	ug/m3	<0.0010	0.0010	9116501
Total Thallium (Tl)	ug/m3	<0.00021	0.00021	9116501
Total Tin (Sn)	ug/m3	<0.00062	0.00062	9116501
Total Titanium (Ti)	ug/m3	<0.0021	0.0021	9116501
Total Uranium (U)	ug/m3	<0.00021	0.00021	9116501
Total Vanadium (V)	ug/m3	<0.00062	0.00062	9116501
Total Zinc (Zn)	ug/m3	<0.010	0.010	9116501

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		XWY149	XWY150	XWY151	XWY152	XWY154	XWY155		
Sampling Date		2023/10/17	2023/10/21	2023/10/27	2023/11/20	2023/12/01			
COC Number		n/a	n/a	n/a	n/a	n/a	n/a		
	UNITS	TSP OCT 17	TSP OCT 21	TSP OCT 27	TSP NOV 20	TSP DEC 1	TSP BLANK	RDL	QC Batch
Metals									
Total Aluminum (Al)	ug	10	8.1	9.0	14	9.2	10	2.0	9139502
Total Antimony (Sb)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9139502
Total Arsenic (As)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9139502
Total Barium (Ba)	ug	0.052	<0.050	<0.050	0.32	<0.050	<0.050	0.050	9139502
Total Beryllium (Be)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	9139502
Total Bismuth (Bi)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9139502
Total Boron (B)	ug	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.0	9139502
Total Cadmium (Cd)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9139502
Total Calcium (Ca)	ug	6.2	<5.0	<5.0	16	<5.0	<5.0	5.0	9139502
Total Chromium (Cr)	ug	<0.050	<0.050	<0.050	0.17	<0.050	0.11	0.050	9139502
Total Cobalt (Co)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	9139502
Total Copper (Cu)	ug	0.071	<0.030	<0.030	0.12	0.068	<0.030	0.030	9139502
Total Iron (Fe)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	9139502
Total Lead (Pb)	ug	0.043	<0.030	<0.030	0.036	0.080	<0.030	0.030	9139502
Total Magnesium (Mg)	ug	1.5	1.0	<1.0	6.7	<1.0	<1.0	1.0	9139502
Total Manganese (Mn)	ug	0.082	<0.050	<0.050	0.19	<0.050	<0.050	0.050	9139502
Acid Extractable Mercury (Hg)	ug	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025	0.0025	9140824
Total Molybdenum (Mo)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	9139502
Total Nickel (Ni)	ug	<0.050	<0.050	<0.050	0.25	<0.050	<0.050	0.050	9139502
Total Phosphorus (P)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	9139502
Total Potassium (K)	ug	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	5.0	9139502
Total Selenium (Se)	ug	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	9139502
Total Silver (Ag)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9139502
Total Sodium (Na)	ug	9.2	11	6.6	60	9.5	7.1	5.0	9139502
Total Strontium (Sr)	ug	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.050	9139502
Total Thallium (Tl)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9139502
Total Tin (Sn)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	9139502
Total Titanium (Ti)	ug	0.14	<0.10	0.11	0.12	<0.10	0.13	0.10	9139502
Total Uranium (U)	ug	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	9139502
Total Vanadium (V)	ug	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	0.030	9139502
Total Zinc (Zn)	ug	0.68	<0.50	<0.50	0.63	<0.50	<0.50	0.50	9139502

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9139502	PBA	Matrix Spike [XWY149-01]	Total Aluminum (Al)	2024/01/03		101	%	70 - 130
			Total Antimony (Sb)	2024/01/03		103	%	70 - 130
			Total Arsenic (As)	2024/01/03		103	%	70 - 130
			Total Barium (Ba)	2024/01/03		103	%	70 - 130
			Total Beryllium (Be)	2024/01/03		101	%	70 - 130
			Total Bismuth (Bi)	2024/01/03		103	%	70 - 130
			Total Boron (B)	2024/01/03		98	%	70 - 130
			Total Cadmium (Cd)	2024/01/03		100	%	70 - 130
			Total Calcium (Ca)	2024/01/03		104	%	70 - 130
			Total Chromium (Cr)	2024/01/03		103	%	70 - 130
			Total Cobalt (Co)	2024/01/03		103	%	70 - 130
			Total Copper (Cu)	2024/01/03		103	%	70 - 130
			Total Iron (Fe)	2024/01/03		104	%	70 - 130
			Total Lead (Pb)	2024/01/03		102	%	70 - 130
			Total Magnesium (Mg)	2024/01/03		101	%	70 - 130
			Total Manganese (Mn)	2024/01/03		102	%	70 - 130
			Total Molybdenum (Mo)	2024/01/03		104	%	70 - 130
			Total Nickel (Ni)	2024/01/03		102	%	70 - 130
			Total Phosphorus (P)	2024/01/03		101	%	70 - 130
			Total Potassium (K)	2024/01/03		104	%	70 - 130
			Total Selenium (Se)	2024/01/03		103	%	70 - 130
			Total Silver (Ag)	2024/01/03		102	%	70 - 130
			Total Sodium (Na)	2024/01/03		101	%	70 - 130
			Total Strontium (Sr)	2024/01/03		103	%	70 - 130
			Total Thallium (Tl)	2024/01/03		104	%	70 - 130
			Total Tin (Sn)	2024/01/03		102	%	70 - 130
			Total Titanium (Ti)	2024/01/03		102	%	70 - 130
			Total Uranium (U)	2024/01/03		103	%	70 - 130
			Total Vanadium (V)	2024/01/03		103	%	70 - 130
			Total Zinc (Zn)	2024/01/03		101	%	70 - 130
9139502	PBA	RPD [XWY149-01]	Total Aluminum (Al)	2024/01/03	2.0		%	20
			Total Antimony (Sb)	2024/01/03	4.6		%	20
			Total Arsenic (As)	2024/01/03	2.4		%	20
			Total Barium (Ba)	2024/01/03	1.9		%	20
			Total Beryllium (Be)	2024/01/03	1.1		%	20
			Total Bismuth (Bi)	2024/01/03	0.93		%	20
			Total Boron (B)	2024/01/03	1.9		%	20
			Total Cadmium (Cd)	2024/01/03	2.8		%	20
			Total Calcium (Ca)	2024/01/03	0.098		%	20
			Total Chromium (Cr)	2024/01/03	1.5		%	20
			Total Cobalt (Co)	2024/01/03	2.5		%	20
			Total Copper (Cu)	2024/01/03	2.2		%	20
			Total Iron (Fe)	2024/01/03	2.9		%	20
			Total Lead (Pb)	2024/01/03	1.1		%	20
			Total Magnesium (Mg)	2024/01/03	2.3		%	20
			Total Manganese (Mn)	2024/01/03	1.9		%	20
			Total Molybdenum (Mo)	2024/01/03	2.5		%	20
			Total Nickel (Ni)	2024/01/03	1.8		%	20
			Total Phosphorus (P)	2024/01/03	2.4		%	20
			Total Potassium (K)	2024/01/03	2.0		%	20
			Total Selenium (Se)	2024/01/03	1.6		%	20

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Silver (Ag)	2024/01/03	3.4		%	20
			Total Sodium (Na)	2024/01/03	3.0		%	20
			Total Strontium (Sr)	2024/01/03	2.1		%	20
			Total Thallium (Tl)	2024/01/03	0.56		%	20
			Total Tin (Sn)	2024/01/03	3.4		%	20
			Total Titanium (Ti)	2024/01/03	1.6		%	20
			Total Uranium (U)	2024/01/03	0.79		%	20
			Total Vanadium (V)	2024/01/03	2.0		%	20
			Total Zinc (Zn)	2024/01/03	2.1		%	20
			Total Aluminum (Al)	2024/01/03	1.5		%	20
			Total Antimony (Sb)	2024/01/03	NC		%	20
			Total Arsenic (As)	2024/01/03	NC		%	20
			Total Barium (Ba)	2024/01/03	1.7		%	20
			Total Beryllium (Be)	2024/01/03	NC		%	20
			Total Bismuth (Bi)	2024/01/03	NC		%	20
			Total Boron (B)	2024/01/03	NC		%	20
			Total Cadmium (Cd)	2024/01/03	NC		%	20
			Total Calcium (Ca)	2024/01/03	0.31		%	20
			Total Chromium (Cr)	2024/01/03	NC		%	20
			Total Cobalt (Co)	2024/01/03	NC		%	20
			Total Copper (Cu)	2024/01/03	2.8		%	20
			Total Iron (Fe)	2024/01/03	NC		%	20
			Total Lead (Pb)	2024/01/03	0.71		%	20
			Total Magnesium (Mg)	2024/01/03	2.1		%	20
			Total Manganese (Mn)	2024/01/03	5.2		%	20
			Total Molybdenum (Mo)	2024/01/03	NC		%	20
			Total Nickel (Ni)	2024/01/03	NC		%	20
			Total Phosphorus (P)	2024/01/03	NC		%	20
			Total Potassium (K)	2024/01/03	NC		%	20
			Total Selenium (Se)	2024/01/03	NC		%	20
			Total Silver (Ag)	2024/01/03	NC		%	20
			Total Sodium (Na)	2024/01/03	6.6		%	20
			Total Strontium (Sr)	2024/01/03	NC		%	20
			Total Thallium (Tl)	2024/01/03	NC		%	20
			Total Tin (Sn)	2024/01/03	NC		%	20
			Total Titanium (Ti)	2024/01/03	15		%	20
			Total Uranium (U)	2024/01/03	NC		%	20
			Total Vanadium (V)	2024/01/03	NC		%	20
			Total Zinc (Zn)	2024/01/03	3.3		%	20
9139502	PBA	Spiked Blank	Total Aluminum (Al)	2024/01/03		96	%	85 - 115
			Total Antimony (Sb)	2024/01/03		102	%	85 - 115
			Total Arsenic (As)	2024/01/03		99	%	85 - 115
			Total Barium (Ba)	2024/01/03		99	%	85 - 115
			Total Beryllium (Be)	2024/01/03		98	%	85 - 115
			Total Bismuth (Bi)	2024/01/03		100	%	85 - 115
			Total Boron (B)	2024/01/03		95	%	85 - 115
			Total Cadmium (Cd)	2024/01/03		98	%	85 - 115
			Total Calcium (Ca)	2024/01/03		101	%	85 - 115
			Total Chromium (Cr)	2024/01/03		99	%	85 - 115
			Total Cobalt (Co)	2024/01/03		102	%	85 - 115
			Total Copper (Cu)	2024/01/03		101	%	85 - 115
			Total Iron (Fe)	2024/01/03		102	%	85 - 115

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Lead (Pb)	2024/01/03		101	%	85 - 115
			Total Magnesium (Mg)	2024/01/03		98	%	85 - 115
			Total Manganese (Mn)	2024/01/03		100	%	85 - 115
			Total Molybdenum (Mo)	2024/01/03		100	%	85 - 115
			Total Nickel (Ni)	2024/01/03		99	%	85 - 115
			Total Phosphorus (P)	2024/01/03		102	%	85 - 115
			Total Potassium (K)	2024/01/03		100	%	85 - 115
			Total Selenium (Se)	2024/01/03		98	%	85 - 115
			Total Silver (Ag)	2024/01/03		94	%	85 - 115
			Total Sodium (Na)	2024/01/03		101	%	85 - 115
			Total Strontium (Sr)	2024/01/03		100	%	85 - 115
			Total Thallium (Tl)	2024/01/03		100	%	85 - 115
			Total Tin (Sn)	2024/01/03		99	%	85 - 115
			Total Titanium (Ti)	2024/01/03		98	%	85 - 115
			Total Uranium (U)	2024/01/03		99	%	85 - 115
			Total Vanadium (V)	2024/01/03		100	%	85 - 115
			Total Zinc (Zn)	2024/01/03		98	%	85 - 115
9139502	PBA	RPD	Total Aluminum (Al)	2024/01/03	0.093		%	20
			Total Antimony (Sb)	2024/01/03	1.7		%	20
			Total Arsenic (As)	2024/01/03	0.29		%	20
			Total Barium (Ba)	2024/01/03	2.0		%	20
			Total Beryllium (Be)	2024/01/03	0.095		%	20
			Total Bismuth (Bi)	2024/01/03	0.34		%	20
			Total Boron (B)	2024/01/03	0.94		%	20
			Total Cadmium (Cd)	2024/01/03	0.46		%	20
			Total Calcium (Ca)	2024/01/03	0.62		%	20
			Total Chromium (Cr)	2024/01/03	0.50		%	20
			Total Cobalt (Co)	2024/01/03	0.14		%	20
			Total Copper (Cu)	2024/01/03	0.060		%	20
			Total Iron (Fe)	2024/01/03	0.22		%	20
			Total Lead (Pb)	2024/01/03	0.46		%	20
			Total Magnesium (Mg)	2024/01/03	1.5		%	20
			Total Manganese (Mn)	2024/01/03	0.67		%	20
			Total Molybdenum (Mo)	2024/01/03	0.15		%	20
			Total Nickel (Ni)	2024/01/03	0.74		%	20
			Total Phosphorus (P)	2024/01/03	1.2		%	20
			Total Potassium (K)	2024/01/03	0.24		%	20
			Total Selenium (Se)	2024/01/03	1.2		%	20
			Total Silver (Ag)	2024/01/03	0.76		%	20
			Total Sodium (Na)	2024/01/03	0.19		%	20
			Total Strontium (Sr)	2024/01/03	0.44		%	20
			Total Thallium (Tl)	2024/01/03	0.34		%	20
			Total Tin (Sn)	2024/01/03	0.80		%	20
			Total Titanium (Ti)	2024/01/03	0.48		%	20
			Total Uranium (U)	2024/01/03	0.094		%	20
			Total Vanadium (V)	2024/01/03	0.34		%	20
			Total Zinc (Zn)	2024/01/03	0.31		%	20
9139502	PBA	Method Blank	Total Aluminum (Al)	2024/01/03	<2.0		ug	
			Total Antimony (Sb)	2024/01/03	<0.050		ug	
			Total Arsenic (As)	2024/01/03	<0.050		ug	
			Total Barium (Ba)	2024/01/03	<0.050		ug	
			Total Beryllium (Be)	2024/01/03	<0.030		ug	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Bismuth (Bi)	2024/01/03	<0.050		ug	
			Total Boron (B)	2024/01/03	<1.0		ug	
			Total Cadmium (Cd)	2024/01/03	<0.010		ug	
			Total Calcium (Ca)	2024/01/03	<5.0		ug	
			Total Chromium (Cr)	2024/01/03	<0.050		ug	
			Total Cobalt (Co)	2024/01/03	<0.030		ug	
			Total Copper (Cu)	2024/01/03	<0.030		ug	
			Total Iron (Fe)	2024/01/03	<5.0		ug	
			Total Lead (Pb)	2024/01/03	<0.030		ug	
			Total Magnesium (Mg)	2024/01/03	<1.0		ug	
			Total Manganese (Mn)	2024/01/03	<0.050		ug	
			Total Molybdenum (Mo)	2024/01/03	<0.030		ug	
			Total Nickel (Ni)	2024/01/03	<0.050		ug	
			Total Phosphorus (P)	2024/01/03	<5.0		ug	
			Total Potassium (K)	2024/01/03	<5.0		ug	
			Total Selenium (Se)	2024/01/03	<0.10		ug	
			Total Silver (Ag)	2024/01/03	<0.010		ug	
			Total Sodium (Na)	2024/01/03	<5.0		ug	
			Total Strontium (Sr)	2024/01/03	<0.050		ug	
			Total Thallium (Tl)	2024/01/03	<0.010		ug	
			Total Tin (Sn)	2024/01/03	<0.030		ug	
			Total Titanium (Ti)	2024/01/03	<0.10		ug	
			Total Uranium (U)	2024/01/03	<0.010		ug	
			Total Vanadium (V)	2024/01/03	<0.030		ug	
			Total Zinc (Zn)	2024/01/03	<0.50		ug	
9140824	JWK	Spiked Blank	Acid Extractable Mercury (Hg)	2024/01/03		100	%	90 - 110
9140824	JWK	RPD	Acid Extractable Mercury (Hg)	2024/01/03	2.2		%	20
9140824	JWK	Method Blank	Acid Extractable Mercury (Hg)	2024/01/03	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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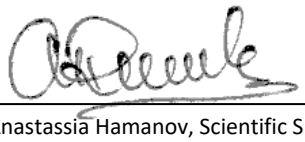
Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3BH526
Report Date: 2024/01/04

