Appendix D-1

Q1-Q3 2022 Atmospheric Compliance Monitoring Program Report – Doris and Madrid Projects

AGNICO EAGLE

Q1-Q3 2022 Atmospheric Compliance Monitoring Program Report

Doris and Madrid Projects

Final Report

April 2023

Prepared for:
Agnico Eagle Mines Limited
Toronto, Ontario

Prepared by:
Nunami Stantec Limited
Rankin Inlet, Nunavut

Project Number: 160930542

NUNAMI STANTEC

NUNAMI STANTEC

Executive Summary

This report presents the results of ambient air quality, dustfall, and meteorological monitoring conducted by Agnico Eagle Mines Ltd. (Agnico Eagle) at the Doris and Madrid sites (the Sites) from January 2022 to September 2022 as outlined under the Air Quality Management Plan (AQMP; TMAC 2016,2019). To calculate annual average concentrations for requisite parameters, data from October to December 2021 (already reported by Agnico Eagle) were also utilized and are included in this report.

The 2022 monitoring program included the following:

- Dustfall sampling at six locations in the vicinity of the Doris site utilizing dustfall canisters for the period May - September 2022.
- Dustfall sampling at nine locations in the vicinity of the Madrid site utilizing dustfall canisters for the same period and methodology as for the Doris site.
- Snow core sampling for dustfall at six locations in the vicinity of the Doris site utilizing snow cores over the period October 28, 2021 (first snow fall) to May 5-7, 2022.
- Snow core sampling for dustfall at seven locations in the vicinity of the Madrid Site utilizing snow cores over the same period.
- Total Suspended Particulate (TSP) and particulate less than 2.5 microns ($PM_{2.5}$) using continuous monitors at one location at the Doris site.
- Meteorological monitoring for wind speed, wind direction, temperature, relative humidity, snowfall, rainfall, solar radiation and barometric pressure at one location. The meteorological data were used in the interpretation of the air quality measurements.

The results of the Q1-Q3 2022 ambient monitoring program were compared to:

1. Relevant ambient air quality Standards, Objectives and Guidelines (SOGs)
2. Dustfall predictions downwind of the Tailings Impoundment Area included in the 2016 Doris North Project Certificate and Type A Water License Amendment Application (the 2016 Amendment)
3. The Madrid Project dispersion model predictions for dustfall presented in the Final Environmental Impact Statement (FEIS) Air Quality Assessment (Nunami Stantec, 2017)

A summary of the results and conclusions of the Q1-Q3 2022 compliance monitoring program are presented in Table ES-1.

Table ES-1: Summary of Q1-Q3 Compliance Monitoring Results

Measurement Parameter	Monitoring Period	Averaging Period	Results	Report Section	Action
Dustfall using Snow Core Sampling – Doris Site	October 2021 - May 2022	30-day	• All measurements were below the ambient air quality objective for industrial and commercial areas. • One measurement was above the maximum dustfall prediction in the 2017 FEIS for the Madrid-Boston Project (2017 FEIS) but was within the expected range of variability for the dispersion modelling predictions. All other measurements were less than the relevant dustfall predictions in the 2016 Amendment/2017 FEIS.	4.1.1	Results Satisfactory
Dustfall using Snow Core Sampling – Madrid Site	October 2021 - May 2022	30-day	• All measurements were below the ambient air quality objective for industrial and commercial areas. • All measurements were less than the maximum dustfall predictions in the 2017 FEIS for the Madrid-Boston Project (2017 FEIS).	4.1.2	Results Satisfactory
Dustfall using Canisters – Doris Sites	May - September 2022	30-day	• All dustfall measurements around the Doris site were below the ambient air quality objective for industrial and commercial areas. • All measurements were below the maximum dustfall prediction in the 2016 Amendment.	4.2.1	Results Satisfactory
Dustfall using Canisters – Madrid Sites	May - September 2022	30-day	• Elevated dustfall levels were measured for two months, but the values were well below the ambient air quality objective for industrial and commercial areas. • Two measurements were above the maximum dustfall prediction in the 2017 FEIS for the Madrid Boston Project but were within the expected range of variability for the dispersion modelling predictions.	4.2.2	Results Satisfactory

Measurement Parameter	Monitoring Period	Averaging Period	Results	Report Section	Action
TSP	January - September 2022	24-hour	• All measurements were below the ambient air quality objective. • All measurements were below the maximum 2017 FEIS prediction.	4.3.1	Results Satisfactory
	October 2021 - September 2022	annual	• A valid annual average could not be calculated due to monitor installation/operation complications resulting in the annual data recovery rate being less than the target level.	4.3.1	Training of Agnico Eagle staff in the calibration and maintenance of the continuous monitors was conducted in Q4 2022.
$PM_{2.5}$	October 2021 - September 2022	24-hour	• Measured 98th percentile concentration was below the CAAQS. • Measured 98th percentile concentration was above the maximum 2017 FEIS prediction, but within the expected range of variability for the dispersion modelling predictions.	4.3.2	Results Satisfactory
	October 2021 - September 2022	annual	• A valid annual average could not be calculated due to monitor installation/operation complications resulting in the annual data recovery rate being less than the target level.	4.3.2	Training of Agnico Eagle staff in the calibration and maintenance of the continuous monitors was conducted in Q4 2022.

.

Table of Contents

1 INTRODUCTION 1-1

2 AMBIENT MONITORING DATA COMPARISONS 2-1
2.1 Air Quality Standards, Objectives and Guidelines 2-1
2.2 Dispersion Model Prediction Comparisons 2-1
2.2.1 Doris Site 2-1
2.2.2 Madrid Site 2-2

3 MONITORING PROGRAM DESCRIPTION 3-1
3.1 Monitor Siting Criteria 3-1
3.2 Dustfall 3-1
3.2.1.1 Doris Dustfall 3-1
3.2.1.2 Madrid Dustfall 3-5
3.2.2 Methods 3-9
3.2.2.1 Summer Dustfall Sampling 3-9
3.2.2.2 Snow Core Sampling 3-10
3.2.3 Data Analysis 3-10
3.2.4 Schedule 3-10
3.3 Suspended Particulate Monitoring ($PM_{2.5}$ and TSP) 3-11
3.3.1 Sample Location 3-11
3.3.2 Sampling Methods 3-11
3.3.3 Data Analysis 3-11
3.3.4 Schedule 3-11
3.4 Meteorological Monitoring Program 3-12
3.4.1 Sampling Location 3-12
3.4.2 Sampling Methods 3-12
3.4.3 Data Analysis 3-12
3.4.4 Schedule 3-12

4 MONITORING PROGRAM RESULTS AND DISCUSSION 4-1
4.1 Snow Core Dustfall Results 4-1
4.1.1 Doris Site 4-1
4.1.2 Madrid Site 4-2
4.2 Canister Sampling Dustfall Results 4-3
4.2.1 Doris Site 4-3
4.2.2 Madrid Site 4-6
4.3 Particulate Matter Sampling 4-8
4.3.1 TSP 4-10
4.3.2 $PM_{2.5}$ 4-10
4.3.3 Historical Trends in Ambient Particulate 4-14
4.3.3.1 January to September Reporting Period Trends 4-14

4.3.3.2 Four Year Trend in Air Quality 4-14
4.4 Meteorology 4-16

5 CONCLUSIONS AND RECOMMENDATIONS 5-1

6 CLOSURE 6-1

7 REFERENCES 7-1

List of Tables

Table ES-1: Summary of Q1-Q3 Compliance Monitoring Results ii
Table 2-1: Ambient Air Quality Standards, Objectives and Guidelines Compared to 2017 FEIS Predictions 2-2
Table 3-1: Reasons for Doris Site Dustfall Sampling Location Selection 3-2
Table 3-2: Reasons for Madrid Site Dustfall Sampling Location Selection 3-5
Table 4-1: Snow Core Sampling Periods – Doris Site 4-1
Table 4-2: Measured Deposition Rates from Snow Core Sampling – Doris Site 4-1
Table 4-3: Snow Core Sampling Periods – Madrid Site 4-2
Table 4-4: Measured Deposition Rates from Snow Core Sampling – Madrid Site 4-3
Table 4-5: Summary of Measured Dustfall Levels from Canister Sampling in 2022 – Doris Site 4-5
Table 4-6: Summary of Measured Dustfall Levels from Canister Sampling in 2022 – Madrid Site 4-7
Table 4-7: Summary of Ambient TSP and $PM_{2.5}$ Measurements 4-9
Table 4-8: Summary of Data Recovery Rates for Continuous Particulate Sampling (Jan - Sep 2022) 4-9
Table 4-9: Summary of Maximum Measured 24-Hour and Annual Average TSP and $PM_{2.5}$ Concentrations for 2019-2022 4-14
Table 4-10: Summary of Particulate Monitoring Measurement Statistics (2018-2022) 4-15
Table 4-11: Summary of Meteorological Measurements (Jan - Sep 2022) 4-17

List of Figures

Figure 3-1: Locations of the Doris Ambient Monitoring Stations 3-3
Figure 3-2: Locations of the Madrid Ambient Monitoring Stations 3-7
Figure 4-1: Variation in Measured Monthly Dustfall Levels with Distance from the Doris TIA 4-6
Figure 4-2: Variation in Measured Monthly Dustfall Levels with Distance from the Doris-Madrid Road 4-8
Figure 4-3: Summary of Measured 24-Hour Average TSP Concentrations (Oct 2021 - Sep 2022) 4-12
Figure 4-4: Summary of Measured 24-Hour Average $PM_{2.5}$ Concentrations (Oct 2021 - Sep 2022) 4-13
Figure 4-5: Four Year Time History Plot of Measured Ambient TSP Concentrations 4-15
Figure 4-6: Four Year Time History Plot of Measured Ambient $PM_{2.5}$ Concentrations 4-15
Figure 4-7: Wind Rose for January to September 2022 4-19

Appendices

Appendix A Snow Core Laboratory Analysis
Appendix B Dustfall Canister Laboratory Analysis
Appendix C Continuous Particulate Monitors Calibration Records
Appendix D Meteorological Data Summary

Abbreviations

µg	Microgram
AAAQO	Alberta Ambient Air Quality Objective
Agnico Eagle	Agnico Eagle Mines Limited
ALS	ALS Laboratory Group
AMSL	Above Mean Sea Level
ASTM	ASTM International
AWR	All-weather road
BC	British Columbia
BC MoE	British Columbia Ministry of Environment
CAAQS	Canadian Ambient Air Quality Standards
CALA	Canadian Association for Laboratory Accreditation
CCME	Canadian Council of Ministers of the Environment
cm	Centimetre
dm^2	Square decimetre (equal to 100 square centimetres)
ECCC	Environment and Climate Change Canada
ERM	ERM Consultants Canada Ltd.
FEIS	Final Environmental Impact Statement
GN	Government of Nunavut
hr	Hour
km	Kilometre
m	Metre
m^2	Square metre
m^3	Cubic metre
mg	Milligram

$mg/dm^2/d$	Milligrams per square decimeter per day
$mg/100\text{-}cm^2/30\text{-}days$	Milligram per 100 square centimetres per 30-day period
mg/L	Milligram per Litre
NAPS	National Air Pollution Surveillance Program
NIRB	Nunavut Impact Review Board
Nunami Stantec	Nunami Stantec Ltd.
NWB	Nunavut Water Board
PM	Particulate Matter
PM_{10}	Particulate Matter less than 10 µm in diameter
$PM_{2.5}$	Particulate Matter less than 2.5 µm in diameter
Project	Doris North Project or Site
Q1 – Q3 2022	January to September 2022
Sites	Doris and Madrid Sites
SOGs	Standards, Objectives and Guidelines
SWE	Snow-Water Equivalent
TIA	Tailings Impoundment Area (Doris)
TMAC	TMAC Resources Inc.
TSP	Total Suspended Particulate
US	United States
US EPA	United States Environmental Protection Agency

1 Introduction

This report presents the results of ambient air quality, dustfall, and meteorological monitoring conducted by Agnico Eagle Mines Limited (Agnico Eagle) at the Doris and Madrid Projects (the Sites) from January 2022 to September 2022 as outlined under the Air Quality Management Plan (AQMP; TMAC 2016/2019). To calculate annual average concentrations for requisite parameters, data from October to December 2021 (already reported by Agnico Eagle) was also utilized in this report.

Agnico Eagle commissioned new continuous monitors measuring Total Suspended Particulate (TSP) and particulate matter smaller than 2.5 microns ($PM_{2.5}$) in November 2021 and decommissioned the Partisol samplers previously used. Monitoring for dustfall around the Doris and Madrid Sites continued using the same methods/locations as in previous years.

The 2022 monitoring program included the following:

- Dustfall sampling at six locations in the vicinity of the Doris site utilizing dustfall canisters for the period May - September 2022.
- Dustfall sampling at nine locations in the vicinity of the Madrid site utilizing dustfall canisters for May - September 2022.
- Snow core sampling for dustfall at six locations in the vicinity of the Doris site over the period October 28, 2021 (first snow fall) to May 5-7, 2022.
- Total Suspended Particulate (TSP) and particulate less than 2.5 microns ($PM_{2.5}$) using continuous particulate monitors at one location at the Doris site.
- Meteorological monitoring for wind speed, wind direction, temperature, relative humidity, snowfall, rainfall, solar radiation, and barometric pressure at one location. The meteorological data were used in the interpretation of the air quality measurements.

The results of the Quarter 1 to Quarter 3 2022 (Q1-Q3 2022) ambient monitoring were compared to:

- Relevant ambient air quality Standards, Objectives and Guidelines (SOGs);
- Dustfall predictions downwind of the Tailings Impoundment Area included in the 2016 Doris North Project Certificate and Type A Water License Amendment Application (the 2016 Amendment); and,
    - The Madrid Project dispersion model predictions for dustfall presented in the Final Environmental Impact Statement (FEIS) Air Quality Assessment (Nunami Stantec, 2017).

Madrid North construction in Q1-Q3 2022 corresponded with the operations phase air quality assessment presented in the Madrid-Boston Project 2017 FEIS (Nunami Stantec, 2017), so this study was used for comparison to the Madrid measurements. Activities at the Doris Site in Q1-Q3 2022 also most closely correspond to the operations phase of the Madrid-Boston Project, so the Doris measurements were compared to the 2017 FEIS and the 2016 Amendment modelling of TIA deposition. Operations at both the Doris and Madrid North sites have been reduced in 2022 due to the mine being placed in Care and Maintenance.

2 Ambient Monitoring Data Comparisons

The results of the Q1-Q3 2022 ambient monitoring program were compared to relevant air quality standards, objectives and guidelines and Doris / Madrid site dispersion modelling studies, as detailed in the following sections.

2.1 Air Quality Standards, Objectives and Guidelines

Ambient air quality Standards, Objectives and Guidelines (SOGs) have been developed by the Canadian federal government and individual provinces and territories to assist or mandate the management of common air contaminants.

The assessment incorporates the Nunavut Environmental Guideline for Ambient Air Quality (Government of Nunavut 2011). Nunavut does not have guidelines or standards for some of the air contaminants. In these cases, guidelines, objectives, or standards from the federal government (CCME 2016b, 2016a), British Columbia (BC) government (BC MOE 2016) and Alberta government (Alberta Environment and Parks 2016) have been used.

The ambient air quality SOGs that are used in this report are summarized in Table 2-1.

2.2 Dispersion Model Prediction Comparisons

2.2.1 Doris Site

During Q1-Q3 2022, the Doris site had reduced operations. In October 2021 Agnico Eagle stopped Doris milling operations. In February 2022, Agnico Eagle announced its decision to place the Doris Mine into Care and Maintenance and suspend production at the Hope Bay Project. Of the scenarios assessed for the Doris site in the 2017 FEIS (construction and operation), these activities more closely correspond to the operations phase of the Madrid-Boston Project (as the construction scenario considered the Doris site operating plus construction activities that would generate additional emissions relative to the operations scenario). The 2017 FEIS predicted deposition rates in the vicinity of the monitors that varied between 7.4 and 25.7 mg/100-cm^2/30-days.

The 2016 Doris North Project Certificate and Type A Water License Amendment Application (the 2016 Amendment) also contained predictions for dustfall. The Amendment predicted that Tailings Impoundment Area (TIA) maximum monthly dustfall contributions (modelled over three years) would be more than 53 mg/100-cm^2/30-days up to 250 m from the TIA and would drop to 2.1 mg/100-cm^2/30-days at approximately 1 km from the TIA. These predictions were for dustfall resulting from the subaerial deposition of tailings in the TIA only and did not include dust emissions from any other sources (e.g., unpaved roads) or project phases (e.g., construction), nor did these predictions include background (non-project related) dust contributions.

Dustfall predictions for the Doris Site were compared to the 2016 Amendment/2017 FEIS modelling for dustfall locations downwind of the TIA and the 2017 FEIS modelling for all other dustfall locations. Maximum Doris site FEIS predictions are presented in Table 2-1.

Table 2-1: Ambient Air Quality Standards, Objectives and Guidelines Compared to 2017 FEIS Predictions

Contaminant	Units	Averaging Period	Nunavut Ambient Air Quality Guidelines [a]	Guidelines or Standards from Other Government Agencies		Maximum 2017 FEIS Predictions at Monitoring Sites	
				Value	Agency	Doris	Madrid
Total Suspended Particulate (TSP)	µg/m³	24-hour	120	-	-	69.9	-
		Annual (geometric mean)	60	-	-	13.3	-
Particulate Matter <2.5 µm diameter ($PM_{2.5}$)	µg/m³	24-hour	30	27 [b]	CAAQS[d]	12.1	-
	µg/m³	Annual	-	8.8 [c]	CAAQS[d]	5.0	-
Dust deposition	mg/100-cm²/30 days	30-day	-	53 (residential and recreation areas) 158 (commercial and industrial areas)	Alberta Ambient Air Quality Objectives and Guidelines [f]	7.4 - 27.5	10.6 - 54

NOTES:

Dash (-) = not applicable

a: Reference: Government of Nunavut 2011

b: The 24-hour $PM_{2.5}$ value is calculated from the 3-year average of the annual 98th percentile of the daily 24-hour average concentration.

c: The annual $PM_{2.5}$ value is calculated from the 3-year average of the annual average concentrations.

d: Canadian Ambient Air Quality Standards for O_3 and $PM_{2.5}$. Reference: CCME 2020

e: Reference: BC MOE 2020

f: Reference: Alberta Environment and Parks 2020

2.2.2 Madrid Site

Dustfall measurements made in the vicinity of the Madrid North site (under reduced operations in Q1 – Q3 2022) were compared to operations predictions made in the air quality modelling study in the 2017 FEIS for the Madrid-Boston Project (Nunami Stantec, 2017). Operations phase dustfall predictions in the 2017 FEIS at the locations of the Madrid dust fall monitoring sites ranged from 10.6 to 54 mg/100-cm^2/30-days.