WSP E & I Canada Limited
Your P.O. #: C026200346
Sampler Initials: RF

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

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Your P.O. #: C026200346
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2024/01/04
Report #: R7977644
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3BH526
Received: 2023/12/14, 15:16

Sample Matrix: Filter
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Mercury	1	2024/01/03	2024/01/03	BRL SOP-00104	EPA 7470A m
Total Metals on Hi-Vol Filter (6020Amod)	1	2023/12/16	2024/01/02	BRL SOP-00103 / BRL SOP-00102	EPA 6020A m
Total Metals on Small Filter (6020Bmod)	1	2024/01/02	2024/01/03	CAM SOP-00447	EPA 6020B m
Particulate Calculation	1	N/A	2024/01/02	BRL SOP-00109	EPA IO-2mod
Total Particulate	1	N/A	2024/01/27	BRL SOP-00109	Mthd IO-3-1
Air Volume from LoVol Sampling	1	N/A	2023/12/16		

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.

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Your P.O. #: C026200346
Your C.O.C. #: n/a

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2024/01/04
Report #: R7977644
Version: 2 - Revision

CERTIFICATE OF ANALYSIS – REVISED REPORT

BUREAU VERITAS JOB #: C3BH526
Received: 2023/12/14, 15:16

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3BH526
Report Date: 2024/01/04

WSP E & I Canada Limited
Your P.O. #: C026200346
Sampler Initials: RF

RESULTS OF ANALYSES OF FILTER

Bureau Veritas ID		XWY153		
Sampling Date		2023/11/23		
COC Number		n/a		
	UNITS	**TSP NOV 23 C1610398**	**RDL**	**QC Batch**
Particulate	ug/m3	3.33	0.62	9116502
Particulate Weight on Filter	ug	160 (1)	30	9138697
Volume	m3	48.07	N/A	ONSITE

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable
(1) Found Filter switch .So,analysis has been done according to filter ID (WC1610398)

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		XWY153		
Sampling Date		2023/11/23		
COC Number		n/a		
	UNITS	TSP NOV 23 C1610398	RDL	QC Batch
Metals				
Total Aluminum (Al)	ug/m3	0.18	0.042	9116501
Total Antimony (Sb)	ug/m3	<0.0010	0.0010	9116501
Total Arsenic (As)	ug/m3	<0.0010	0.0010	9116501
Total Barium (Ba)	ug/m3	0.0024	0.0010	9116501
Total Beryllium (Be)	ug/m3	<0.00062	0.00062	9116501
Total Bismuth (Bi)	ug/m3	<0.0010	0.0010	9116501
Total Boron (B)	ug/m3	<0.021	0.021	9116501
Total Cadmium (Cd)	ug/m3	<0.00021	0.00021	9116501
Total Calcium (Ca)	ug/m3	0.15	0.10	9116501
Total Chromium (Cr)	ug/m3	0.0014	0.0010	9116501
Total Cobalt (Co)	ug/m3	<0.00062	0.00062	9116501
Total Copper (Cu)	ug/m3	0.00068	0.00062	9116501
Total Iron (Fe)	ug/m3	<0.10	0.10	9116501
Total Lead (Pb)	ug/m3	<0.00062	0.00062	9116501
Total Magnesium (Mg)	ug/m3	0.034	0.021	9116501
Total Manganese (Mn)	ug/m3	0.0011	0.0010	9116501
Total Molybdenum (Mo)	ug/m3	<0.00062	0.00062	9116501
Total Nickel (Ni)	ug/m3	<0.0010	0.0010	9116501
Total Potassium (K)	ug/m3	<0.10	0.10	9116501
Total Selenium (Se)	ug/m3	<0.0021	0.0021	9116501
Total Silver (Ag)	ug/m3	<0.00021	0.00021	9116501
Total Sodium (Na)	ug/m3	0.19	0.10	9116501
Total Strontium (Sr)	ug/m3	<0.0010	0.0010	9116501
Total Thallium (Tl)	ug/m3	<0.00021	0.00021	9116501
Total Tin (Sn)	ug/m3	<0.00062	0.00062	9116501
Total Titanium (Ti)	ug/m3	<0.0021	0.0021	9116501
Total Uranium (U)	ug/m3	<0.00021	0.00021	9116501
Total Vanadium (V)	ug/m3	<0.00062	0.00062	9116501
Total Zinc (Zn)	ug/m3	<0.010	0.010	9116501

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

ELEMENTS BY ATOMIC SPECTROSCOPY (FILTER)

Bureau Veritas ID		XWY153		
Sampling Date		2023/11/23		
COC Number		n/a		
	UNITS	TSP NOV 23 C1610398	RDL	QC Batch
Metals				
Total Aluminum (Al)	ug	8.6	2.0	9139502
Total Antimony (Sb)	ug	<0.050	0.050	9139502
Total Arsenic (As)	ug	<0.050	0.050	9139502
Total Barium (Ba)	ug	0.11	0.050	9139502
Total Beryllium (Be)	ug	<0.030	0.030	9139502
Total Bismuth (Bi)	ug	<0.050	0.050	9139502
Total Boron (B)	ug	<1.0	1.0	9139502
Total Cadmium (Cd)	ug	<0.010	0.010	9139502
Total Calcium (Ca)	ug	7.0	5.0	9139502
Total Chromium (Cr)	ug	0.066	0.050	9139502
Total Cobalt (Co)	ug	<0.030	0.030	9139502
Total Copper (Cu)	ug	0.032	0.030	9139502
Total Iron (Fe)	ug	<5.0	5.0	9139502
Total Lead (Pb)	ug	<0.030	0.030	9139502
Total Magnesium (Mg)	ug	1.6	1.0	9139502
Total Manganese (Mn)	ug	0.055	0.050	9139502
Acid Extractable Mercury (Hg)	ug	<0.0025	0.0025	9140824
Total Molybdenum (Mo)	ug	<0.030	0.030	9139502
Total Nickel (Ni)	ug	<0.050	0.050	9139502
Total Phosphorus (P)	ug	<5.0	5.0	9139502
Total Potassium (K)	ug	<5.0	5.0	9139502
Total Selenium (Se)	ug	<0.10	0.10	9139502
Total Silver (Ag)	ug	<0.010	0.010	9139502
Total Sodium (Na)	ug	8.9	5.0	9139502
Total Strontium (Sr)	ug	<0.050	0.050	9139502
Total Thallium (Tl)	ug	<0.010	0.010	9139502
Total Tin (Sn)	ug	<0.030	0.030	9139502
Total Titanium (Ti)	ug	0.10	0.10	9139502
Total Uranium (U)	ug	<0.010	0.010	9139502
Total Vanadium (V)	ug	<0.030	0.030	9139502
Total Zinc (Zn)	ug	<0.50	0.50	9139502

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9139502	PBA	Matrix Spike [XWY149-01]	Total Aluminum (Al)	2024/01/03		101	%	70 - 130
			Total Antimony (Sb)	2024/01/03		103	%	70 - 130
			Total Arsenic (As)	2024/01/03		103	%	70 - 130
			Total Barium (Ba)	2024/01/03		103	%	70 - 130
			Total Beryllium (Be)	2024/01/03		101	%	70 - 130
			Total Bismuth (Bi)	2024/01/03		103	%	70 - 130
			Total Boron (B)	2024/01/03		98	%	70 - 130
			Total Cadmium (Cd)	2024/01/03		100	%	70 - 130
			Total Calcium (Ca)	2024/01/03		104	%	70 - 130
			Total Chromium (Cr)	2024/01/03		103	%	70 - 130
			Total Cobalt (Co)	2024/01/03		103	%	70 - 130
			Total Copper (Cu)	2024/01/03		103	%	70 - 130
			Total Iron (Fe)	2024/01/03		104	%	70 - 130
			Total Lead (Pb)	2024/01/03		102	%	70 - 130
			Total Magnesium (Mg)	2024/01/03		101	%	70 - 130
			Total Manganese (Mn)	2024/01/03		102	%	70 - 130
			Total Molybdenum (Mo)	2024/01/03		104	%	70 - 130
			Total Nickel (Ni)	2024/01/03		102	%	70 - 130
			Total Phosphorus (P)	2024/01/03		101	%	70 - 130
			Total Potassium (K)	2024/01/03		104	%	70 - 130
			Total Selenium (Se)	2024/01/03		103	%	70 - 130
			Total Silver (Ag)	2024/01/03		102	%	70 - 130
			Total Sodium (Na)	2024/01/03		101	%	70 - 130
			Total Strontium (Sr)	2024/01/03		103	%	70 - 130
			Total Thallium (Tl)	2024/01/03		104	%	70 - 130
			Total Tin (Sn)	2024/01/03		102	%	70 - 130
			Total Titanium (Ti)	2024/01/03		102	%	70 - 130
			Total Uranium (U)	2024/01/03		103	%	70 - 130
			Total Vanadium (V)	2024/01/03		103	%	70 - 130
			Total Zinc (Zn)	2024/01/03		101	%	70 - 130
9139502	PBA	RPD [XWY149-01]	Total Aluminum (Al)	2024/01/03	2.0		%	20
			Total Antimony (Sb)	2024/01/03	4.6		%	20
			Total Arsenic (As)	2024/01/03	2.4		%	20
			Total Barium (Ba)	2024/01/03	1.9		%	20
			Total Beryllium (Be)	2024/01/03	1.1		%	20
			Total Bismuth (Bi)	2024/01/03	0.93		%	20
			Total Boron (B)	2024/01/03	1.9		%	20
			Total Cadmium (Cd)	2024/01/03	2.8		%	20
			Total Calcium (Ca)	2024/01/03	0.098		%	20
			Total Chromium (Cr)	2024/01/03	1.5		%	20
			Total Cobalt (Co)	2024/01/03	2.5		%	20
			Total Copper (Cu)	2024/01/03	2.2		%	20
			Total Iron (Fe)	2024/01/03	2.9		%	20
			Total Lead (Pb)	2024/01/03	1.1		%	20
			Total Magnesium (Mg)	2024/01/03	2.3		%	20
			Total Manganese (Mn)	2024/01/03	1.9		%	20
			Total Molybdenum (Mo)	2024/01/03	2.5		%	20
			Total Nickel (Ni)	2024/01/03	1.8		%	20
			Total Phosphorus (P)	2024/01/03	2.4		%	20
			Total Potassium (K)	2024/01/03	2.0		%	20
			Total Selenium (Se)	2024/01/03	1.6		%	20