3 Monitoring Program Description

3.1 Monitor Siting Criteria

Nunavut does not have established siting requirements for ambient air samplers. Therefore, the siting criteria from the BC MoE (BC MoE 2009) and the United States Environmental Protection Agency (US EPA 1999, 2009) were used. The monitoring locations were selected based on the following criteria:

- A stable 120 VAC power source is available (for continuous monitoring)
- The sampler is not in an area of future infrastructure development
- The sampler inlet is mounted at a height of 2 to 15 m above ground level (for continuous monitoring)
- The locations are accessible year-round
- The sampler is away from structures, vegetation, and topographic features
- Dustfall samplers are sited up and down wind of the surface facilities and zones of high activity, considering the dominant wind direction during the summer months
- The samplers are more than 20 m away from structures, vegetation, and topographic features

3.2 Dustfall

Dustfall is the measure of airborne particulate that has settled onto a given surface. The main dust generation sources will be from wind erosion from tailings facilities, the use of the crushers, and the movement of vehicles and large equipment on site. The dustfall monitoring program measures the quantities of dust deposited near project sites. Dustfall is monitored using dustfall canisters in the summer and by snow core sampling in the winter. Results of the monitoring program can be used to modify dust management procedures at a site, if required. Since dustfall measurements are a non-continuous methodology requiring laboratory analysis, the sampling is only used to retroactively confirm the effectiveness of mitigation measures. Real-time dust management on the site is carried out through application of water or approved chemical dust suppressants based on on-site observations of dust generation.

3.2.1.1 Doris Dustfall

Dustfall monitoring at the Doris site is undertaken at six locations, including a control station. The reasons for each selected location are provided in Table 3-1 and shown in Figure 3-1.

Table 3-1: Reasons for Doris Site Dustfall Sampling Location Selection

Station	Reason for Selected Location	UTM Coordinates (Zone 13W)		Elevation (m above mean sea level)
		Easting (m)	Northing (m)	
DFA1	This location has historical data and represents dustfall from the general site area, is located downwind of crushing activities, and close to the camp and mill site.	433731	7559047	28
CDF4	This station is located approximately 200 m away from Quarry 2, where crushing activities occur, to monitor dustfall from crushing activities.	432616	7558982	80
TIA-DF1	This station is located approximately 250 m downwind of the TIA tailings beach at a distance which corresponds with the maximum predicted monthly Project-generated dustfall of 53 mg/100-cm^2/30-days in the 2016 Amendment.	435881	7556806	51
TIA-DF2	This station is located approximately 1.65 km downwind (east) of the TIA tailings beach. This location is approximately 300 m west (upwind) of the location predicted to have a maximum annual TIA-generated dustfall level of 23 mg/100-cm^2/year (1.9 mg/100-cm^2/30-days) in the 2016 Amendment.	437318	7557017	46
TIA-DF3	This station is located approximately 3 km downwind of the TIA tailings beach at a distance which corresponds with minimal annual predicted Project-generated dustfall.	438574	7557252	23
ControlDF	This station is located well away from potential project contributions and represents background conditions. The station is approximately 2 km southwest of Windy Camp.	430993	7549219	35

Legend

- Project Development Area (PDA)
- Roads

0 1 2 km

1:35,000 (At Original document size of 11x17)

NUNAMI STANTEC

Project Location
Hope Bay,
Nunavut

160930343 REVA
Prepared by BCC on 2020-10-28
Technical Review by Greg Crooks on 2020-10-28

Client/Project
AGNICO EAGLE-HOPE BAY
NUNAMI STANTEC LIMITED

Figure No.
3-1

Title
Locations of the Doris Ambient Monitoring Stations

Notes

1. Coordinate System: NAD 1983 UTM Zone 13N
2. Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

3.2.1.2 Madrid Dustfall

Dustfall monitoring stations around the Madrid site were installed in the spring of 2019. Dustfall monitoring was undertaken at nine locations around the Madrid North and Madrid South locations, including a control station in the predominantly upwind location and three locations to quantify dustfall with perpendicular distance from the Doris-Madrid Road. The reasons for each selected location are provided in Table 3-2 and are shown in Figure 3-2.

Table 3-2: Reasons for Madrid Site Dustfall Sampling Location Selection

Station	Reason for Selected Location	UTM Coordinates (Zone 13W)		Elevation (m above mean sea level)
		Easting (m)	Northing (m)	
M-DF01	Control station in a predominantly upwind location to the Madrid sites – in the vicinity of the Windy Radio Tower.	432840	7549835	26
M-DF02	This station is located in the vicinity of the predicted maximum dustfall along the property boundary for the overall Madrid operations – 2 km east of Madrid North processing plant.	435586	7550597	44
M-DF03	This station is located in the vicinity of the predicted maximum dustfall along the property boundary in the vicinity of Madrid South operations – 2 km east of the Madrid South Portal.	436338	7547550	45
M-DF04	Station is located to assess the maximum impact inside the property boundary but outside the PDA near the Madrid North operations – along vent raise pad access road east of the ore stockpile.	433848	7549908	44
M-DF05	Station is located to assess the maximum impact inside the property boundary but outside the PDA near the Madrid South operations – along shore of Patch Lake east of the waste rock pile.	435052	7547168	52
M-DF06	Upwind station for roadway dustfall study – 50 m west of Doris-Madrid All-Weather Road.	432661	7552874	62
M-DF07	Downwind station for roadway dustfall study – 50 m east of Doris-Madrid All-Weather Road (in a perpendicular line to road).	432768	7552891	62
M-DF08	Downwind station for roadway dustfall study 100 m east of Doris-Madrid All-Weather Road (in a perpendicular line to road).	432823	7552891	66
M-DF09	Downwind station for roadway dustfall study (200 m east of Doris-Madrid All-Weather Road (in a perpendicular line to road).	432922	7552895	45

Legend

- Project Development Area (PDA)
- Roads

0 1 2 km

1:35,000 (At Original document size of 11x17)

NUNAMI STANTEC

Project Location
Hope Bay,
Nunavut

160930343 REVA
Prepared by BCC on 2020-10-28
Technical Review by Greg Crooks on 2020-10-28

Client/Project
AGNICO EAGLE - RESOURCES-HOPE BAY
NUNAMI STANTEC LIMITED

Figure No.
3-2

Title
Locations of the Madrid Ambient Monitoring Stations

Notes

1. Coordinate System: NAD 1983 UTM Zone 13N
2. Service Layer Credits: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community
Esri, HERE, Garmin, © OpenStreetMap contributors, and the GIS user community

3.2.2 Methods

Dustfall collection is a passive monitoring method which provides a measure of particulates that would be directly deposited onto vegetation or soil. The basis of the methodologies is that field-deposited dust is collected in a manner that is quantifiable in terms of area (cm^2) and exposure length (days), and that samples are then sent to a laboratory for analysis.

Dustfall is monitored at each station via dustfall canisters during summer and through snow core sampling in winter. The details of each methodology are provided below.

3.2.2.1 Summer Dustfall Sampling

Summer dustfall is quantified by the American Society for Testing and Materials (ASTM) D1739-98 sampling method (ASTM 2010). Two dustfall sample canisters were deployed at each station to act as a form of redundancy in case one of the samples became void and to provide sufficient sample material to analyze for a full range of parameters including metals. Laboratory cleaned canisters of standard size and shape containing a liquid sampling matrix (deionized water and algaecide) are attached to 2 m tall poles and are exposed to the atmosphere for an approximate 30-day period. Windscreens around the sample containers improves the dustfall collection efficiency. The samplers collect particles small enough to pass through a 1-millimetre (mm) screen and large enough to settle by their own weight.

During sampling periods when air temperatures were below 0 degrees Celsius (°C), an isopropyl alcohol solution was added to the dustfall monitoring station canisters to reduce the captured precipitation from freezing. The stations are checked regularly to ensure that the canisters did not overfill or evaporate.

Following exposure, the canisters are collected and sent to ALS Laboratory Group (ALS) – a Canadian Association for Laboratory Accreditation Quality Assurance (CALA) accredited laboratory (accreditation No. 1719) for analysis. The condition of the canisters was evaluated at the time of collection. If canisters were found to be full of precipitation upon collection, indicating the canister had overflowed, the dustfall canister was not sent for analysis because the sample was considered void.

At the laboratory, samples are analyzed for total particulates, anions, cations, and total metals. The data are standardized to units of (mg/100-cm^2/30-days or kg/ha/year). For canister samples, this standardization is based on canister opening dimensions and the duration of exposure. Both containers were combined for each station and sampling period at the laboratory. The combined samples were then analyzed for particulates (total, soluble, and insoluble), anions (sulphate, nitrate, chloride, and ammonia) and total metals.

3.2.2.2 Snow Core Sampling

Snow core sampling for the Doris site was instituted in 2016 to record dustfall during the winter months due to issues with using the canister method during winter months. Snow core sampling was implemented at the new Madrid dustfall stations starting in winter 2019-2020. At each dustfall station, snow core subsamples are collected using a snow corer to retrieve a cylindrical snow core from the snowpack. A minimum of three snow cores are collected along a transect at each monitoring location. The samples are composited in the field to produce a single representative composite snow sample for the location. Composite samples are bagged, labelled, and shipped to an accredited laboratory (ALS) for processing. Processing of snow cores require filtration, drying and weighing in the laboratory. For quality assurance/quality control (QA/QC), a duplicate sample is collected from one of the snow core sampling locations.

In the event that the snow depth is insufficient at a location to collect a snow core sample, a bucket method is used. This entails collecting scoop samples through the entire depth of the snow and depositing them into a pre-weighed bucket of known dimensions, measuring the weight of the snow sample and then bagging, labelling and shipping the sample to the laboratory.

Snow core samples are analyzed by the laboratory as water samples and are reported in units of mg/L. These units are converted to dustfall units of mg/100-cm^2 and standardized to mg/100cm^2/30-days over the monitoring period. The surface loading rate was calculated by multiplying the parameter concentration (mg/L or mg/1000 cm^3) by the average snow-water-equivalent of the transect samples (measured in cm of water) and dividing by the number of days snow had accumulated (time from the first snowfall to the sampling day).

3.2.3 Data Analysis

Standardized dustfall is compared to the Alberta AAQO for dustfall (Table 2-1) as Nunavut does not currently have a dustfall standard. Analysis of temporal trends is undertaken to identify any trends in the measured dustfall levels with time of year or meteorological conditions. A qualitative comparison to the 2017 FEIS and 2016 Amendment predictions was also made. Review of dustfall levels with distance from the tailings management area was also made to determine spatial trends in dustfall.

3.2.4 Schedule

Summer dustfall canister samples are normally collected from May through September, inclusive, with access to the sampling locations being via helicopter.

Winter dustfall is collected at the end of winter (late April/early May). The snow core composite sample reflects cumulative winter dust deposition since the date of first snowfall (October) to the sampling period end (approximately October through April/May, inclusive).

3.3 Suspended Particulate Monitoring ($PM_{2.5}$ and TSP)

Suspended particulate matter includes both airborne solid and low-vapour-pressure liquid particles having aerodynamic diameters ranging in size from 0.01 to about 44 µm. The generation of particulate matter results from the movement of vehicles, mobile equipment, crushing, blasting, bulk handling, and storage and other activities associated with mineral processing and construction. Wind erosion from sources such as tailings can also generate particulate emissions.

3.3.1 Sample Location

Sampling is conducted at monitoring location DFA1 in the Doris site. This location is free from obstructions that may cause interference in suspended particulate monitoring.

3.3.2 Sampling Methods

At the Doris site, ambient particulate monitoring for TSP and $PM_{2.5}$ in Q1-Q3 2022 used Thermo Scientific 5014i continuous particulate monitors following the protocols described in the 2019 version of the Agnico Eagle AQMP (TMAC, 2019). The Thermo Scientific monitors are housed inside a temperature-controlled shelter to ensure the monitors are maintained within their required operating temperature range.

The instruments are calibrated and maintained following Environment and Climate Change Canada (ECCC) protocols given in the document National Air Pollution Surveillance Network Quality Assurance and Quality Control Guidelines (ECCC 2004).

Agnico Eagle technicians visit the stations bi-weekly and perform checks to ensure the equipment is working properly.

3.3.3 Data Analysis

Data collected from the continuous monitors were screened for any suspicious data including outliers, instrumentation drift and missing data. The particulate sampling provides 24-hour average ground-level concentrations for each size fraction. These were compared to the relevant 24-hour and annual standards (Table 2-1). In addition, temporal trends of the TSP and $PM_{2.5}$ ambient concentrations were examined, taking into consideration the time of year and meteorological conditions during the sampling period.

3.3.4 Schedule

The Thermo Fisher Scientific Model 5014i Beta Monitors operate continuously, collecting hourly average particulate concentrations.

3.4 Meteorological Monitoring Program

The Doris meteorological station has recorded air temperature, relative humidity, wind speed and direction, precipitation, and solar radiation since 2004. Barometric pressure has been recorded since 2010. In September 2016, a Geonor T-200B all-weather precipitation gauge was installed to collect precipitation year-round.

3.4.1 Sampling Location

The meteorological station was chosen in consultation with Environment Canada and Health Canada officials and is located at UTM coordinates 432840 E, 7549835 N (Zone 13W).

3.4.2 Sampling Methods

The meteorological station is a self-contained, solar/battery-powered system and includes instrumentation to measure hourly values of temperature, wind speed, wind direction, relative humidity, solar radiation, and rainfall. Data is recorded by a data logger located at the station and is downloaded manually.

3.4.3 Data Analysis

Meteorological data are analyzed on a monthly basis and compiled into summary tables. Data validity checks are conducted and missing / invalid data are flagged. For the Q1-Q3 2022 period, 11 hours of wind speed and wind direction data were invalidated due to calibration/maintenance activities or icing of the sensor. Total precipitation data for the month of July was invalidated as the data recovery rate was less than 75%. The data recovery rates for all other meteorological instruments in this period were better than 99.9%.

3.4.4 Schedule

Meteorological data is collected continuously and is downloaded at the beginning of each month, or on an as-needed basis.

4 Monitoring Program Results and Discussion

4.1 Snow Core Dustfall Results

4.1.1 Doris Site

The measurement period for each snow core sample at the Doris is provided in Table 4-1. Measured dustfall rates estimated for each monitoring location in 2021 – 2022 are summarized in Table 4-2. Laboratory results are presented in Appendix A.

Table 4-1: Snow Core Sampling Periods – Doris Site

Snow Core Station	Date of First Snowfall	Sample Retrieval Date	Sample Time (days)
CDF4	10/28/2021	5/7/2022	191
DFA1		5/6/2022	190
TIA-DF1		5/6/2022	190
TIA-DF2		5/6/2022	190
TIA-DF3		5/7/2022	191
ControlDF		5/6/2022	190

Table 4-2: Measured Deposition Rates from Snow Core Sampling – Doris Site

Snow Core Station	Alberta Ambient Air Quality Objective (AAAQO) (mg/100-cm²/30-days)	Measured Dustfall Level (mg/100-cm²/30-days)	Percentage of AAAQO (Residential and Recreation Area)	Percentage of AAAQO (Commercial and Industrial Area)
CDF4[1]	53 (residential and recreation areas)	2.8	5%	2%
DFA1		19.2	36%	12%
TIA-DF1		17.9	34%	11%
TIA-DF2	158 (commercial and industrial areas)	5.9	11%	4%
TIA-DF3		4.8	9%	3%
ControlDF		1.1	2%	1%

Note:
1. Insufficient snow to fill snow core tube. Bucket method used to collect the sample.

Dustfall levels estimated from the snow core sampling ranged from 1.1 mg/100-cm^2/30-days (at ControlDF) to 19.2 mg/100-cm^2/30-days (DFA1) during the October 2021 to May 2022 monitoring period (189 to 191 days). All measured dustfall levels are less than the AAAQO of 158 mg/100-cm^2/30-days for commercial and industrial areas. The maximum measured dustfall (19.2 mg/100-cm^2/30-days) occurred at Station DFA1 which is located close to the camp and mill site. The dustfall measurements at locations TIA-DF1, TIA-DF2 and TIA-DF3 (monitoring locations downwind of the TIA) are consistent with the predicted dustfall level in the 2016 Amendment modelling of <53 mg/100-cm^2/30-days outside of 250 m from the TIA. Dustfall rates at all other Doris monitoring locations, except for DFA1, were less than their maximum predicted dustfall levels in the 2017 FEIS modelling. The DFA1 measurement was within the expected range of variability for the dispersion modelling predictions.

4.1.2 Madrid Site

The measurement period for each snow core sample at the Madrid Site is provided in Table 4-3. Measured dustfall rates estimated for each monitoring location in 2021-2022 are summarized in Table 4-4. Laboratory results are presented in Appendix A. Snow core measurements were collected from all Madrid locations in 2021-2022.

Table 4-3: Snow Core Sampling Periods – Madrid Site

Snow Core Station	Date of First Snowfall	Sample Date	Sample Time (days)
MDF01	10/28/2021	5/5/2022	189
MDF02		5/5/2022	189
MDF03		5/5/2022	189
MDF04		5/5/2022	189
MDF05		5/5/2022	189
MDF06		5/7/2022	191
MDF07		5/7/2022	191
MDF08		5/7/2022	191
MDF09		5/7/2022	191

Table 4-4: Measured Deposition Rates from Snow Core Sampling – Madrid Site

Snow Core Station	Alberta Ambient Air Quality Objective (AAAQO) (mg/100-cm²/30-days)	Measured Dustfall Level (mg/100-cm²/30-days)	Percentage of AAAQO (Residential and Recreation Area)	Percentage of AAAQO (Commercial and Industrial Area)
MDF01	53 (residential and recreation areas) 158 (commercial and industrial areas)	4.8	9%	3%
MDF02		2.2	4%	1%
MDF03		2.2	4%	1%
MDF04		5.1	10%	3%
MDF05		1.4	3%	1%
MDF06		7.1	13%	5%
MDF07 [1]		4.5	9%	3%
MDF08 [1]		7.2	14%	5%
MDF09		22.1	42%	14%

Note:
1. Insufficient snow to fill snow core tube. Bucket method used to collect the sample.

Dustfall levels estimated from the snow core sampling ranged from 1.4 mg/100-cm^2/30-days (at MDF05) to 22.1 mg/100-cm^2/30-days (MDF09) during the October 2021 to May 2022 monitoring period (189 to 191 days). All measured dustfall levels were less than the AAAQO of 158 mg/100-cm^2/30-days for commercial and industrial areas. The maximum deposition rate (22.1 mg/100-cm^2/30-days) occurred at Station MDF09 which is 200 m east of the Doris-Madrid All-Weather Road.

The dustfall rates from all Madrid Site monitoring stations were less than their maximum predicted dustfall level at each location in the 2017 FEIS modelling.

4.2 Canister Sampling Dustfall Results

4.2.1 Doris Site

A summary of the measured monthly dustfall levels at each monitoring location using dustfall canisters in 2022 is presented in Table 4-5. Laboratory results are presented in Appendix B. Dustfall levels estimated from the canister sampling ranged from 2 mg/100-cm^2/30-days (at multiple sites due to the dust fall level being below the method detection limit) to 43.2 mg/100-cm^2/30-days (DFA1). There were no dustfall exceedances measured at the Doris site.

Table 4-5 also presents the predominant wind direction over each month based on the Doris meteorological data. Winds were predominantly blowing from easterly directions through the sampling period.

The measured monthly dustfall levels at locations TIA-DF1, TIA-DF2, and TIA-DF3 are plotted versus distance from the TIA in Figure 4-1.

All monthly dustfall rates from the Doris monitoring stations were less than the maximum predicted dustfall level of 53 mg/100-cm^2/30-days (at 250-m from the TIA) in the 2016 Amendment modelling.