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Silver (Ag)	2024/01/03	3.4		%	20
			Total Sodium (Na)	2024/01/03	3.0		%	20
			Total Strontium (Sr)	2024/01/03	2.1		%	20
			Total Thallium (Tl)	2024/01/03	0.56		%	20
			Total Tin (Sn)	2024/01/03	3.4		%	20
			Total Titanium (Ti)	2024/01/03	1.6		%	20
			Total Uranium (U)	2024/01/03	0.79		%	20
			Total Vanadium (V)	2024/01/03	2.0		%	20
			Total Zinc (Zn)	2024/01/03	2.1		%	20
			Total Aluminum (Al)	2024/01/03	1.5		%	20
			Total Antimony (Sb)	2024/01/03	NC		%	20
			Total Arsenic (As)	2024/01/03	NC		%	20
			Total Barium (Ba)	2024/01/03	1.7		%	20
			Total Beryllium (Be)	2024/01/03	NC		%	20
			Total Bismuth (Bi)	2024/01/03	NC		%	20
			Total Boron (B)	2024/01/03	NC		%	20
			Total Cadmium (Cd)	2024/01/03	NC		%	20
			Total Calcium (Ca)	2024/01/03	0.31		%	20
			Total Chromium (Cr)	2024/01/03	NC		%	20
			Total Cobalt (Co)	2024/01/03	NC		%	20
			Total Copper (Cu)	2024/01/03	2.8		%	20
			Total Iron (Fe)	2024/01/03	NC		%	20
			Total Lead (Pb)	2024/01/03	0.71		%	20
			Total Magnesium (Mg)	2024/01/03	2.1		%	20
			Total Manganese (Mn)	2024/01/03	5.2		%	20
			Total Molybdenum (Mo)	2024/01/03	NC		%	20
			Total Nickel (Ni)	2024/01/03	NC		%	20
			Total Phosphorus (P)	2024/01/03	NC		%	20
			Total Potassium (K)	2024/01/03	NC		%	20
			Total Selenium (Se)	2024/01/03	NC		%	20
			Total Silver (Ag)	2024/01/03	NC		%	20
			Total Sodium (Na)	2024/01/03	6.6		%	20
			Total Strontium (Sr)	2024/01/03	NC		%	20
			Total Thallium (Tl)	2024/01/03	NC		%	20
			Total Tin (Sn)	2024/01/03	NC		%	20
			Total Titanium (Ti)	2024/01/03	15		%	20
			Total Uranium (U)	2024/01/03	NC		%	20
			Total Vanadium (V)	2024/01/03	NC		%	20
			Total Zinc (Zn)	2024/01/03	3.3		%	20
9139502	PBA	Spiked Blank	Total Aluminum (Al)	2024/01/03		96	%	85 - 115
			Total Antimony (Sb)	2024/01/03		102	%	85 - 115
			Total Arsenic (As)	2024/01/03		99	%	85 - 115
			Total Barium (Ba)	2024/01/03		99	%	85 - 115
			Total Beryllium (Be)	2024/01/03		98	%	85 - 115
			Total Bismuth (Bi)	2024/01/03		100	%	85 - 115
			Total Boron (B)	2024/01/03		95	%	85 - 115
			Total Cadmium (Cd)	2024/01/03		98	%	85 - 115
			Total Calcium (Ca)	2024/01/03		101	%	85 - 115
			Total Chromium (Cr)	2024/01/03		99	%	85 - 115
			Total Cobalt (Co)	2024/01/03		102	%	85 - 115
			Total Copper (Cu)	2024/01/03		101	%	85 - 115
			Total Iron (Fe)	2024/01/03		102	%	85 - 115

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Lead (Pb)	2024/01/03		101	%	85 - 115
			Total Magnesium (Mg)	2024/01/03		98	%	85 - 115
			Total Manganese (Mn)	2024/01/03		100	%	85 - 115
			Total Molybdenum (Mo)	2024/01/03		100	%	85 - 115
			Total Nickel (Ni)	2024/01/03		99	%	85 - 115
			Total Phosphorus (P)	2024/01/03		102	%	85 - 115
			Total Potassium (K)	2024/01/03		100	%	85 - 115
			Total Selenium (Se)	2024/01/03		98	%	85 - 115
			Total Silver (Ag)	2024/01/03		94	%	85 - 115
			Total Sodium (Na)	2024/01/03		101	%	85 - 115
			Total Strontium (Sr)	2024/01/03		100	%	85 - 115
			Total Thallium (Tl)	2024/01/03		100	%	85 - 115
			Total Tin (Sn)	2024/01/03		99	%	85 - 115
			Total Titanium (Ti)	2024/01/03		98	%	85 - 115
			Total Uranium (U)	2024/01/03		99	%	85 - 115
			Total Vanadium (V)	2024/01/03		100	%	85 - 115
			Total Zinc (Zn)	2024/01/03		98	%	85 - 115
9139502	PBA	RPD	Total Aluminum (Al)	2024/01/03	0.093		%	20
			Total Antimony (Sb)	2024/01/03	1.7		%	20
			Total Arsenic (As)	2024/01/03	0.29		%	20
			Total Barium (Ba)	2024/01/03	2.0		%	20
			Total Beryllium (Be)	2024/01/03	0.095		%	20
			Total Bismuth (Bi)	2024/01/03	0.34		%	20
			Total Boron (B)	2024/01/03	0.94		%	20
			Total Cadmium (Cd)	2024/01/03	0.46		%	20
			Total Calcium (Ca)	2024/01/03	0.62		%	20
			Total Chromium (Cr)	2024/01/03	0.50		%	20
			Total Cobalt (Co)	2024/01/03	0.14		%	20
			Total Copper (Cu)	2024/01/03	0.060		%	20
			Total Iron (Fe)	2024/01/03	0.22		%	20
			Total Lead (Pb)	2024/01/03	0.46		%	20
			Total Magnesium (Mg)	2024/01/03	1.5		%	20
			Total Manganese (Mn)	2024/01/03	0.67		%	20
			Total Molybdenum (Mo)	2024/01/03	0.15		%	20
			Total Nickel (Ni)	2024/01/03	0.74		%	20
			Total Phosphorus (P)	2024/01/03	1.2		%	20
			Total Potassium (K)	2024/01/03	0.24		%	20
			Total Selenium (Se)	2024/01/03	1.2		%	20
			Total Silver (Ag)	2024/01/03	0.76		%	20
			Total Sodium (Na)	2024/01/03	0.19		%	20
			Total Strontium (Sr)	2024/01/03	0.44		%	20
			Total Thallium (Tl)	2024/01/03	0.34		%	20
			Total Tin (Sn)	2024/01/03	0.80		%	20
			Total Titanium (Ti)	2024/01/03	0.48		%	20
			Total Uranium (U)	2024/01/03	0.094		%	20
			Total Vanadium (V)	2024/01/03	0.34		%	20
			Total Zinc (Zn)	2024/01/03	0.31		%	20
9139502	PBA	Method Blank	Total Aluminum (Al)	2024/01/03	<2.0		ug	
			Total Antimony (Sb)	2024/01/03	<0.050		ug	
			Total Arsenic (As)	2024/01/03	<0.050		ug	
			Total Barium (Ba)	2024/01/03	<0.050		ug	
			Total Beryllium (Be)	2024/01/03	<0.030		ug	

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QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Total Bismuth (Bi)	2024/01/03	<0.050		ug	
			Total Boron (B)	2024/01/03	<1.0		ug	
			Total Cadmium (Cd)	2024/01/03	<0.010		ug	
			Total Calcium (Ca)	2024/01/03	<5.0		ug	
			Total Chromium (Cr)	2024/01/03	<0.050		ug	
			Total Cobalt (Co)	2024/01/03	<0.030		ug	
			Total Copper (Cu)	2024/01/03	<0.030		ug	
			Total Iron (Fe)	2024/01/03	<5.0		ug	
			Total Lead (Pb)	2024/01/03	<0.030		ug	
			Total Magnesium (Mg)	2024/01/03	<1.0		ug	
			Total Manganese (Mn)	2024/01/03	<0.050		ug	
			Total Molybdenum (Mo)	2024/01/03	<0.030		ug	
			Total Nickel (Ni)	2024/01/03	<0.050		ug	
			Total Phosphorus (P)	2024/01/03	<5.0		ug	
			Total Potassium (K)	2024/01/03	<5.0		ug	
			Total Selenium (Se)	2024/01/03	<0.10		ug	
			Total Silver (Ag)	2024/01/03	<0.010		ug	
			Total Sodium (Na)	2024/01/03	<5.0		ug	
			Total Strontium (Sr)	2024/01/03	<0.050		ug	
			Total Thallium (Tl)	2024/01/03	<0.010		ug	
			Total Tin (Sn)	2024/01/03	<0.030		ug	
			Total Titanium (Ti)	2024/01/03	<0.10		ug	
			Total Uranium (U)	2024/01/03	<0.010		ug	
			Total Vanadium (V)	2024/01/03	<0.030		ug	
			Total Zinc (Zn)	2024/01/03	<0.50		ug	
9140824	JWK	Spiked Blank	Acid Extractable Mercury (Hg)	2024/01/03		100	%	90 - 110
9140824	JWK	RPD	Acid Extractable Mercury (Hg)	2024/01/03	2.2		%	20
9140824	JWK	Method Blank	Acid Extractable Mercury (Hg)	2024/01/03	<0.0025		ug	

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

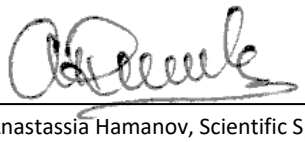
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Bureau Veritas Job #: C3BH526
Report Date: 2024/01/04

WSP E & I Canada Limited
Your P.O. #: C026200346
Sampler Initials: RF

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:



Anastassia Hamanov, Scientific Specialist

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Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Your Project #: C3BH522
Site Location: WSP E & I CANADA LIMITED

Attention: Cristina Bacchus

Bureau Veritas Laboratories
6740 Campobello Road
Mississauga, ON
Canada L5N 2L8

Report Date: 01/10/2024
Report #: R7983767
Version: 1 - Final

ANALYTICAL REPORT

BV LABS JOB #: C401264
Received: 01/03/2024, 00:00

Sample Matrix: Air
Samples Received: 5

Analyses	Quantity	Date Analyzed	Laboratory Method	Analytical Method
Silica by NIOSH 7500-PVC filter (1)	5	01/09/2024	NOV5SOP-00001	NIOSH 7500

This report shall not be reproduced except in full, without the written approval of the laboratory.
Results relate only to the items tested.
Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.
(1) Tridymite: A NIST-traceable standard is not available for tridymite. If tridymite is detected, the result is estimated and intended solely for information purposes.
Total (Quartz & Cristobalite): If one silica polymorph is positive, but the total is less than (<) the reporting limit, then the data user needs to decide which value is appropriate for their situation.

Encryption Key



Megan Stupar
Client Service Rep
10 Jan 2024 14:05:20

Please direct all questions regarding this Analytical Report to your Project Manager.
Megan Stupar, Client Service Rep
Email: megan.stupar@bureauveritas.com
Phone# (248) 344-1770
==========
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This report is authorized by Jason Forbes, Director of Operations responsible for Michigan Industrial Hygiene laboratory operations.

Total Cover Pages : 1

BV Labs Job #: C401264
Report Date: 01/10/2024

Bureau Veritas Laboratories
Client Project #: C3BH522
Site Location: WSP E & I CANADA LIMITED

ANALYTICAL RESULTS

Client ID:	XWY139-PM10 OCT 4	Matrix:	Air
BV Labs ID:	YAD114	Sample Media:	PVC filter untared, 47mm
Date Sampled:	10/04/2023	Air Volume (L):	24050

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	45	0.0019	5.0	NIOSH 7500	01/09/2024
Cristobalite	<5.0	<0.00021	5.0	NIOSH 7500	01/09/2024
Total (Quartz and Cristobalite)	45	0.0019	10	NIOSH 7500	01/09/2024
Tridymite	<10	<0.00042	10	NIOSH 7500	01/09/2024

RL = Reporting Limit

Client ID:	XWY140-PM10 OCT 9	Matrix:	Air
BV Labs ID:	YAD115	Sample Media:	PVC filter untared, 47mm
Date Sampled:	10/09/2023	Air Volume (L):	24050

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	<0.00021	5.0	NIOSH 7500	01/09/2024
Cristobalite	<5.0	<0.00021	5.0	NIOSH 7500	01/09/2024
Total (Quartz and Cristobalite)	<10	<0.00042	10	NIOSH 7500	01/09/2024
Tridymite	<10	<0.00042	10	NIOSH 7500	01/09/2024

RL = Reporting Limit

Client ID:	XWY142-PM10 NOV 7	Matrix:	Air
BV Labs ID:	YAD116	Sample Media:	PVC filter untared, 47mm
Date Sampled:	11/07/2023	Air Volume (L):	23020

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	<5.0	<0.00022	5.0	NIOSH 7500	01/09/2024
Cristobalite	<5.0	<0.00022	5.0	NIOSH 7500	01/09/2024
Total (Quartz and Cristobalite)	<10	<0.00043	10	NIOSH 7500	01/09/2024
Tridymite	<10	<0.00043	10	NIOSH 7500	01/09/2024

RL = Reporting Limit

Client ID:	XWY143-PM10 NOV 13	Matrix:	Air
BV Labs ID:	YAD117	Sample Media:	PVC filter untared, 47mm
Date Sampled:	11/13/2023	Air Volume (L):	24030

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	5.8	0.00024	5.0	NIOSH 7500	01/09/2024
Cristobalite	<5.0	<0.00021	5.0	NIOSH 7500	01/09/2024
Total (Quartz and Cristobalite)	<10	<0.00042	10	NIOSH 7500	01/09/2024
Tridymite	<10	<0.00042	10	NIOSH 7500	01/09/2024

RL = Reporting Limit

BV Labs Job #: C401264
Report Date: 01/10/2024

Bureau Veritas Laboratories
Client Project #: C3BH522
Site Location: WSP E & I CANADA LIMITED

ANALYTICAL RESULTS

Client ID:	XWY144-PM10 NOV 16	Matrix:	Air
BV Labs ID:	YAD118	Sample Media:	PVC filter untared, 47mm
Date Sampled:	11/16/2023	Air Volume (L):	24030

ANALYTE	Mass ug	Concentration mg/m3	RL ug	Test Method	Date Analyzed
Quartz	8.7	0.00036	5.0	NIOSH 7500	01/09/2024
Cristobalite	<5.0	<0.00021	5.0	NIOSH 7500	01/09/2024
Total (Quartz and Cristobalite)	<10	<0.00042	10	NIOSH 7500	01/09/2024
Tridymite	<10	<0.00042	10	NIOSH 7500	01/09/2024

RL = Reporting Limit

BV Labs Job #: C401264
Report Date: 01/10/2024

Bureau Veritas Laboratories
Client Project #: C3BH522
Site Location: WSP E & I CANADA LIMITED

GENERAL COMMENTS

Unless otherwise noted below the following statements apply: 1) all samples were received in acceptable condition, 2) all quality control results associated with this sample set were within acceptable limits and /or do not adversely affect the reported results and 3) the industrial hygiene results have not been blank corrected.