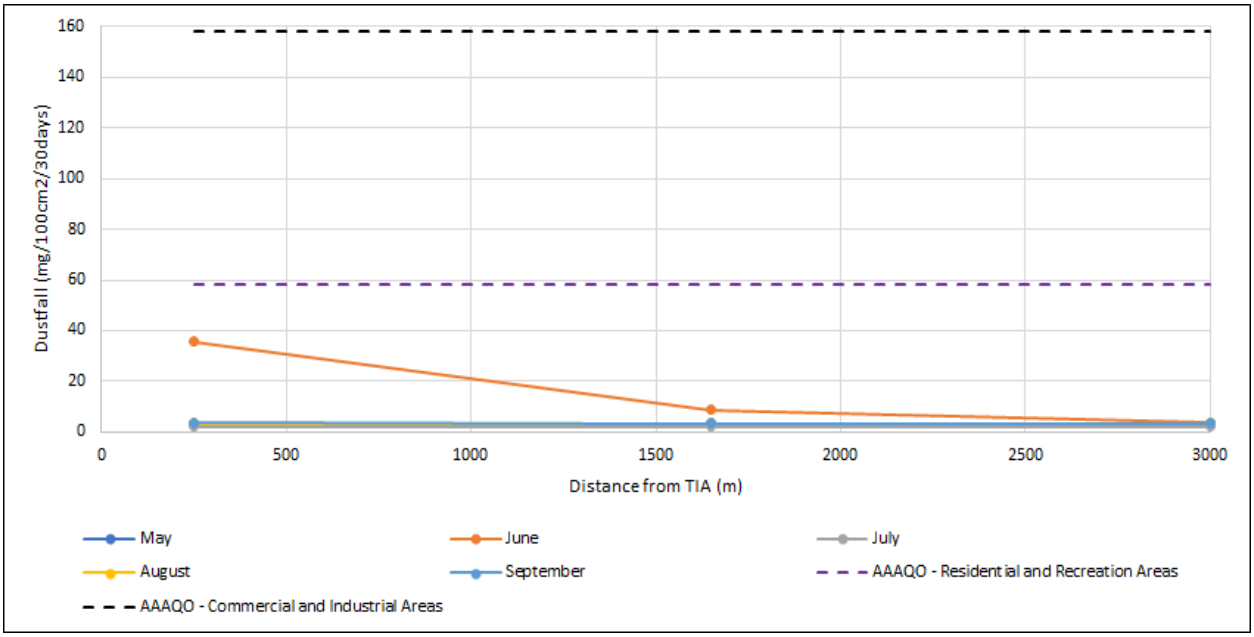
Table 4-5: Summary of Measured Dustfall Levels from Canister Sampling in 2022 – Doris Site

Sample Month	AAAQO	Units	Dustfall Location						Monthly Average	Prevailing Wind Direction
			CDF4	DFA1	TIA-DF1	TIA-DF2	TIA-DF3	Control DF		
May	53 (residential and recreation areas) 158 (commercial and industrial areas)	mg/100-cm^2/30-days	3.3 [1]	3.3 [1]	3.2 [1]	3.2 [1]	3.3 [1]	3.2 [1]	3.2	SE
June		mg/100-cm^2/30-days	3.6 [1]	7.5	35.7	8.7	3.6 [1]	3.6 [1]	11.8	E
July		mg/100-cm^2/30-days	4.5	2.0 [1]	2.0 [1]	2.0 [1]	2.0 [1]	2.0 [1]	2.5	ENE
August		mg/100-cm^2/30-days	13.8	43.2	3.3 [1]	3.3 [1]	3.3 [1]	3.3 [1]	13.4	W
September		mg/100-cm^2/30-days	3.6 [1]	3.6 [1]	3.6 [1]	3.5 [1]	3.5 [1]	3.5 [1]	3.5	NW
Maximum		mg/100-cm^2/30-days	13.8	43.2	35.7	8.7	3.6	3.6		
Average		mg/100-cm^2/30-days	5.8	11.9	9.5	4.1	3.1	3.1		
Max Percentage of Alberta AAQO for Residential Recreational Areas		%	26.0%	81.5%	67.4%	16.4%	6.8%	6.8%		
Max Percentage of Alberta AAQO for Commercial and Industrial Areas		%	8.7%	27.3%	22.6%	5.5%	2.3%	2.3%		

Notes:

1. Measurement was below the laboratory minimum detection limit. A value of ½ the detection limit was used in the assessment.

Figure 4-1: Variation in Measured Monthly Dustfall Levels with Distance from the Doris TIA



4.2.2 Madrid Site

A summary of the estimated monthly dustfall levels at each monitoring location using dustfall canisters in 2022 is presented in Table 4-6. Laboratory results are presented in Appendix B. Dustfall levels estimated from the canister sampling ranged from 2.0 mg/100-cm^2/30-days (at multiple sites due to the dust fall level being below the method detection limit) to 88.2 mg/100-cm^2/30-days (M-DF07). There were two months (June and August 2022) at location M-DF07 where elevated dustfall levels were measured. . These measurements were however, less than the AAAQO of 158 mg/100-cm^2/30-days for commercial and industrial areas.

The measured monthly dustfall levels at locations M-DF06, M-DF07, M-DF08 and M-DF09 are plotted versus distance from the Doris-Madrid All Weather Road (AWR) in Figure 4-2. These monitoring locations were chosen to study the variation in dustfall levels with distance from the roadway. M-DF06 is located 50 m from the road in the predominantly upwind direction, while the other three stations are located 50 m, 100 m, and 200 m downwind. Dustfall levels were relatively consistent in all months other than June and August, where dustfall levels downwind of the AWR were elevated.

Over the Madrid monitoring stations, two dustfall measurements (M-DF07 in June and August) were above the maximum predicted dustfall level at that location in the 2017 FEIS modelling. At all monitoring locations (including M-DF07), the measured dustfall levels were within the expected range of variability for the dispersion modelling predictions.

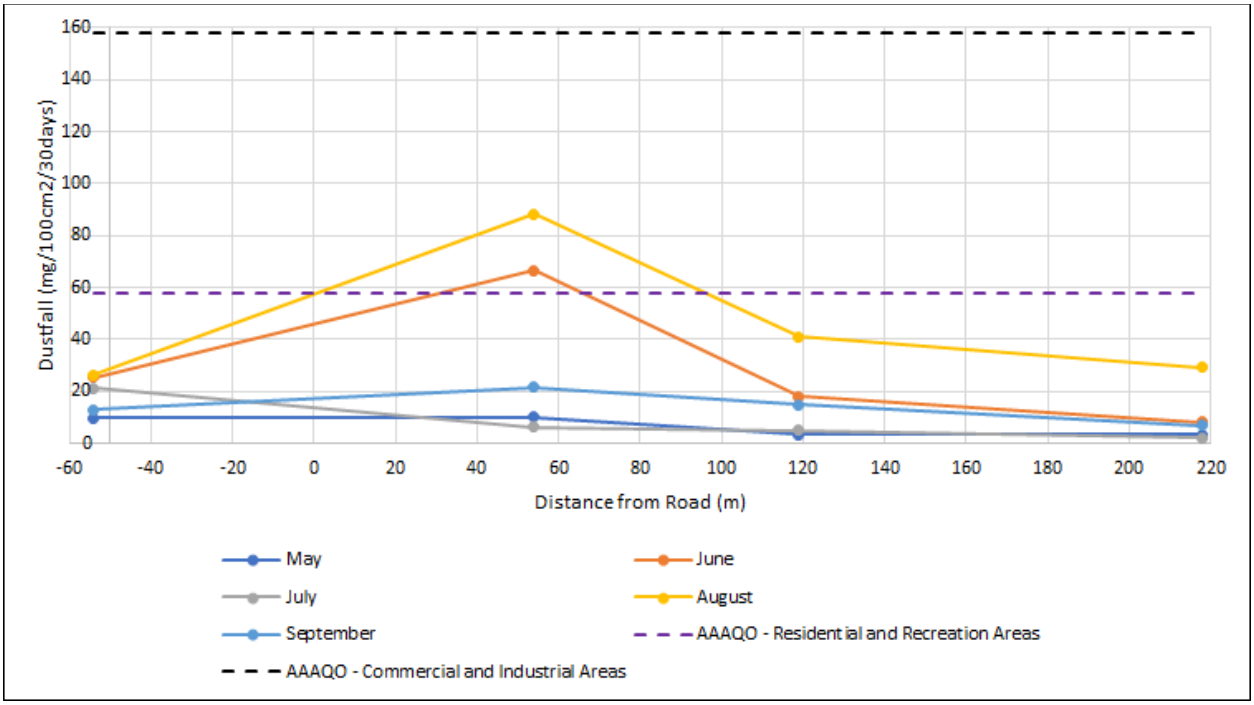
Table 4-6: Summary of Measured Dustfall Levels from Canister Sampling in 2022 – Madrid Site

Sample Month	AAAQO	Units	Dustfall Location									Monthly Average	Prevailing Wind Direction
			M-DF01	M-DF02	M-DF03	M-DF04	M-DF05	M-DF06	M-DF07	M-DF08	M-DF09		
May	53 (residential and recreation areas) 158 (commercial and industrial areas)	mg/100-cm²/ 30-days	3.2[1]	3.2[1]	3.2[1]	3.2[1]	3.2[1]	9.6	9.9	3.3[1]	3.3[1]	4.7	SE
June		mg/100-cm²/ 30-days	3.6[1]	3.6[1]	8.1	3.6[1]	3.6[1]	25.5	66.6	18.0	8.1	15.6	E
July		mg/100-cm²/ 30-days	2.0[1]	2.0[1]	2.0[1]	2.0[1]	2.0[1]	21.3	6.3	5.1	2.0[1]	4.9	ENE
August		mg/100-cm²/ 30-days	3.3[1]	8.1	3.3[1]	3.3[1]	3.3[1]	26.4	88.2	41.1	29.1	22.9	W
September		mg/100-cm²/ 30-days	10.2	3.3[1]	3.3[1]	3.3	3.3[1]	12.9	21.6	14.7	6.9	11.6	NW
Maximum		mg/100-cm²/ 30-days	10.2	8.1	8.1	3.6	3.6	26.4	88.2	41.1	29.1		
Average		mg/100-cm²/ 30-days	4.4	4.0	4.0	3.1	3.1	19.1	38.5	16.4	9.9		
Max Percentage of Alberta AAQO for Residential Recreational Areas		%	19.2%	15.3%	15.3%	6.8%	6.8%	49.8%	166.4%	77.5%	54.9%		
Max Percentage of Alberta AAQO for Commercial and Industrial Areas		%	6.4%	5.1%	5.1%	2.3%	2.3%	16.7%	55.8%	26.0%	18.4%		

Notes:

1 - Measurement was below the laboratory minimum detection limit. A value of ½ the detection limit was used in the assessment.