The client provided their pertinent field sampling data on the analysis request paperwork submitted with the samples. Results apply to the sample as received.

Results relate only to the items tested.

Appendix 2

Sent to: **Bureau Veritas (Novi)**
22345 Roethal Dr.
Novi, MI, 48375
Tel: (248) 344-1770

BV LABS INTERLAB CHAIN OF CUSTODY RECORD

COC # C3BH522-MBV-01-01

C401264

REPORT INFORMATION	
Company:	Bureau Veritas Laboratories
Address:	6740 Campobello Road, Mississauga, Ontario, L5N 2L8
Contact Name:	Cristina (Maria) Bacchus
Email:	maria.bacchus@bureauveritas.com
Phone:	(905) 817-5763
BV Labs Project #:	C3BH522
Client Invoice To:	WSP E & I Canada Limited (9991)
Client Report To:	WSP E & I Canada Limited (9991) **Incl. on Report? Yes / No**

#	SAMPLE ID	MATRIX	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	SAMPLER INITIALS	# CONT.	ANALYSIS REQUESTED: Subcontracting from AT-AMB to BV Novi	ADDITIONAL SAMPLE INFORMATION
1	XWY139-PM10 OCT 4	FLT	2023/10/04		RF	1	X	(P: 01) Volume=24.05 m3
2	XWY140-PM10 OCT 9	FLT	2023/10/09		RF	1	X	(P: 01) Volume=24.05 m3
3	XWY142-PM10 NOV 7	FLT	2023/11/07		RF	1	X	(P: 01) Volume=23.02 m3
4	XWY143-PM10 NOV 13	FLT	2023/11/13		RF	1	X	(P: 01) Volume=24.03 m3
5	XWY144-PM10 NOV 16	FLT	2023/11/16		RF	1	X	(P: 01) Volume=24.03 m3
6								
7								
8								
9								
10								

Job Barcode Label

SITE LOCATION:

SITE #:

PROJECT #:

PO/AFE, TASK ORDER/SERVICE ORDER, LINE ITEM:
CC6200346

REGULATORY CRITERIA

SPECIAL INSTRUCTIONS
Please inform Bureau Veritas immediately if you are not accredited for the requested test(s) or the hold time is approaching.
Please return a copy of this form with the report.
SUBBV-AMB is for silica by NIOSH 7500 at BV Novi
Client is: WSP E & I Canada Limited
report copies to jade.browne@bvlabs.com

REQUIRED EDDs
National Excel (N001)
OEC Excel (O036)
Woods EQEDD 3-file
Equis (N054)

TURNAROUND TIME
☐ Rush Required
2024/01/02
Date Required
Please inform us if rush charges will be incurred.

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

COOLER ID:	YES	NO	Temp: (°C)	1	2	3
Custody Seal Present						
Custody Seal Intact						
Cooling Media Present						

RECEIVING LAB USE ONLY
BV Labs Job #

RELINQUISHED BY: (SIGN & PRINT)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)	RECEIVED BY: (SIGN & PRINT)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)	Samples Labelled By:	Labels Verified By:
1. Maria NIRAL PATEL	2024/01/02	10:22	1. Maegan Smith	1/3/24	10:10a		
2.			2.				

Crawford Project Quality Baseline Report

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/08/30
Report #: R7788933
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3P0563
Received: 2023/08/18, 08:45

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/08/24	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/08/24	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/08/24	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/08/30
Report #: R7788933
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3P0563
Received: 2023/08/18, 08:45

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WSN673		
Sampling Date		2023/08/14		
COC Number		NA		
	UNITS	**CRAWFORD VOC 14 AUGUST/14508**	**RDL**	**QC Batch**
Volatile Organics				
Pressure on Receipt	psig	(-3.7)	N/A	8873935
2-Propanone	ppbv	1.69	0.14	8873934
Dichlorodifluoromethane (FREON 12)	ppbv	0.47	0.20	8873929
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	8873929
Chloromethane	ppbv	0.43	0.30	8873929
Vinyl Chloride	ppbv	<0.020	0.020	8873934
Chloroethane	ppbv	<0.30	0.30	8873929
1,3-Butadiene	ppbv	<0.50	0.50	8873929
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.20	8873929
Ethanol (ethyl alcohol)	ppbv	<1.0	1.0	8873929
Trichlorotrifluoroethane	ppbv	<0.15	0.15	8873929
2-propanol	ppbv	<1.0	1.0	8873929
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.24	0.10	8873934
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	8873934
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	8873929
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	8873934
Ethyl Acetate	ppbv	<1.0	1.0	8873929
1,1-Dichloroethylene	ppbv	<0.050	0.050	8873934
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	8873934
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	8873934
Methylene Chloride(Dichloromethane)	ppbv	0.125	0.050	8873934
Chloroform	ppbv	<0.040	0.040	8873934
Carbon Tetrachloride	ppbv	0.126	0.050	8873934
1,1-Dichloroethane	ppbv	<0.050	0.050	8873934
1,2-Dichloroethane	ppbv	0.015	0.010	8873934
Ethylene Dibromide	ppbv	<0.010	0.010	8873934
1,1,1-Trichloroethane	ppbv	<0.050	0.050	8873934
1,1,2-Trichloroethane	ppbv	<0.012	0.012	8873934
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	8873934

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WSN673		
Sampling Date		2023/08/14		
COC Number		NA		
	UNITS	**CRAWFORD VOC 14 AUGUST/14508**	**RDL**	**QC Batch**
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	8873934
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	8873934
1,2-Dichloropropane	ppbv	<0.050	0.050	8873934
Bromomethane	ppbv	<0.050	0.050	8873934
Bromoform	ppbv	<0.10	0.10	8873934
Bromodichloromethane	ppbv	<0.20	0.20	8873929
Dibromochloromethane	ppbv	<0.20	0.20	8873929
Trichloroethylene	ppbv	<0.050	0.050	8873934
Tetrachloroethylene	ppbv	<0.050	0.050	8873934
Benzene	ppbv	0.108	0.050	8873934
Toluene	ppbv	0.393	0.050	8873934
Ethylbenzene	ppbv	<0.050	0.050	8873934
p+m-Xylene	ppbv	<0.10	0.10	8873934
o-Xylene	ppbv	<0.050	0.050	8873934
Styrene	ppbv	<0.050	0.050	8873934
4-ethyltoluene	ppbv	<0.50	0.50	8873929
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	8873929
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	8873929
Chlorobenzene	ppbv	<0.050	0.050	8873934
Benzyl chloride	ppbv	<0.50	0.50	8873929
1,3-Dichlorobenzene	ppbv	<0.40	0.40	8873929
1,4-Dichlorobenzene	ppbv	<0.050	0.050	8873934
1,2-Dichlorobenzene	ppbv	<0.050	0.050	8873934
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	8873934
Hexachlorobutadiene	ppbv	<0.0047	0.0047	8873934
Hexane	ppbv	<0.10	0.10	8873934
Heptane	ppbv	<0.30	0.30	8873929
Cyclohexane	ppbv	<0.20	0.20	8873929
Tetrahydrofuran	ppbv	<0.40	0.40	8873929
1,4-Dioxane	ppbv	<1.0	1.0	8873929
Naphthalene	ppbv	<0.10	0.10	8873934

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3P0563
Report Date: 2023/08/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		WSN673		
Sampling Date		2023/08/14		
COC Number		NA		
	UNITS	**CRAWFORD VOC 14 AUGUST/14508**	**RDL**	**QC Batch**
Total Xylenes	ppbv	<0.15	0.15	8873934
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	8873934
Vinyl Bromide	ppbv	<0.20	0.20	8873929
Propene	ppbv	<0.50	0.50	8873929
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	8873929
Carbon Disulfide	ppbv	<0.50	0.50	8873929
Vinyl Acetate	ppbv	<0.20	0.20	8873929
Surrogate Recovery (%)				
Bromochloromethane	%	94	N/A	8873934
D5-Chlorobenzene	%	86	N/A	8873934
Difluorobenzene	%	86	N/A	8873934
Bromochloromethane	%	94	N/A	8873929
D5-Chlorobenzene	%	86	N/A	8873929
Difluorobenzene	%	86	N/A	8873929

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas Job #: C3P0563
Report Date: 2023/08/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: WSN673
Sample ID: CRAWFORD VOC 14 AUGUST/14508
Matrix: Air

Collected: 2023/08/14
Shipped:
Received: 2023/08/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	8873935	N/A	2023/08/24	Ana Nunes
Volatile Organics in Air by GC/MS/SIM	GC/MS	8873934	N/A	2023/08/24	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	8873929	N/A	2023/08/24	Ana Nunes

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8873929	Bromochloromethane	2023/08/24	101	60 - 140	105	%		
8873929	D5-Chlorobenzene	2023/08/24	105	60 - 140	95	%		
8873929	Difluorobenzene	2023/08/24	106	60 - 140	97	%		
8873934	Bromochloromethane	2023/08/24	101	60 - 140	105	%		
8873934	D5-Chlorobenzene	2023/08/24	105	60 - 140	95	%		
8873934	Difluorobenzene	2023/08/24	106	60 - 140	97	%		
8873929	1,2,4-Trimethylbenzene	2023/08/24	98	70 - 130	<0.50	ppbv	NC (1)	25
8873929	1,2-Dichlorotetrafluoroethane	2023/08/24	92	70 - 130	<0.17	ppbv	NC (1)	25
8873929	1,3,5-Trimethylbenzene	2023/08/24	96	70 - 130	<0.50	ppbv	NC (1)	25
8873929	1,3-Butadiene	2023/08/24	101	70 - 130	<0.50	ppbv	NC (1)	25
8873929	1,3-Dichlorobenzene	2023/08/24	94	70 - 130	<0.40	ppbv	NC (1)	25
8873929	1,4-Dioxane	2023/08/24	94	70 - 130	<1.0	ppbv	NC (1)	25
8873929	2,2,4-Trimethylpentane	2023/08/24	100	70 - 130	<0.20	ppbv	NC (1)	25
8873929	2-propanol	2023/08/24	93	70 - 130	<1.0	ppbv	NC (1)	25
8873929	4-ethyltoluene	2023/08/24	100	70 - 130	<0.50	ppbv	NC (1)	25
8873929	Benzyl chloride	2023/08/24	122	70 - 130	<0.50	ppbv	NC (1)	25
8873929	Bromodichloromethane	2023/08/24	90	70 - 130	<0.20	ppbv	NC (1)	25
8873929	Carbon Disulfide	2023/08/24	97	70 - 130	<0.50	ppbv	NC (1)	25
8873929	Chloroethane	2023/08/24	105	70 - 130	<0.30	ppbv	NC (1)	25
8873929	Chloromethane	2023/08/24	100	70 - 130	<0.30	ppbv	1.2 (1)	25
8873929	Cyclohexane	2023/08/24	101	70 - 130	<0.20	ppbv	NC (1)	25
8873929	Dibromochloromethane	2023/08/24	97	70 - 130	<0.20	ppbv	NC (1)	25
8873929	Dichlorodifluoromethane (FREON 12)	2023/08/24	90	70 - 130	<0.20	ppbv	3.2 (1)	25
8873929	Ethanol (ethyl alcohol)	2023/08/24	85	70 - 130	<1.0	ppbv	NC (1)	25
8873929	Ethyl Acetate	2023/08/24	103	70 - 130	<1.0	ppbv	NC (1)	25
8873929	Heptane	2023/08/24	103	70 - 130	<0.30	ppbv	NC (1)	25
8873929	Methyl Butyl Ketone (2-Hexanone)	2023/08/24	97	70 - 130	<1.0	ppbv	NC (1)	25
8873929	Propene	2023/08/24	121	70 - 130	<0.50	ppbv	NC (1)	25
8873929	Tetrahydrofuran	2023/08/24	101	70 - 130	<0.40	ppbv	NC (1)	25
8873929	Trichlorofluoromethane (FREON 11)	2023/08/24	94	70 - 130	<0.20	ppbv	3.0 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8873929	Trichlorotrifluoroethane	2023/08/24	92	70 - 130	<0.15	ppbv	NC (1)	25
8873929	Vinyl Acetate	2023/08/24	105	70 - 130	<0.20	ppbv	NC (1)	25
8873929	Vinyl Bromide	2023/08/24	89	70 - 130	<0.20	ppbv	NC (1)	25
8873934	1,1,1,2-Tetrachloroethane	2023/08/24	100	70 - 130	<0.021	ppbv	NC (1)	25
8873934	1,1,1-Trichloroethane	2023/08/24	96	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,1,2,2-Tetrachloroethane	2023/08/24	92	70 - 130	<0.0027	ppbv	NC (1)	25
8873934	1,1,2-Trichloroethane	2023/08/24	98	70 - 130	<0.012	ppbv	NC (1)	25
8873934	1,1-Dichloroethane	2023/08/24	95	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,1-Dichloroethylene	2023/08/24	83	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,2,4-Trichlorobenzene	2023/08/24	95	70 - 130	<0.10	ppbv	NC (1)	25
8873934	1,2-Dichlorobenzene	2023/08/24	91	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,2-Dichloroethane	2023/08/24	97	70 - 130	<0.010	ppbv	1.6 (1)	25
8873934	1,2-Dichloropropane	2023/08/24	100	70 - 130	<0.050	ppbv	NC (1)	25
8873934	1,4-Dichlorobenzene	2023/08/24	96	70 - 130	<0.050	ppbv	NC (1)	25
8873934	2-Propanone	2023/08/24	94	70 - 130	<0.14	ppbv	NC (1)	N/A
8873934	Benzene	2023/08/24	102	70 - 130	<0.050	ppbv	1.0 (1)	25
8873934	Bromoform	2023/08/24	99	70 - 130	<0.10	ppbv	NC (1)	25
8873934	Bromomethane	2023/08/24	92	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Carbon Tetrachloride	2023/08/24	102	70 - 130	<0.050	ppbv	2.1 (1)	25
8873934	Chlorobenzene	2023/08/24	97	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Chloroform	2023/08/24	100	70 - 130	<0.040	ppbv	NC (1)	25
8873934	cis-1,2-Dichloroethylene	2023/08/24	98	70 - 130	<0.050	ppbv	NC (1)	25
8873934	cis-1,3-Dichloropropene	2023/08/24	103	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Ethylbenzene	2023/08/24	101	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Ethylene Dibromide	2023/08/24	101	70 - 130	<0.010	ppbv	NC (1)	25
8873934	Hexachlorobutadiene	2023/08/24	83	70 - 130	<0.0047	ppbv	NC (1)	25
8873934	Hexane	2023/08/24	98	70 - 130	<0.10	ppbv	NC (1)	25
8873934	Methyl Ethyl Ketone (2-Butanone)	2023/08/24	99	70 - 130	<0.10	ppbv	2.8 (1)	25
8873934	Methyl Isobutyl Ketone	2023/08/24	95	70 - 130	<0.10	ppbv	NC (1)	25
8873934	Methyl t-butyl ether (MTBE)	2023/08/24	87	70 - 130	<0.10	ppbv	NC (1)	25

QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
8873934	Methylene Chloride(Dichloromethane)	2023/08/24	93	70 - 130	<0.050	ppbv	1.9 (1)	25
8873934	Naphthalene	2023/08/24	110	70 - 130	<0.10	ppbv	NC (1)	25
8873934	o-Xylene	2023/08/24	93	70 - 130	<0.050	ppbv	NC (1)	25
8873934	p+m-Xylene	2023/08/24	99	70 - 130	<0.10	ppbv	NC (1)	25
8873934	Styrene	2023/08/24	99	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Tetrachloroethylene	2023/08/24	98	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Toluene	2023/08/24	101	70 - 130	<0.050	ppbv	5.3 (1)	25
8873934	Total Xylenes	2023/08/24	97	70 - 130	<0.15	ppbv	NC (1)	25
8873934	trans-1,2-Dichloroethylene	2023/08/24	95	70 - 130	<0.10	ppbv	NC (1)	25
8873934	trans-1,3-Dichloropropene	2023/08/24	116	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Trichloroethylene	2023/08/24	102	70 - 130	<0.050	ppbv	NC (1)	25
8873934	Vinyl Chloride	2023/08/24	99	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID

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Bureau Veritas Job #: C3P0563
Report Date: 2023/08/30

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by {0}, {1} responsible for {2} {3} laboratory operations.

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BUREAU VERITAS

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Mississauga Ontario ,L5N 2L8
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Toll Free: 1-800-668-0639
Phone: (905) 817-5700
Fax: (905) 817-5777

CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7

SECTION

Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

ANALYSIS REQUESTED

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)									
Crawford VOC 14 August	14508	FX1653	14-Aug-23	23.5hr	-29.5	-7.5	X	X									

18-Aug-23 08:45
Gina Baybayan
C3P0563
VKK AIR-001

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.
PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

Client Signature: Adam Gauthier
Affiliation: WSP
Date/Time: 14-Aug-23

Received by: Jaswinderdeep Kaur Kuhar
Affiliation:
Date/Time: 2023/08/18 8:45

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Bureau Veritas Laboratories' standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms available at http://www.bvlabs.com/terms-and-conditions

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: na

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/10/18
Report #: R7865782
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3U6855
Received: 2023/10/04, 09:00

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/10/11	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/10/11	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/10/11	BRL SOP-00304	EPA TO-15 m

Reference Method suffix "m" indicates test methods incorporate validated modifications from specific reference methods to improve performance.

(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

==========

This report has been generated and distributed using a secure automated process.
Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

Bureau Veritas Job #: C3U6855
Report Date: 2023/10/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

RESULTS OF ANALYSES OF AIR

Bureau Veritas ID		XEL362	
Sampling Date		2023/09/27	
COC Number		na	
	UNITS	VOC 27 SEPT	QC Batch
Volatile Organics			
Pressure on Receipt	psig	(-2.0)	8972805
QC Batch = Quality Control Batch			

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

VOLATILE ORGANICS BY GC/MS (AIR)

Bureau Veritas ID		XEL362				
Sampling Date		2023/09/27				
COC Number		na				
	UNITS	VOC 27 SEPT	RDL	ug/m3	DL (ug/m3)	QC Batch
Volatile Organics						
2-Propanone	ppbv	2.22	0.30	5.26	0.713	8972804
Dichlorodifluoromethane (FREON 12)	ppbv	0.48	0.20	2.38	0.989	8972798
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	0.17	<1.19	1.19	8972798
Chloromethane	ppbv	0.37	0.30	0.758	0.620	8972798
Vinyl Chloride	ppbv	<0.020	0.020	<0.0511	0.0511	8972804
Chloroethane	ppbv	<0.30	0.30	<0.792	0.792	8972798
1,3-Butadiene	ppbv	<0.50	0.50	<1.11	1.11	8972798
Trichlorofluoromethane (FREON 11)	ppbv	0.29	0.20	1.61	1.12	8972798
Ethanol (ethyl alcohol)	ppbv	4.3	1.0	8.05	1.88	8972798
Trichlorotrifluoroethane	ppbv	<0.15	0.15	<1.15	1.15	8972798
2-propanol	ppbv	<1.0	1.0	<2.46	2.46	8972798
Methyl Ethyl Ketone (2-Butanone)	ppbv	0.25	0.10	0.724	0.295	8972804
Methyl Isobutyl Ketone	ppbv	<0.10	0.10	<0.410	0.410	8972804
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	1.0	<4.10	4.10	8972798
Methyl t-butyl ether (MTBE)	ppbv	<0.10	0.10	<0.361	0.361	8972804
Ethyl Acetate	ppbv	<1.0	1.0	<3.60	3.60	8972798
1,1-Dichloroethylene	ppbv	<0.050	0.050	<0.198	0.198	8972804
cis-1,2-Dichloroethylene	ppbv	<0.050	0.050	<0.198	0.198	8972804
trans-1,2-Dichloroethylene	ppbv	<0.10	0.10	<0.396	0.396	8972804
Methylene Chloride(Dichloromethane)	ppbv	0.360	0.050	1.25	0.174	8972804
Chloroform	ppbv	<0.040	0.040	<0.195	0.195	8972804
Carbon Tetrachloride	ppbv	0.105	0.050	0.658	0.315	8972804
1,1-Dichloroethane	ppbv	<0.050	0.050	<0.202	0.202	8972804
1,2-Dichloroethane	ppbv	0.015	0.010	0.0603	0.0405	8972804
Ethylene Dibromide	ppbv	<0.010	0.010	<0.0768	0.0768	8972804
1,1,1-Trichloroethane	ppbv	<0.050	0.050	<0.273	0.273	8972804
1,1,2-Trichloroethane	ppbv	<0.012	0.012	<0.0655	0.0655	8972804
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	0.0027	<0.0185	0.0185	8972804
cis-1,3-Dichloropropene	ppbv	<0.050	0.050	<0.227	0.227	8972804
trans-1,3-Dichloropropene	ppbv	<0.050	0.050	<0.227	0.227	8972804
1,2-Dichloropropane	ppbv	<0.050	0.050	<0.231	0.231	8972804
Bromomethane	ppbv	<0.050	0.050	<0.194	0.194	8972804
Bromoform	ppbv	<0.10	0.10	<1.03	1.03	8972804

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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VOLATILE ORGANICS BY GC/MS (AIR)

Bureau Veritas ID		XEL362				
Sampling Date		2023/09/27				
COC Number		na				
	UNITS	VOC 27 SEPT	RDL	ug/m3	DL (ug/m3)	QC Batch
Bromodichloromethane	ppbv	<0.20	0.20	<1.34	1.34	8972798
Dibromochloromethane	ppbv	<0.20	0.20	<1.70	1.70	8972798
Trichloroethylene	ppbv	<0.050	0.050	<0.269	0.269	8972804
Tetrachloroethylene	ppbv	<0.050	0.050	<0.339	0.339	8972804
Benzene	ppbv	0.225	0.050	0.718	0.160	8972804
Toluene	ppbv	0.564	0.050	2.13	0.188	8972804
Ethylbenzene	ppbv	0.081	0.050	0.352	0.217	8972804
p+m-Xylene	ppbv	0.20	0.10	0.866	0.434	8972804
o-Xylene	ppbv	0.069	0.050	0.299	0.217	8972804
Styrene	ppbv	<0.050	0.050	<0.213	0.213	8972804
4-ethyltoluene	ppbv	<0.50	0.50	<2.46	2.46	8972798
1,3,5-Trimethylbenzene	ppbv	<0.50	0.50	<2.45	2.45	8972798
1,2,4-Trimethylbenzene	ppbv	<0.50	0.50	<2.45	2.45	8972798
Chlorobenzene	ppbv	<0.050	0.050	<0.230	0.230	8972804
Benzyl chloride	ppbv	<0.50	0.50	<2.59	2.59	8972798
1,3-Dichlorobenzene	ppbv	<0.40	0.40	<2.40	2.40	8972798
1,4-Dichlorobenzene	ppbv	<0.050	0.050	<0.301	0.301	8972804
1,2-Dichlorobenzene	ppbv	<0.050	0.050	<0.301	0.301	8972804
1,2,4-Trichlorobenzene	ppbv	<0.10	0.10	<0.742	0.742	8972804
Hexachlorobutadiene	ppbv	<0.0047	0.0047	<0.0501	0.0501	8972804
Hexane	ppbv	0.14	0.10	0.480	0.352	8972804
Heptane	ppbv	<0.30	0.30	<1.23	1.23	8972798
Cyclohexane	ppbv	<0.20	0.20	<0.688	0.688	8972798
Tetrahydrofuran	ppbv	<0.40	0.40	<1.18	1.18	8972798
1,4-Dioxane	ppbv	<1.0	1.0	<3.60	3.60	8972798
Naphthalene	ppbv	<0.10	0.10	<0.524	0.524	8972804
Total Xylenes	ppbv	0.27	0.15	1.17	0.651	8972804
1,1,1,2-Tetrachloroethane	ppbv	<0.021	0.021	<0.144	0.144	8972804
Vinyl Bromide	ppbv	<0.20	0.20	<0.875	0.875	8972798
Propene	ppbv	<0.50	0.50	<0.861	0.861	8972798
2,2,4-Trimethylpentane	ppbv	<0.20	0.20	<0.934	0.934	8972798
Carbon Disulfide	ppbv	<0.50	0.50	<1.56	1.56	8972798
Vinyl Acetate	ppbv	<0.20	0.20	<0.704	0.704	8972798

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3U6855
Report Date: 2023/10/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VOLATILE ORGANICS BY GC/MS (AIR)

Bureau Veritas ID		XEL362				
Sampling Date		2023/09/27				
COC Number		na				
	UNITS	VOC 27 SEPT	RDL	ug/m3	DL (ug/m3)	QC Batch
Surrogate Recovery (%)						
Bromochloromethane	%	97		N/A	N/A	8972804
D5-Chlorobenzene	%	82		N/A	N/A	8972804
Difluorobenzene	%	85		N/A	N/A	8972804
Bromochloromethane	%	97		N/A	N/A	8972798
D5-Chlorobenzene	%	82		N/A	N/A	8972798
Difluorobenzene	%	85		N/A	N/A	8972798

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
N/A = Not Applicable

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

Bureau Veritas Job #: C3U6855
Report Date: 2023/10/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas 6740 Campobello Road, Mississauga, Ontario, L5N 2L8 Tel: (905) 817-5700 Toll-Free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
8972798	ANE	Spiked Blank	Bromochloromethane	2023/10/11		102	%	60 - 140
			D5-Chlorobenzene	2023/10/11		105	%	60 - 140
			Difluorobenzene	2023/10/11		108	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2023/10/11		87	%	70 - 130
			1,2-Dichlorotetrafluoroethane	2023/10/11		89	%	70 - 130
			Chloromethane	2023/10/11		94	%	70 - 130
			Chloroethane	2023/10/11		100	%	70 - 130
			1,3-Butadiene	2023/10/11		99	%	70 - 130
			Trichlorofluoromethane (FREON 11)	2023/10/11		95	%	70 - 130
			Ethanol (ethyl alcohol)	2023/10/11		76	%	70 - 130
			Trichlorotrifluoroethane	2023/10/11		89	%	70 - 130
			2-propanol	2023/10/11		90	%	70 - 130
			Methyl Butyl Ketone (2-Hexanone)	2023/10/11		91	%	70 - 130
			Ethyl Acetate	2023/10/11		99	%	70 - 130
			Bromodichloromethane	2023/10/11		88	%	70 - 130
			Dibromochloromethane	2023/10/11		92	%	70 - 130
			4-ethyltoluene	2023/10/11		100	%	70 - 130
			1,3,5-Trimethylbenzene	2023/10/11		94	%	70 - 130
			1,2,4-Trimethylbenzene	2023/10/11		97	%	70 - 130
			Benzyl chloride	2023/10/11		112	%	70 - 130
			1,3-Dichlorobenzene	2023/10/11		89	%	70 - 130
			Heptane	2023/10/11		97	%	70 - 130
			Cyclohexane	2023/10/11		97	%	70 - 130
			Tetrahydrofuran	2023/10/11		95	%	70 - 130
			1,4-Dioxane	2023/10/11		98	%	70 - 130
			Vinyl Bromide	2023/10/11		89	%	70 - 130
			Propene	2023/10/11		100	%	70 - 130
			2,2,4-Trimethylpentane	2023/10/11		100	%	70 - 130
			Carbon Disulfide	2023/10/11		90	%	70 - 130
			Vinyl Acetate	2023/10/11		98	%	70 - 130
8972798	ANE	Method Blank	Bromochloromethane	2023/10/11		101	%	60 - 140
			D5-Chlorobenzene	2023/10/11		81	%	60 - 140
			Difluorobenzene	2023/10/11		85	%	60 - 140
			Dichlorodifluoromethane (FREON 12)	2023/10/11	<0.20		ppbv	
			1,2-Dichlorotetrafluoroethane	2023/10/11	<0.17		ppbv	
			Chloromethane	2023/10/11	<0.30		ppbv	
			Chloroethane	2023/10/11	<0.30		ppbv	
			1,3-Butadiene	2023/10/11	<0.50		ppbv	
			Trichlorofluoromethane (FREON 11)	2023/10/11	<0.20		ppbv	
			Ethanol (ethyl alcohol)	2023/10/11	<1.0		ppbv	
			Trichlorotrifluoroethane	2023/10/11	<0.15		ppbv	
			2-propanol	2023/10/11	<1.0		ppbv	
			Methyl Butyl Ketone (2-Hexanone)	2023/10/11	<1.0		ppbv	
			Ethyl Acetate	2023/10/11	<1.0		ppbv	
			Bromodichloromethane	2023/10/11	<0.20		ppbv	
			Dibromochloromethane	2023/10/11	<0.20		ppbv	
			4-ethyltoluene	2023/10/11	<0.50		ppbv	
			1,3,5-Trimethylbenzene	2023/10/11	<0.50		ppbv	
			1,2,4-Trimethylbenzene	2023/10/11	<0.50		ppbv	
			Benzyl chloride	2023/10/11	<0.50		ppbv	