Figure 4-2: Variation in Measured Monthly Dustfall Levels with Distance from the Doris-Madrid Road



4.3 Particulate Matter Sampling

TSP and $PM_{2.5}$ ambient monitoring in Q1-Q3 2022 was conducted at location DFA1 at the Doris site. A summary of the measured ambient TSP and $PM_{2.5}$ concentrations for the study period are presented in Table 4-7. Data recovery rates are presented in Table 4-8. Calibration records are presented in Appendix D.

Table 4-7: Summary of Ambient TSP and $PM_{2.5}$ Measurements

Parameter	Air Quality Standard / Objective		24-Hour Average (µg/m³)				Annual Average (µg/m³) [2]	
	24-Hour	Annual	Maximum [1]	98th Percentile [2]	Range	% of Criteria	Average [3]	% of Criteria
TSP	120	60	59.6		2.0 - 59.6	50%	N/A	N/A
$PM_{2.5}$	27	8.8	25.1	15.2	1.4 – 25.1	56%	N/A	N/A

Notes:

1 - Results reported for Jan 2022 to Sep 2022

2 - Results reported for Oct 2021 to Sep 2022

3 – Data recovery rate below target for calculating a valid annual average.

Table 4-8: Summary of Data Recovery Rates for Continuous Particulate Sampling (Jan - Sep 2022)

Month	Data Recovery Rate (%)	
	TSP	$PM_{2.5}$
January 2022	97%	97%
February 2022	93%	86%
March 2022	58%	94%
April 2022	40%	30%
May 2022	97%	77%
June 2022	80%	63%
July 2022	61%	68%
August 2022	77%	0%
September 2022	40%	23%
Overall	71%	60%

4.3.1 TSP

The annual data recovery rate for TSP was 71% which is slightly below acceptable levels for calculating an annual average concentration. The monthly recovery rates for the continuous TSP monitoring were above the data recovery objective of 90% for January, February, and May 2022, but below the objective for the other months due to intermittent downtime as initial installation/operation complications were addressed by Agnico Eagle.

The maximum measured 24-hour average TSP concentration in the January to September 2022 period was 59.6 µg/m^3 which is 50% of the applicable Government of Nunavut (GN) air quality objective and is less than the maximum predicted TSP concentration in the 2017 FEIS of 69.9 µg/m^3.

TSP monitoring data for October - December 2021, which have been previously reported, were used in conjunction with the January - September 2022 TSP measurements. To calculate a valid annual average concentration, a data recovery rate of 75% is required. Since the data recovery rate was less than this target, a valid annual average concentration could not be calculated. Training for Agnico Eagle personnel on the calibration and maintenance of the monitor was conducted in October 2022 which is expected to aide in reducing instrument downtimes.

A time history plot of measured 24-hour average TSP concentrations for the period October 2021 to September 2022 is presented in Figure 4-3. TSP concentrations were generally low throughout the monitoring period.

4.3.2 $PM_{2.5}$

The annual $PM_{2.5}$ data recovery rate was 60% which is below acceptable levels for calculating an annual average concentration. Monthly data recovery rates for the continuous sampling were above the objective of 90% for January and March 2022, but below for the other months as Agnico Eagle personnel addressed initial installation/operational issues.

The calculated 98th percentile of the measured 24-hour average $PM_{2.5}$ concentrations in the October 2021 to September 2022 period was 15.2 µg/m^3 which is below the Canadian Ambient Air Quality Standard (CAAQS) of 27 µg/m^3. An explicit comparison to the CAAQS for $PM_{2.5}$ requires averaging the 98th percentile daily average levels in each of three consecutive calendar years, with a valid comparison requiring valid data for a minimum of two of the three years. Since the data presented in this report is for a single year and is not based on a calendar year, comparison to the CAAQS is provided for informational purposes only; not to assess compliance. The 98th percentile of the measured 24-hour average $PM_{2.5}$ concentrations is greater the maximum predicted 98th percentile $PM_{2.5}$ concentration in the 2017 FEIS of 12.1 µg/m^3 but is within the expected range of variability for dispersion models.

Similar to TSP, the annual data recovery rate for $PM_{2.5}$ was less than the target, thus a valid annual average concentration could not be calculated. Training for Agnico Eagle personnel on the calibration and maintenance of the monitor was conducted in October 2022 which is expected to aide in reducing instrument downtimes.

A time history plot of measured 24-hour average $PM_{2.5}$ concentrations for the period October 2021 to September 2022 is presented in Figure 4-5. $PM_{2.5}$ concentrations were generally low throughout the monitoring period.

Figure 4-3: Summary of Measured 24-Hour Average TSP Concentrations (Oct 2021 - Sep 2022)

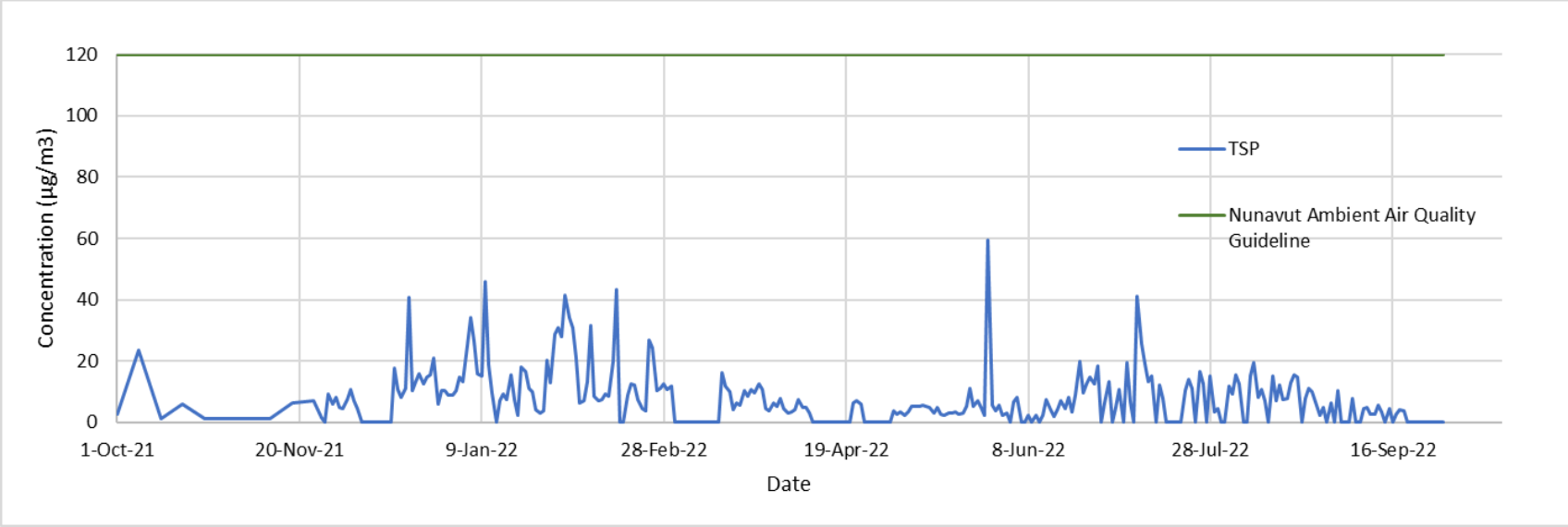
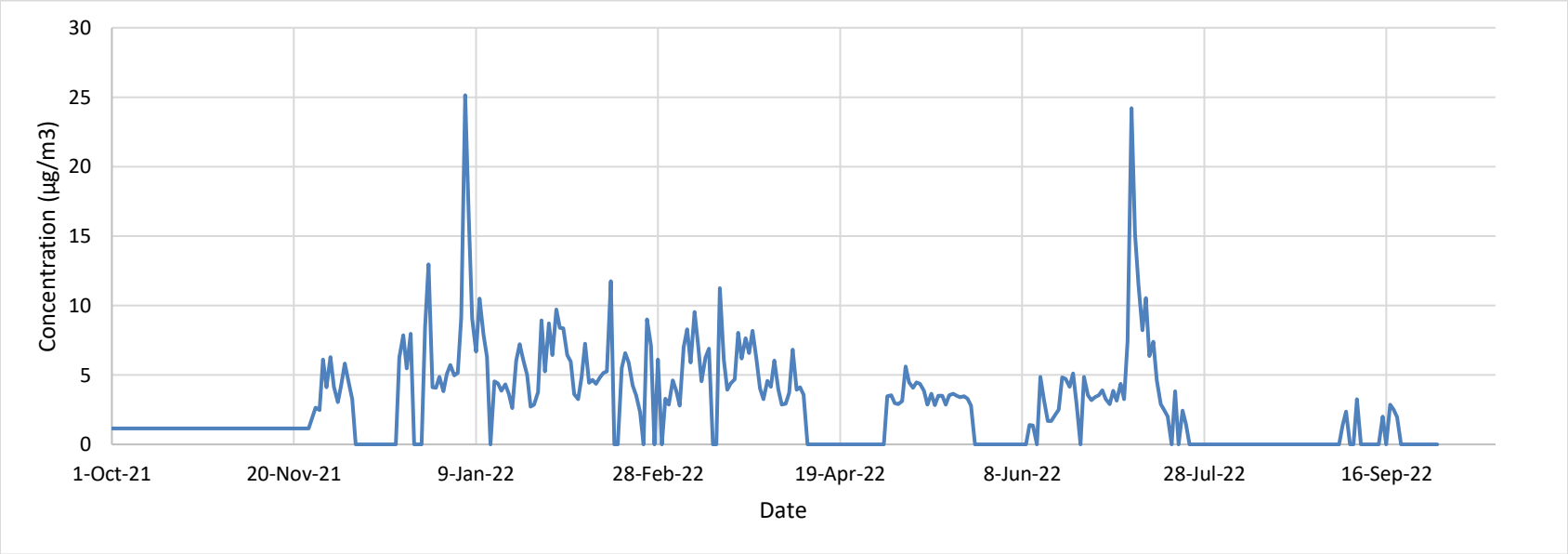


Figure 4-4: Summary of Measured 24-Hour Average $PM_{2.5}$ Concentrations (Oct 2021 - Sep 2022)



4.3.3 Historical Trends in Ambient Particulate

4.3.3.1 January to September Reporting Period Trends

Table 4-9 below provides a comparison of maximum measured 24-hour and annual average TSP and $PM_{2.5}$ measurements in the January to September period over the last 4 years. The highest 24-hour average TSP concentration was measured in 2020 and exceeded the guideline by 47%. No 24-hour average TSP exceedances were measured in 2022.

Measured 24-hour average $PM_{2.5}$ concentrations were similar throughout the 2019 to 2021 period with higher concentrations measured in 2022, which may be attributable to transitioning from non-continuous (6-day) measurements to continuous monitoring with a larger number of measurements.

Table 4-9: Summary of Maximum Measured 24-Hour and Annual Average TSP and $PM_{2.5}$ Concentrations for 2019-2022

Contaminant	Averaging Period	Criteria	Jan -Sep 2019	Jan -Sep 2020	Jan -Sep 2021	Jan -Sep 2022
TSP	24-hour	120	121	176	22.1	59.6
	Annual (1)	60	7.3	6.2	5.0	N/A
$PM_{2.5}$	24-hour (2)	28-27 (3)	5.7	7.3	5.4	16.6
	Annual (1)	10-8.8 (4)	2.3	2.3	2.0	N/A

Notes:

1 Annual averages for the period Oct to Sep of the prior and subsequent year.

2 98th percentile of the period Oct to Sep of the prior and subsequent year.

3 CAAQS 24-hour criteria of 27 ug/m^3 became effective in 2020. Prior to 2020, the criterion was 28 ug/m^3.

4 CAAQS annual criterion of 8.8 ug/m^3 became effective in 2020. Prior to 2020, the criterion was 10 ug/m^3.

4.3.3.2 Four Year Trend in Air Quality

Time history plots of measured TSP and $PM_{2.5}$ concentrations at DFA1 over the last 4 years are presented in Figure 4-5 and Figure 4-6, respectively. In Figure 4-5, the 24-hour average guideline of 120 ug/m^3 for TSP is presented as a red line. There have been only two days (24-hour periods) of measured exceedances of the TSP guideline in the last 4 years. For $PM_{2.5}$, the current Canadian Ambient Air Quality Standard (CAAQS) is 27 ug/m^3 and is based on the average of the 98th percentile concentration in each of three consecutive years (with at least two valid years of data available). As seen in Figure 4-6, all measured $PM_{2.5}$ concentrations at the station have been below this level.

Table 4-10 presents summary statistics from the last four years of particulate monitoring. The 90th percentile concentrations are well below the maximum measured levels, indicating that elevated particulate concentrations occur infrequently.

Table 4-10: Summary of Particulate Monitoring Measurement Statistics (2018-2022)

Statistic	TSP	$PM_{2.5}$
Maximum (ug/m^3)	176	25.1
90th Percentile (ug/m^3)	19.9	6.9
Median (ug/m^3)	7.2	3.2
25th Percentile (ug/m^3)	4.3	1.15

Figure 4-5: Four Year Time History Plot of Measured Ambient TSP Concentrations

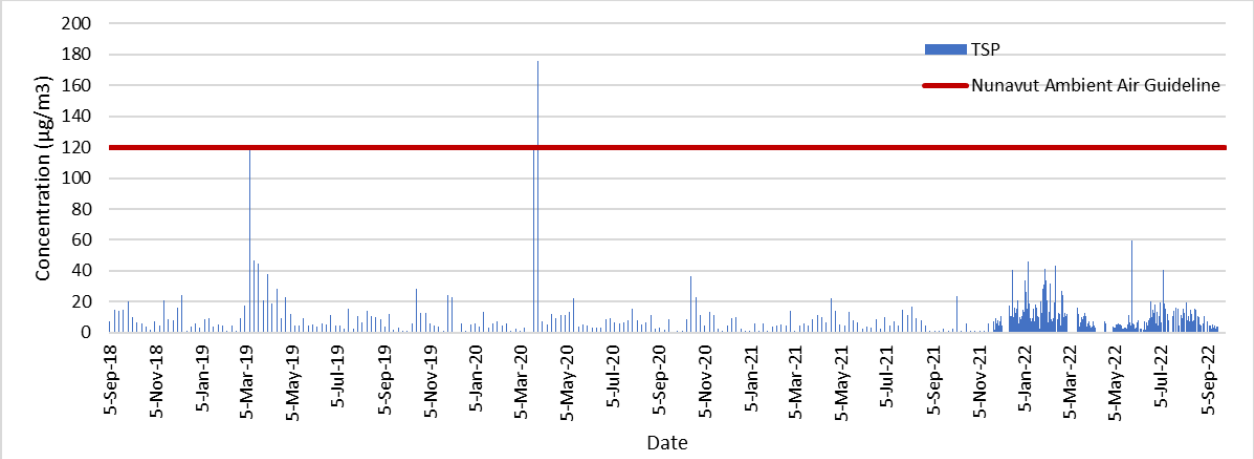
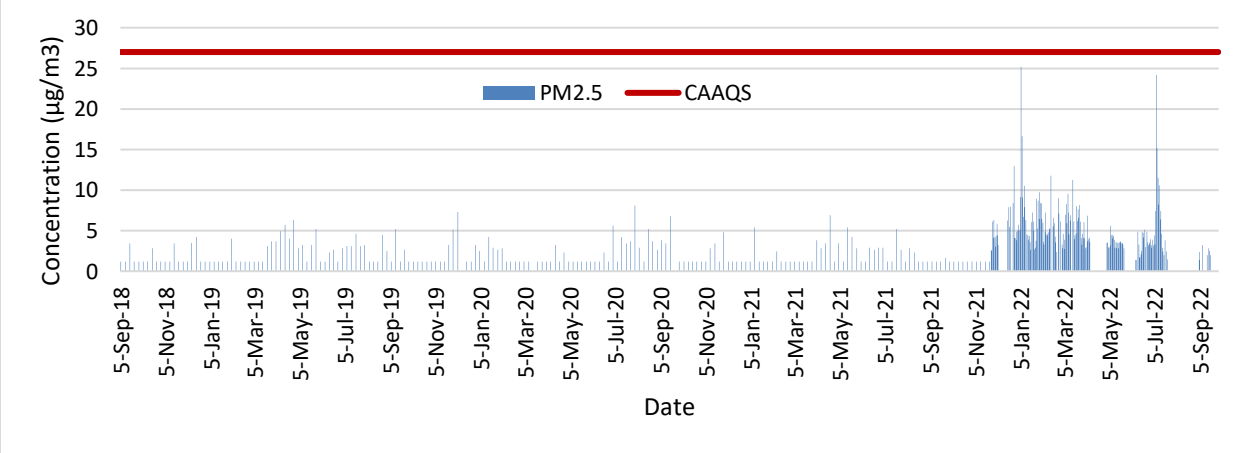


Figure 4-6: Four Year Time History Plot of Measured Ambient $PM_{2.5}$ Concentrations



4.4 Meteorology

A summary of the maximum, minimum, and average of the hourly average meteorological parameters in each month of January to September 2022 are presented in Table 4-11. Meteorological data collected in January - September 2022 at the Doris station are presented in Appendix E.

A wind rose showing the measured directionality and speed for the period January - September 2022 is presented in Figure 4-7. The length of the radial barbs gives the total percent frequency of winds from the indicated direction, while portions of the barbs of different widths indicate the frequency associated with each wind speed category.