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			1,3-Dichlorobenzene	2023/10/11	<0.40		ppbv	
			Heptane	2023/10/11	<0.30		ppbv	
			Cyclohexane	2023/10/11	<0.20		ppbv	
			Tetrahydrofuran	2023/10/11	<0.40		ppbv	
			1,4-Dioxane	2023/10/11	<1.0		ppbv	
			Vinyl Bromide	2023/10/11	<0.20		ppbv	
			Propene	2023/10/11	<0.50		ppbv	
			2,2,4-Trimethylpentane	2023/10/11	<0.20		ppbv	
			Carbon Disulfide	2023/10/11	<0.50		ppbv	
			Vinyl Acetate	2023/10/11	<0.20		ppbv	
8972798	ANE	RPD	Dichlorodifluoromethane (FREON 12)	2023/10/11	5.1		%	25
			1,2-Dichlorotetrafluoroethane	2023/10/11	NC		%	25
			Chloromethane	2023/10/11	0.94		%	25
			Chloroethane	2023/10/11	NC		%	25
			1,3-Butadiene	2023/10/11	NC		%	25
			Trichlorofluoromethane (FREON 11)	2023/10/11	1.3		%	25
			Ethanol (ethyl alcohol)	2023/10/11	1.1		%	25
			Trichlorotrifluoroethane	2023/10/11	NC		%	25
			2-propanol	2023/10/11	NC		%	25
			Methyl Butyl Ketone (2-Hexanone)	2023/10/11	NC		%	25
			Ethyl Acetate	2023/10/11	NC		%	25
			Bromodichloromethane	2023/10/11	NC		%	25
			Dibromochloromethane	2023/10/11	NC		%	25
			4-ethyltoluene	2023/10/11	NC		%	25
			1,3,5-Trimethylbenzene	2023/10/11	NC		%	25
			1,2,4-Trimethylbenzene	2023/10/11	NC		%	25
			Benzyl chloride	2023/10/11	NC		%	25
			1,3-Dichlorobenzene	2023/10/11	NC		%	25
			Heptane	2023/10/11	NC		%	25
			Cyclohexane	2023/10/11	NC		%	25
			Tetrahydrofuran	2023/10/11	NC		%	25
			1,4-Dioxane	2023/10/11	NC		%	25
			Vinyl Bromide	2023/10/11	NC		%	25
			Propene	2023/10/11	NC		%	25
			2,2,4-Trimethylpentane	2023/10/11	NC		%	25
			Carbon Disulfide	2023/10/11	NC		%	25
			Vinyl Acetate	2023/10/11	NC		%	25
8972804	ANE	Spiked Blank	2-Propanone	2023/10/11		90	%	70 - 130
			Bromochloromethane	2023/10/11		102	%	60 - 140
			D5-Chlorobenzene	2023/10/11		105	%	60 - 140
			Difluorobenzene	2023/10/11		108	%	60 - 140
			Vinyl Chloride	2023/10/11		97	%	70 - 130
			Methyl Ethyl Ketone (2-Butanone)	2023/10/11		91	%	70 - 130
			Methyl Isobutyl Ketone	2023/10/11		90	%	70 - 130
			Methyl t-butyl ether (MTBE)	2023/10/11		88	%	70 - 130
			1,1-Dichloroethylene	2023/10/11		79	%	70 - 130
			cis-1,2-Dichloroethylene	2023/10/11		92	%	70 - 130
			trans-1,2-Dichloroethylene	2023/10/11		92	%	70 - 130
			Methylene Chloride(Dichloromethane)	2023/10/11		86	%	70 - 130
			Chloroform	2023/10/11		95	%	70 - 130

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Carbon Tetrachloride	2023/10/11		95	%	70 - 130
			1,1-Dichloroethane	2023/10/11		89	%	70 - 130
			1,2-Dichloroethane	2023/10/11		95	%	70 - 130
			Ethylene Dibromide	2023/10/11		92	%	70 - 130
			1,1,1-Trichloroethane	2023/10/11		94	%	70 - 130
			1,1,2-Trichloroethane	2023/10/11		91	%	70 - 130
			1,1,2,2-Tetrachloroethane	2023/10/11		85	%	70 - 130
			cis-1,3-Dichloropropene	2023/10/11		93	%	70 - 130
			trans-1,3-Dichloropropene	2023/10/11		101	%	70 - 130
			1,2-Dichloropropane	2023/10/11		91	%	70 - 130
			Bromomethane	2023/10/11		90	%	70 - 130
			Bromoform	2023/10/11		92	%	70 - 130
			Trichloroethylene	2023/10/11		96	%	70 - 130
			Tetrachloroethylene	2023/10/11		94	%	70 - 130
			Benzene	2023/10/11		96	%	70 - 130
			Toluene	2023/10/11		97	%	70 - 130
			Ethylbenzene	2023/10/11		99	%	70 - 130
			p+m-Xylene	2023/10/11		99	%	70 - 130
			o-Xylene	2023/10/11		93	%	70 - 130
			Styrene	2023/10/11		92	%	70 - 130
			Chlorobenzene	2023/10/11		92	%	70 - 130
			1,4-Dichlorobenzene	2023/10/11		88	%	70 - 130
			1,2-Dichlorobenzene	2023/10/11		86	%	70 - 130
			1,2,4-Trichlorobenzene	2023/10/11		84	%	70 - 130
			Hexachlorobutadiene	2023/10/11		85	%	70 - 130
			Hexane	2023/10/11		92	%	70 - 130
			Naphthalene	2023/10/11		89	%	70 - 130
			Total Xylenes	2023/10/11		97	%	70 - 130
			1,1,1,2-Tetrachloroethane	2023/10/11		98	%	70 - 130
8972804	ANE	Method Blank	2-Propanone	2023/10/11	<0.30		ppbv	
			Bromochloromethane	2023/10/11		101	%	60 - 140
			D5-Chlorobenzene	2023/10/11		81	%	60 - 140
			Difluorobenzene	2023/10/11		85	%	60 - 140
			Vinyl Chloride	2023/10/11	<0.020		ppbv	
			Methyl Ethyl Ketone (2-Butanone)	2023/10/11	<0.10		ppbv	
			Methyl Isobutyl Ketone	2023/10/11	<0.10		ppbv	
			Methyl t-butyl ether (MTBE)	2023/10/11	<0.10		ppbv	
			1,1-Dichloroethylene	2023/10/11	<0.050		ppbv	
			cis-1,2-Dichloroethylene	2023/10/11	<0.050		ppbv	
			trans-1,2-Dichloroethylene	2023/10/11	<0.10		ppbv	
			Methylene Chloride(Dichloromethane)	2023/10/11	<0.050		ppbv	
			Chloroform	2023/10/11	<0.040		ppbv	
			Carbon Tetrachloride	2023/10/11	<0.050		ppbv	
			1,1-Dichloroethane	2023/10/11	<0.050		ppbv	
			1,2-Dichloroethane	2023/10/11	<0.010		ppbv	
			Ethylene Dibromide	2023/10/11	<0.010		ppbv	
			1,1,1-Trichloroethane	2023/10/11	<0.050		ppbv	
			1,1,2-Trichloroethane	2023/10/11	<0.012		ppbv	
			1,1,2,2-Tetrachloroethane	2023/10/11	<0.0027		ppbv	
			cis-1,3-Dichloropropene	2023/10/11	<0.050		ppbv	

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			trans-1,3-Dichloropropene	2023/10/11	<0.050		ppbv	
			1,2-Dichloropropane	2023/10/11	<0.050		ppbv	
			Bromomethane	2023/10/11	<0.050		ppbv	
			Bromoform	2023/10/11	<0.10		ppbv	
			Trichloroethylene	2023/10/11	<0.050		ppbv	
			Tetrachloroethylene	2023/10/11	<0.050		ppbv	
			Benzene	2023/10/11	<0.050		ppbv	
			Toluene	2023/10/11	<0.050		ppbv	
			Ethylbenzene	2023/10/11	<0.050		ppbv	
			p+m-Xylene	2023/10/11	<0.10		ppbv	
			o-Xylene	2023/10/11	<0.050		ppbv	
			Styrene	2023/10/11	<0.050		ppbv	
			Chlorobenzene	2023/10/11	<0.050		ppbv	
			1,4-Dichlorobenzene	2023/10/11	<0.050		ppbv	
			1,2-Dichlorobenzene	2023/10/11	<0.050		ppbv	
			1,2,4-Trichlorobenzene	2023/10/11	<0.10		ppbv	
			Hexachlorobutadiene	2023/10/11	<0.0047		ppbv	
			Hexane	2023/10/11	<0.10		ppbv	
			Naphthalene	2023/10/11	<0.10		ppbv	
			Total Xylenes	2023/10/11	<0.15		ppbv	
			1,1,1,2-Tetrachloroethane	2023/10/11	<0.021		ppbv	
8972804	ANE	RPD	2-Propanone	2023/10/11	NC		%	N/A
			Vinyl Chloride	2023/10/11	NC		%	25
			Methyl Ethyl Ketone (2-Butanone)	2023/10/11	0.60		%	25
			Methyl Isobutyl Ketone	2023/10/11	NC		%	25
			Methyl t-butyl ether (MTBE)	2023/10/11	NC		%	25
			1,1-Dichloroethylene	2023/10/11	NC		%	25
			cis-1,2-Dichloroethylene	2023/10/11	NC		%	25
			trans-1,2-Dichloroethylene	2023/10/11	NC		%	25
			Methylene Chloride(Dichloromethane)	2023/10/11	3.5		%	25
			Chloroform	2023/10/11	NC		%	25
			Carbon Tetrachloride	2023/10/11	3.5		%	25
			1,1-Dichloroethane	2023/10/11	NC		%	25
			1,2-Dichloroethane	2023/10/11	2.6		%	25
			Ethylene Dibromide	2023/10/11	NC		%	25
			1,1,1-Trichloroethane	2023/10/11	NC		%	25
			1,1,2-Trichloroethane	2023/10/11	NC		%	25
			1,1,2,2-Tetrachloroethane	2023/10/11	NC		%	25
			cis-1,3-Dichloropropene	2023/10/11	NC		%	25
			trans-1,3-Dichloropropene	2023/10/11	NC		%	25
			1,2-Dichloropropane	2023/10/11	NC		%	25
			Bromomethane	2023/10/11	NC		%	25
			Bromoform	2023/10/11	NC		%	25
			Trichloroethylene	2023/10/11	NC		%	25
			Tetrachloroethylene	2023/10/11	NC		%	25
			Benzene	2023/10/11	0.85		%	25
			Toluene	2023/10/11	0.14		%	25
			Ethylbenzene	2023/10/11	NC		%	25
			p+m-Xylene	2023/10/11	NC		%	25
			o-Xylene	2023/10/11	NC		%	25

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

QUALITY ASSURANCE REPORT(CONT'D)

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
			Styrene	2023/10/11	NC		%	25
			Chlorobenzene	2023/10/11	NC		%	25
			1,4-Dichlorobenzene	2023/10/11	NC		%	25
			1,2-Dichlorobenzene	2023/10/11	NC		%	25
			1,2,4-Trichlorobenzene	2023/10/11	NC		%	25
			Hexachlorobutadiene	2023/10/11	NC		%	25
			Hexane	2023/10/11	NC		%	25
			Naphthalene	2023/10/11	NC		%	25
			Total Xylenes	2023/10/11	NC		%	25
			1,1,1,2-Tetrachloroethane	2023/10/11	NC		%	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3U6855
Report Date: 2023/10/18

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Melanie Mabini, Team Leader

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

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Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/12/05
Report #: R7941377
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3AG322
Received: 2023/11/22, 08:45

Sample Matrix: Air
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Canister Pressure (TO-15)	1	N/A	2023/11/28	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air by GC/MS/SIM (1)	1	N/A	2023/11/28	BRL SOP-00304	EPA TO-15 m
Volatile Organics in Air (TO-15) (2)	1	N/A	2023/11/28	BRL SOP-00304	EPA TO-15 m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in writing). All data is in statistical control and has met quality control and method performance criteria unless otherwise noted. All method blanks are reported; unless indicated otherwise, associated sample data are not blank corrected. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas has been retained to provide analysis of samples provided by the Client using the testing methodology referenced in this report. Interpretation and use of test results are the sole responsibility of the Client and are not within the scope of services provided by Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested. When sampling is not conducted by Bureau Veritas, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.
Reference Method suffix “m” indicates test methods incorporate validated modifications from specific reference methods to improve performance.
* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.
(1) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Your P.O. #: C026200346
Your Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your C.O.C. #: NA

Attention: Ryan Fletcher

WSP E & I Canada Limited
Oakville - Standing Offer
2020 Winston Park Drive
Suite 600
Oakville , ON
CANADA L6H 6X7

Report Date: 2023/12/05
Report #: R7941377
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3AG322
Received: 2023/11/22, 08:45

(2) Air sampling canisters have been cleaned in accordance with U.S. EPA Method TO15. At the end of the cleaning, evacuation, and pressurization cycles, one canister was selected and was pressurized with Zero Air. This canister was then analyzed via TO15 on a GC/MS. The canister must have been found to contain <0.2 ppbv concentration of all target analytes in order for the batch to have been considered clean. Each canister also underwent a leak check prior to shipment.

Please Note: SUMMA® canister samples will be retained by Bureau Veritas for a period of 5 calendar days or as contractually agreed from the date of this report, after which time they will be cleaned for reuse. If you require a longer sample storage period, please contact your service representative.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Cristina (Maria) Bacchus, Project Manager
Email: maria.bacchus@bureauveritas.com
Phone# (905)817-5763

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Bureau Veritas Job #: C3AG322
Report Date: 2023/12/05

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		XRD347	XRD347		
Sampling Date		2023/11/13	2023/11/13		
COC Number		NA	NA		
	UNITS	**CRAWFORD VOC-NOV.13/18264**	**CRAWFORD VOC-NOV.13/18264 Lab-Dup**	**RDL**	**QC Batch**
Volatile Organics					
Pressure on Receipt	psig	(-2.4)	N/A	N/A	9076813
2-Propanone	ppbv	0.70	0.68	0.10	9076812
Dichlorodifluoromethane (FREON 12)	ppbv	0.51	0.48	0.20	9076811
1,2-Dichlorotetrafluoroethane	ppbv	<0.17	<0.17	0.17	9076811
Chloromethane	ppbv	0.48	0.45	0.30	9076811
Vinyl Chloride	ppbv	<0.020	<0.020	0.020	9076812
Chloroethane	ppbv	<0.30	<0.30	0.30	9076811
1,3-Butadiene	ppbv	<0.50	<0.50	0.50	9076811
Trichlorofluoromethane (FREON 11)	ppbv	0.30	0.29	0.20	9076811
Ethanol (ethyl alcohol)	ppbv	<1.0	<1.0	1.0	9076811
Trichlorotrifluoroethane	ppbv	<0.15	<0.15	0.15	9076811
2-propanol	ppbv	<1.0	<1.0	1.0	9076811
Methyl Ethyl Ketone (2-Butanone)	ppbv	<0.10	<0.10	0.10	9076812
Methyl Isobutyl Ketone	ppbv	<0.10	<0.10	0.10	9076812
Methyl Butyl Ketone (2-Hexanone)	ppbv	<1.0	<1.0	1.0	9076811
Methyl t-butyl ether (MTBE)	ppbv	<0.10	<0.10	0.10	9076812
Ethyl Acetate	ppbv	<1.0	<1.0	1.0	9076811
1,1-Dichloroethylene	ppbv	<0.050	<0.050	0.050	9076812
cis-1,2-Dichloroethylene	ppbv	<0.050	<0.050	0.050	9076812
trans-1,2-Dichloroethylene	ppbv	<0.10	<0.10	0.10	9076812
Methylene Chloride(Dichloromethane)	ppbv	0.160	0.149	0.050	9076812
Chloroform	ppbv	<0.040	<0.040	0.040	9076812
Carbon Tetrachloride	ppbv	0.128	0.121	0.050	9076812
1,1-Dichloroethane	ppbv	<0.050	<0.050	0.050	9076812
1,2-Dichloroethane	ppbv	0.023	0.023	0.010	9076812
Ethylene Dibromide	ppbv	<0.010	<0.010	0.010	9076812
1,1,1-Trichloroethane	ppbv	<0.050	<0.050	0.050	9076812

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		XRD347	XRD347		
Sampling Date		2023/11/13	2023/11/13		
COC Number		NA	NA		
	UNITS	**CRAWFORD VOC-NOV.13/18264**	**CRAWFORD VOC-NOV.13/18264 Lab-Dup**	**RDL**	**QC Batch**
1,1,2-Trichloroethane	ppbv	<0.012	<0.012	0.012	9076812
1,1,2,2-Tetrachloroethane	ppbv	<0.0027	<0.0027	0.0027	9076812
cis-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	9076812
trans-1,3-Dichloropropene	ppbv	<0.050	<0.050	0.050	9076812
1,2-Dichloropropane	ppbv	<0.050	<0.050	0.050	9076812
Bromomethane	ppbv	<0.050	<0.050	0.050	9076812
Bromoform	ppbv	<0.10	<0.10	0.10	9076812
Bromodichloromethane	ppbv	<0.20	<0.20	0.20	9076811
Dibromochloromethane	ppbv	<0.20	<0.20	0.20	9076811
Trichloroethylene	ppbv	<0.050	<0.050	0.050	9076812
Tetrachloroethylene	ppbv	<0.050	<0.050	0.050	9076812
Benzene	ppbv	0.127	0.123	0.050	9076812
Toluene	ppbv	<0.050	<0.050	0.050	9076812
Ethylbenzene	ppbv	<0.050	<0.050	0.050	9076812
p+m-Xylene	ppbv	<0.10	<0.10	0.10	9076812
o-Xylene	ppbv	<0.050	<0.050	0.050	9076812
Styrene	ppbv	<0.050	<0.050	0.050	9076812
4-ethyltoluene	ppbv	<0.50	<0.50	0.50	9076811
1,3,5-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	9076811
1,2,4-Trimethylbenzene	ppbv	<0.50	<0.50	0.50	9076811
Chlorobenzene	ppbv	<0.050	<0.050	0.050	9076812
Benzyl chloride	ppbv	<0.50	<0.50	0.50	9076811
1,3-Dichlorobenzene	ppbv	<0.40	<0.40	0.40	9076811
1,4-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	9076812
1,2-Dichlorobenzene	ppbv	<0.050	<0.050	0.050	9076812
1,2,4-Trichlorobenzene	ppbv	<0.10	<0.10	0.10	9076812
Hexachlorobutadiene	ppbv	<0.0047	<0.0047	0.0047	9076812
Hexane	ppbv	<0.10	<0.10	0.10	9076812
Heptane	ppbv	<0.30	<0.30	0.30	9076811

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch
Lab-Dup = Laboratory Initiated Duplicate

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
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TO15 FOR AMBIENT/INDOOR VAPOUR (AIR)

Bureau Veritas ID		XRD347	XRD347		
Sampling Date		2023/11/13	2023/11/13		
COC Number		NA	NA		
	UNITS	CRAWFORD VOC-NOV.13/18264	CRAWFORD VOC-NOV.13/18264 Lab-Dup	RDL	QC Batch
Cyclohexane	ppbv	<0.20	<0.20	0.20	9076811
Tetrahydrofuran	ppbv	<0.40	<0.40	0.40	9076811
1,4-Dioxane	ppbv	<1.0	<1.0	1.0	9076811
Naphthalene	ppbv	<0.10	<0.10	0.10	9076812
Total Xylenes	ppbv	<0.15	<0.15	0.15	9076812
1,1,1,2-Tetrachloroethane	ppbv	<0.021	<0.021	0.021	9076812
Vinyl Bromide	ppbv	<0.20	<0.20	0.20	9076811
Propene	ppbv	<0.50	<0.50	0.50	9076811
2,2,4-Trimethylpentane	ppbv	<0.20	<0.20	0.20	9076811
Carbon Disulfide	ppbv	<0.50	<0.50	0.50	9076811
Vinyl Acetate	ppbv	<0.20	<0.20	0.20	9076811
Surrogate Recovery (%)					
Bromochloromethane	%	94	96	N/A	9076812
D5-Chlorobenzene	%	76	77	N/A	9076812
Difluorobenzene	%	76	78	N/A	9076812
Bromochloromethane	%	94	96	N/A	9076811
D5-Chlorobenzene	%	76	77	N/A	9076811
Difluorobenzene	%	76	78	N/A	9076811

RDL = Reportable Detection Limit
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Lab-Dup = Laboratory Initiated Duplicate
N/A = Not Applicable

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Microbiology testing is conducted at 6660 Campobello Rd. Chemistry testing is conducted at 6740 Campobello Rd.

Bureau Veritas Job #: C3AG322
Report Date: 2023/12/05

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

TEST SUMMARY

Bureau Veritas ID: XRD347
Sample ID: CRAWFORD VOC- NOV.13/18264
Matrix: Air

Collected: 2023/11/13
Shipped:
Received: 2023/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Canister Pressure (TO-15)	PRES	9076813	N/A	2023/11/28	Ana Nunes
Volatile Organics in Air by GC/MS/SIM	GC/MS	9076812	N/A	2023/11/28	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	9076811	N/A	2023/11/28	Ana Nunes

Bureau Veritas ID: XRD347 Dup
Sample ID: CRAWFORD VOC- NOV.13/18264
Matrix: Air

Collected: 2023/11/13
Shipped:
Received: 2023/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Volatile Organics in Air by GC/MS/SIM	GC/MS	9076812	N/A	2023/11/28	Ana Nunes
Volatile Organics in Air (TO-15)	GC/MS	9076811	N/A	2023/11/28	Ana Nunes

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Bureau Veritas Job #: C3AG322
Report Date: 2023/12/05

WSP E & I Canada Limited
Client Project #: OMEMA2002.2021E.100*
Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

GENERAL COMMENTS

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9076811	Bromochloromethane	2023/11/28	101	60 - 140	101	%		
9076811	D5-Chlorobenzene	2023/11/28	105	60 - 140	74	%		
9076811	Difluorobenzene	2023/11/28	105	60 - 140	81	%		
9076812	Bromochloromethane	2023/11/28	101	60 - 140	101	%		
9076812	D5-Chlorobenzene	2023/11/28	105	60 - 140	74	%		
9076812	Difluorobenzene	2023/11/28	105	60 - 140	81	%		
9076811	1,2,4-Trimethylbenzene	2023/11/28	109	70 - 130	<0.50	ppbv	NC (1)	25
9076811	1,2-Dichlorotetrafluoroethane	2023/11/28	96	70 - 130	<0.17	ppbv	NC (1)	25
9076811	1,3,5-Trimethylbenzene	2023/11/28	107	70 - 130	<0.50	ppbv	NC (1)	25
9076811	1,3-Butadiene	2023/11/28	107	70 - 130	<0.50	ppbv	NC (1)	25
9076811	1,3-Dichlorobenzene	2023/11/28	107	70 - 130	<0.40	ppbv	NC (1)	25
9076811	1,4-Dioxane	2023/11/28	106	70 - 130	<1.0	ppbv	NC (1)	25
9076811	2,2,4-Trimethylpentane	2023/11/28	108	70 - 130	<0.20	ppbv	NC (1)	25
9076811	2-propanol	2023/11/28	96	70 - 130	<1.0	ppbv	NC (1)	25
9076811	4-ethyltoluene	2023/11/28	107	70 - 130	<0.50	ppbv	NC (1)	25
9076811	Benzyl chloride	2023/11/28	117	70 - 130	<0.50	ppbv	NC (1)	25
9076811	Bromodichloromethane	2023/11/28	92	70 - 130	<0.20	ppbv	NC (1)	25
9076811	Carbon Disulfide	2023/11/28	100	70 - 130	<0.50	ppbv	NC (1)	25
9076811	Chloroethane	2023/11/28	106	70 - 130	<0.30	ppbv	NC (1)	25
9076811	Chloromethane	2023/11/28	103	70 - 130	<0.30	ppbv	7.2 (1)	25
9076811	Cyclohexane	2023/11/28	108	70 - 130	<0.20	ppbv	NC (1)	25
9076811	Dibromochloromethane	2023/11/28	100	70 - 130	<0.20	ppbv	NC (1)	25
9076811	Dichlorodifluoromethane (FREON 12)	2023/11/28	97	70 - 130	<0.20	ppbv	5.1 (1)	25
9076811	Ethanol (ethyl alcohol)	2023/11/28	85	70 - 130	<1.0	ppbv	NC (1)	25
9076811	Ethyl Acetate	2023/11/28	107	70 - 130	<1.0	ppbv	NC (1)	25
9076811	Heptane	2023/11/28	109	70 - 130	<0.30	ppbv	NC (1)	25
9076811	Methyl Butyl Ketone (2-Hexanone)	2023/11/28	102	70 - 130	<1.0	ppbv	NC (1)	25
9076811	Propene	2023/11/28	105	70 - 130	<0.50	ppbv	NC (1)	25
9076811	Tetrahydrofuran	2023/11/28	110	70 - 130	<0.40	ppbv	NC (1)	25
9076811	Trichlorofluoromethane (FREON 11)	2023/11/28	95	70 - 130	<0.20	ppbv	2.8 (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9076811	Trichlorotrifluoroethane	2023/11/28	102	70 - 130	<0.15	ppbv	NC (1)	25
9076811	Vinyl Acetate	2023/11/28	108	70 - 130	<0.20	ppbv	NC (1)	25
9076811	Vinyl Bromide	2023/11/28	93	70 - 130	<0.20	ppbv	NC (1)	25
9076812	1,1,1,2-Tetrachloroethane	2023/11/28	98	70 - 130	<0.021	ppbv	NC (1)	25
9076812	1,1,1-Trichloroethane	2023/11/28	94	70 - 130	<0.050	ppbv	NC (1)	25
9076812	1,1,2,2-Tetrachloroethane	2023/11/28	94	70 - 130	<0.0027	ppbv	NC (1)	25
9076812	1,1,2-Trichloroethane	2023/11/28	102	70 - 130	<0.012	ppbv	NC (1)	25
9076812	1,1-Dichloroethane	2023/11/28	97	70 - 130	<0.050	ppbv	NC (1)	25
9076812	1,1-Dichloroethylene	2023/11/28	91	70 - 130	<0.050	ppbv	NC (1)	25
9076812	1,2,4-Trichlorobenzene	2023/11/28	106	70 - 130	<0.10	ppbv	NC (1)	25
9076812	1,2-Dichlorobenzene	2023/11/28	101	70 - 130	<0.050	ppbv	NC (1)	25
9076812	1,2-Dichloroethane	2023/11/28	100	70 - 130	<0.010	ppbv	1.1 (1)	25
9076812	1,2-Dichloropropane	2023/11/28	104	70 - 130	<0.050	ppbv	NC (1)	25
9076812	1,4-Dichlorobenzene	2023/11/28	111	70 - 130	<0.050	ppbv	NC (1)	25
9076812	2-Propanone	2023/11/28	93	70 - 130	<0.10	ppbv	NC (1)	N/A
9076812	Benzene	2023/11/28	105	70 - 130	<0.050	ppbv	3.6 (1)	25
9076812	Bromoform	2023/11/28	101	70 - 130	<0.10	ppbv	NC (1)	25
9076812	Bromomethane	2023/11/28	96	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Carbon Tetrachloride	2023/11/28	98	70 - 130	<0.050	ppbv	4.9 (1)	25
9076812	Chlorobenzene	2023/11/28	104	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Chloroform	2023/11/28	102	70 - 130	<0.040	ppbv	NC (1)	25
9076812	cis-1,2-Dichloroethylene	2023/11/28	102	70 - 130	<0.050	ppbv	NC (1)	25
9076812	cis-1,3-Dichloropropene	2023/11/28	106	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Ethylbenzene	2023/11/28	110	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Ethylene Dibromide	2023/11/28	106	70 - 130	<0.010	ppbv	NC (1)	25
9076812	Hexachlorobutadiene	2023/11/28	78	70 - 130	<0.0047	ppbv	NC (1)	25
9076812	Hexane	2023/11/28	104	70 - 130	<0.10	ppbv	NC (1)	25
9076812	Methyl Ethyl Ketone (2-Butanone)	2023/11/28	103	70 - 130	<0.10	ppbv	NC (1)	25
9076812	Methyl Isobutyl Ketone	2023/11/28	101	70 - 130	<0.10	ppbv	NC (1)	25
9076812	Methyl t-butyl ether (MTBE)	2023/11/28	92	70 - 130	<0.10	ppbv	NC (1)	25

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QUALITY ASSURANCE REPORT(CONT'D)

			SPIKED BLANK		Method Blank		RPD	
QC Batch	Parameter	Date	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
9076812	Methylene Chloride(Dichloromethane)	2023/11/28	96	70 - 130	<0.050	ppbv	6.8 (1)	25
9076812	Naphthalene	2023/11/28	130	70 - 130	<0.10	ppbv	NC (1)	25
9076812	o-Xylene	2023/11/28	104	70 - 130	<0.050	ppbv	NC (1)	25
9076812	p+m-Xylene	2023/11/28	110	70 - 130	<0.10	ppbv	NC (1)	25
9076812	Styrene	2023/11/28	116	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Tetrachloroethylene	2023/11/28	106	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Toluene	2023/11/28	105	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Total Xylenes	2023/11/28	108	70 - 130	<0.15	ppbv	NC (1)	25
9076812	trans-1,2-Dichloroethylene	2023/11/28	98	70 - 130	<0.10	ppbv	NC (1)	25
9076812	trans-1,3-Dichloropropene	2023/11/28	115	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Trichloroethylene	2023/11/28	107	70 - 130	<0.050	ppbv	NC (1)	25
9076812	Vinyl Chloride	2023/11/28	106	70 - 130	<0.020	ppbv	NC (1)	25

N/A = Not Applicable

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.

Spiked Blank: A blank matrix sample to which a known amount of the analyte, usually from a second source, has been added. Used to evaluate method accuracy.

Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.

Surrogate: A pure or isotopically labeled compound whose behavior mirrors the analytes of interest. Used to evaluate extraction efficiency.

NC (Duplicate RPD): The duplicate RPD was not calculated. The concentration in the sample and/or duplicate was too low to permit a reliable RPD calculation (absolute difference <= 2x RDL).

(1) Duplicate Parent ID [XRD347-01]

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Bureau Veritas Job #: C3AG322
Report Date: 2023/12/05

WSP E & I Canada Limited
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Site Location: CRAWFORD
Your P.O. #: C026200346
Sampler Initials: AG

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anke Macfarlane, Laboratory Manager, VOC

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

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CAM FCD-01302 /3

BUREAU VERITAS

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CHAIN OF CUSTODY FORM - AIR

CLIENT INFORMATION

Company Name: Canada Nickel Company / WSP E&I Canada Limited
Project Manager: Ryan Fletcher
e-mail: ryan.fletcher@wsp.com, caleb.vandenberg@wsp.com, airgroup@woodplc.com
Address: 160 Traders Blvd E, Mississauga ON, L4Z 3K7
Phone: 905-568-2929 Fax:
Sampled by: AG adamgauthier@canadanickel.com

SECTION

ANALYSIS REQUESTED

22-Nov-23 08:45
Gina Baybayan
C3AG322
VKK AIR-001

Field Sample ID	Can Serial#	Flow Regulator Serial #	Sample Date	Sample Collection Time	Start Vacuum in Hg	End Vacuum in Hg	Ambient Air	Full List of VOCs (TO-15A)
Crawford VOC - Nov.13	18264	FX28	13-Nov-23	24hr	-27	-6.5	X	X

TAT Requirement

STD 10 Business day ☑
Rush 5 Business day * ☐
Rush 2 Business day * ☐
* need approval from Bureau Veritas

PROJECT INFORMATION

Project #: OMEMA2002.2021E.100*
Name: Crawford
PO #: C026200346
BV Quote #:
BV Contact: Marinela Sim

REPORTING REQUIREMENTS

Summary Report only ☐
EDD ☐
Regulation

Notes

Please note if these samples are "Industrial Hygiene" samples
If submitting dustfall samples, please indicate the diameter of the jar opening in cm.

PROJECT SPECIFIC COMMENTS

* 6 inch jar opening

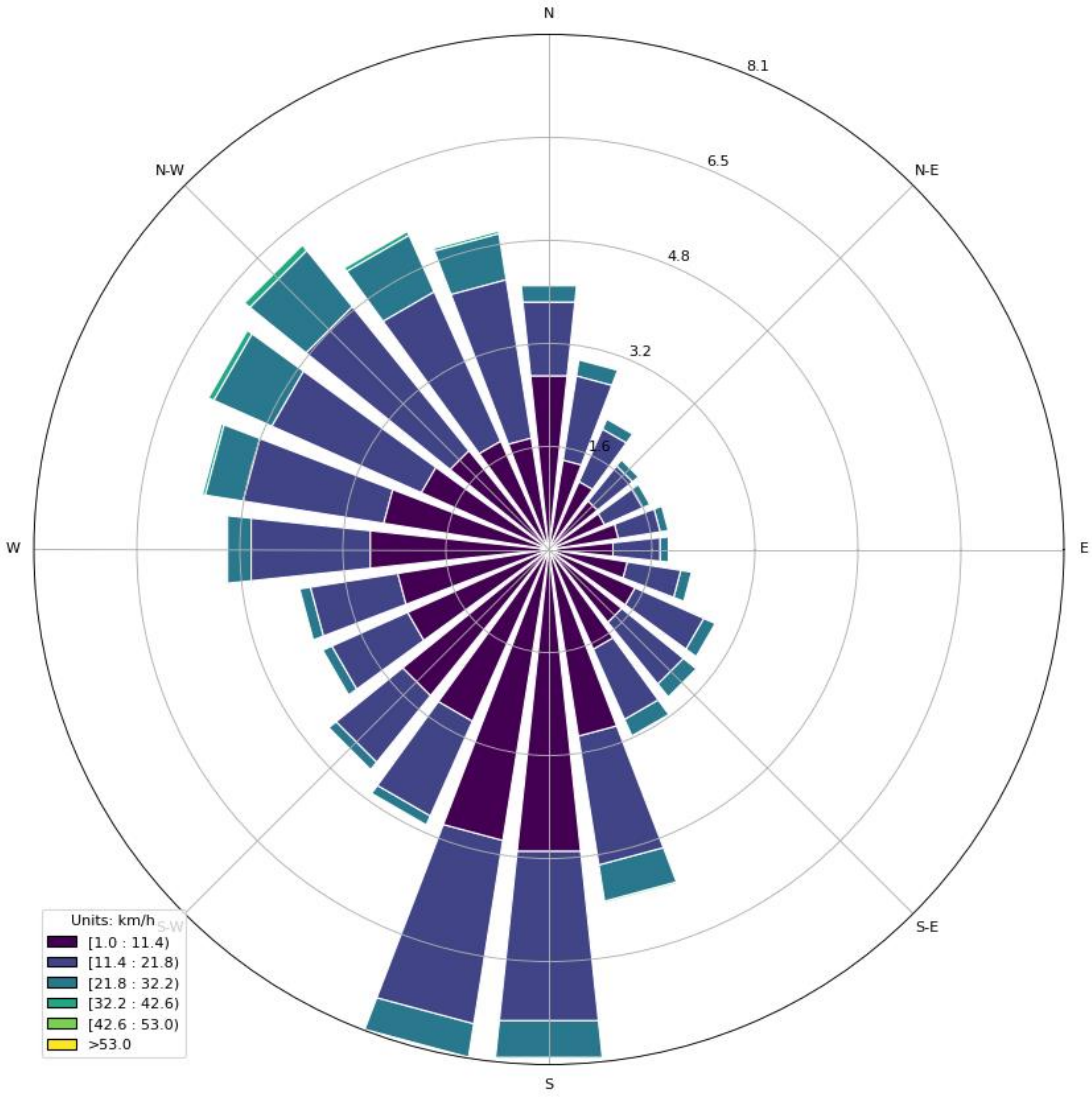
Client Signature:
Affiliation: Canada Nickel Company
Date/Time: 13-Nov-23

Received by: Pawandeep Kaur Kalsi
Affiliation:
Date/Time: 2023/11/22 8:45

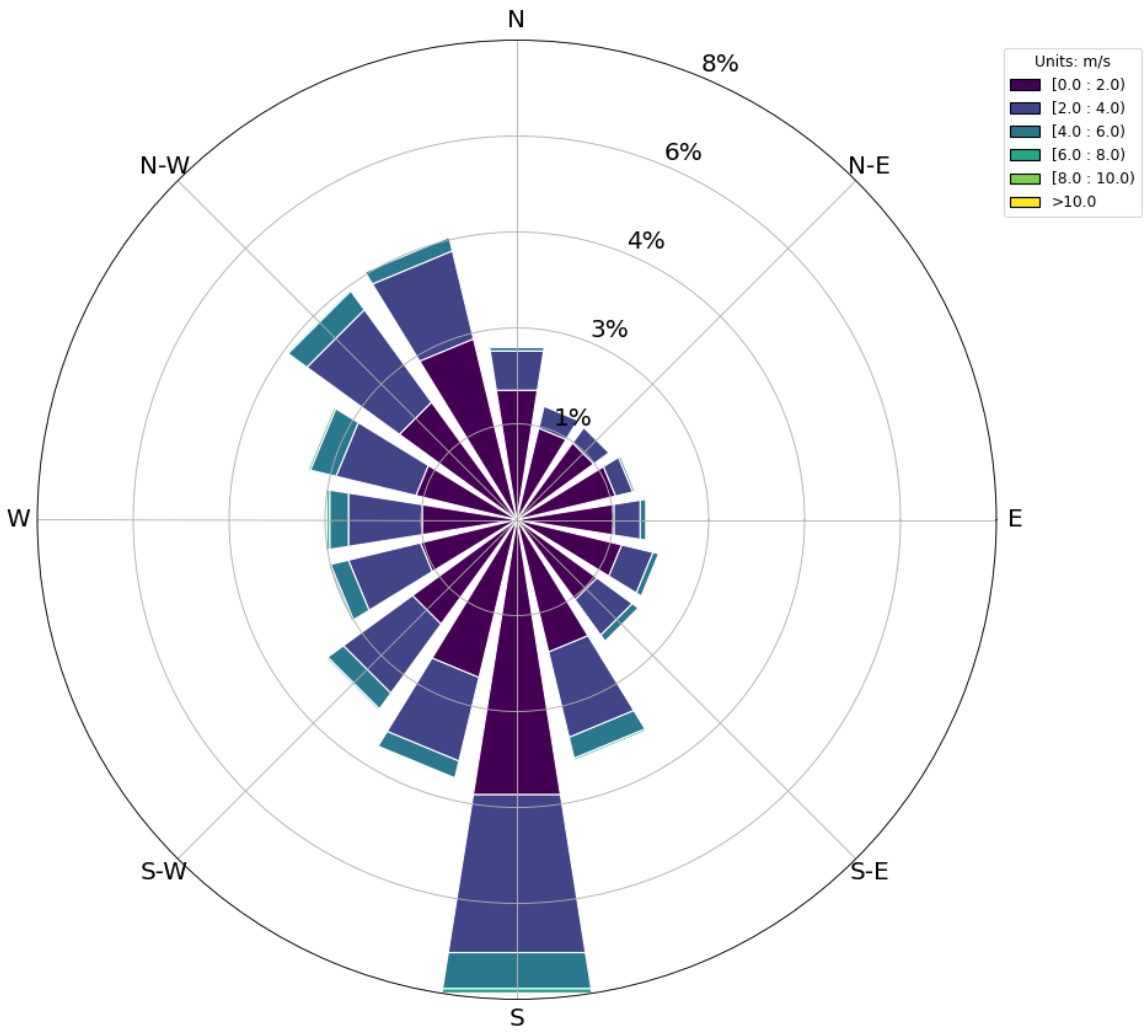
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APPENDIX D

Wind Roses and Figure



Timmins Airport Wind Rose 2012-2022



On Site Wind Rose November 2021- December 2023



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