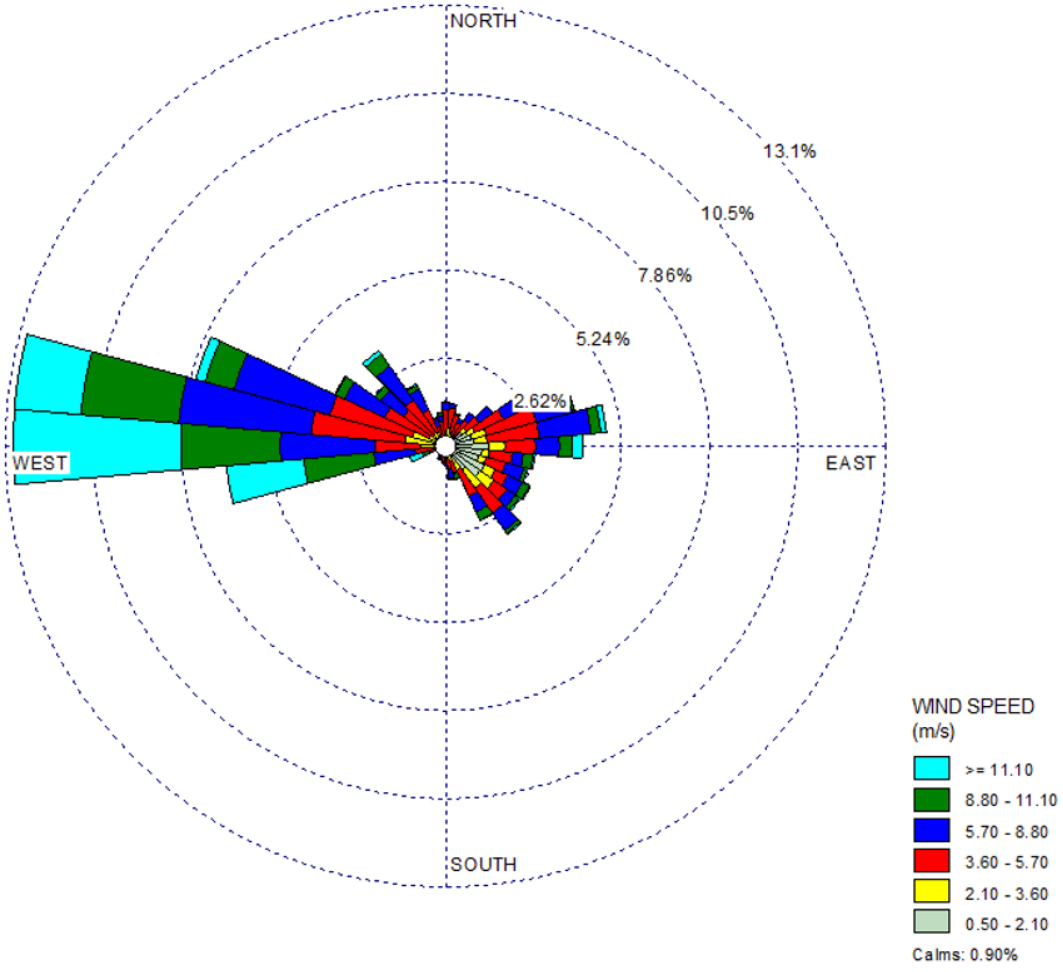
Winds over the nine-month period occurred predominantly from the west. Higher wind speeds occurred most frequently from the west.

Table 4-11: Summary of Meteorological Measurements (Jan - Sep 2022)

Date	Average Air Temperature	Minimum Daily Air Temperature	Maximum Daily Air Temperature	Absolute Minimum Temperature	Absolute Maximum Temperature	Average Wind Speed	Maximum Instantaneous Wind Speed	Time of Maximum Instantaneous Wind Speed	Total Precipitation	Total Rainfall	Total SWE	Average Relative Humidity	Average Solar Radiation	Total Bright Sunshine Hours	Station Pressure
(mm-yy)	(°C)	(°C)	(°C)	(°C)	(°C)	(m/s)	(m/s)	(mm/dd/yyyy)	(mm)	(mm)	(mm)	(%)	(W/m^2)	(hours)	(kpa)
Jan-22	-29.1	-31.9	-26.0	-37.3	-16.7	8.3	19.3	1/5/2022 14:26	6.4	0.0	6.4	76.1	2.5	0	100.9
Feb-22	-30.9	-33.9	-27.9	-41.7	-13.2	8.3	22.6	2/16/2022 23:19	12.3	0.0	12.3	73.2	26.2	54	100.7
Mar-22	-23.7	-27.1	-20.4	-34.5	-11.1	7.5	26.7	3/15/2022 22:41	9.0	0.0	9.0	77.9	88.3	236	101.2
Apr-22	-18.4	-23.2	-14.0	-31.9	-1.8	4.8	19.8	4/13/2022 19:07	5.2	0.0	5.2	80.3	191.7	354	101.8
May-22	-3.1	-7.6	1.1	-17.5	12.0	4.8	16.2	5/24/2022 1:42	M	M	M	80.0	247.5	424	101.4
Jun-22	5.6	1.9	9.4	-2.7	20.1	5.1	16.4	6/2/2022 23:47	M	M	M	75.8	241.5	414	101.2
Jul-22	13.8	9.2	18.4	1.5	27.6	5.0	20.4	7/28/2022 13:31	INV (1)	INV (1)	INV (1)	68.5	227.7	421	100.5
Aug-22	10.0	6.6	14.1	3.0	25.5	6.4	30.4	8/11/2022 11:25	38.7	38.7	0.0	76.5	150.7	327	100.4
Sep-22	3.1	1.0	5.4	-6.0	18.3	5.7	21.6	9/23/2022 8:46	64.0	37.9	26.1	88.0	59.6	143	100.2
Average	-8.1	-11.7	-4.4	-18.6	6.8	6.2	21.5		22.6	12.8	9.8	77.4	137.3	263.7	100.9
Maximum	13.8	9.2	18.4	3.0	27.6	8.3	30.4		64.0	38.7	26.1	88.0	247.5	424.0	101.8
Minimum	-30.9	-33.9	-27.9	-41.7	-16.7	4.8	16.2		5.2	0.0	0.0	68.5	2.5	0.0	100.2
Total									135.6	76.6	59.0				

Notes:
1. Precipitation measurements for July were from July 24 – 31, 2022, therefore data capture is <75% for the month and a total is invalid for reporting

Figure 4-7: Wind Rose for January to September 2022



5 Conclusions and Recommendations

This report presents the results of ambient air quality, dustfall, and meteorological monitoring conducted at the Doris and Madrid sites (the Sites) from January 2022 to September 2022 as outlined under the Air Quality Management Plan (AQMP; TMAC 2016, 2019). To calculate annual average concentrations for requisite parameters, data from October to December 2021 (already reported by Agnico Eagle) was also utilized and is included in this report.

The 2022 monitoring program included the following:

- Monthly dustfall sampling at six locations in the vicinity of the Doris site utilizing dustfall canisters for the period May - September 2022.
- Monthly dustfall sampling at nine locations in the vicinity of the Madrid site utilizing dustfall canisters for the same period and methodology as for the Doris site.
- Snow core sampling for dustfall at six locations in the vicinity of the Doris site utilizing snow cores over the period October 28, 2021 (first snow fall) to May 5-7, 2022.
- Snow core sampling for dustfall at seven locations in the vicinity of the Madrid Site utilizing snow cores over the same period.
- Total Suspended Particulate (TSP), and particulate less than 2.5 microns ($PM_{2.5}$) using Continuous Monitors at one location at the Doris site.
- Meteorological monitoring for wind speed, wind direction, temperature, relative humidity, snowfall, rainfall, solar radiation, and barometric pressure at one location. The meteorological data were used in the interpretation of the air quality measurements.

The main results and findings of the report are presented below.

Snow Core Dustfall Sampling – Doris Site

- Dustfall levels estimated from the snow core sampling ranged from 1.1 mg/100-cm^2/30-days (at ControlDF) to 19.2 mg/100-cm^2/30-days (DFA1).
- The dustfall levels for all stations were less than the AAAQO of 158 mg/100-cm^2/30-days for commercial and industrial areas.
- Other than DFA1, the measured dustfall levels at the Doris Site monitoring stations were less than their maximum predicted dustfall level at each location in the 2017 FEIS modelling. The measured dustfall level as DFA1 was within the expected range of variability for dispersion model predictions.

Snow Core Dustfall Sampling – Madrid Site

- Dustfall levels estimated from the snow core sampling ranged from 1.4 mg/100-cm^2/30-days (at MDF05) to 22.1 mg/100-cm^2/30-days (at MDF09).
- All measured dustfall levels were less than the AAAQO of 158 mg/100-cm^2/30-days for commercial and industrial areas.
- The dustfall rates from all Madrid Site monitoring stations were less than their maximum predicted dustfall level at each location in the 2017 FEIS modelling.

Canister Dustfall Sampling – Doris Site

- Dustfall levels estimated from the canister sampling ranged from 2 mg/100-cm^2/30-days (at multiple sites due to the dust fall level being below the method detection limit) to 43.2 mg/100-cm^2/30-days (DFA1). There were no dustfall exceedances measured at the Doris site.
- The estimated monthly dustfall rates at the monitoring stations were less than the maximum predicted dustfall level of 53 mg/100-cm^2/30-days (at 250 m from the TIA) in the 2016 Amendment modelling.

Canister Dustfall Sampling – Madrid Site

- Dustfall levels estimated from the canister sampling ranged from 2 mg/100-cm^2/30-days to 88.2 mg/100-cm^2/30-days (M-DF07).
- Elevated dustfall levels were measured in June and August 2022 at location M-DF07. These measurements were however less than the AAAQO of 158 mg/100-cm^2/30-days for commercial and industrial areas.
- Two dustfall measurements (M-DF07 in June and August) were above the maximum predicted dustfall level at this location in the 2017 FEIS modelling but were within the expected range of variability for dispersion modelling predictions.

Particulate Monitoring – Doris Site

- The maximum measured 24-hour average TSP concentration was 59.6 µg/m^3 which is 50% of the applicable GN air quality objective.
- The calculated 98th percentile of the measured 24-hour average $PM_{2.5}$ concentrations in the October 2021 to September 2022 period was 15.5 µg/m^3 which is below the CAAQS of 27 µg/m^3.
- Annual average TSP and $PM_{2.5}$ concentrations could not be calculated due to the annual data recovery rates for both these parameters being less than the required threshold.
- The maximum measured 24-hour average TSP concentration was below the maximum predicted concentrations in the 2017 FEIS, while the measured 98th percentile of the 24-hour average $PM_{2.5}$ concentrations was greater than the 2017 FEIS prediction but within the expected range of variability for dispersion modelling predictions.

6 Closure

This document entitled Q1-Q3 2022 Atmospheric Compliance Monitoring Program Report was prepared by Nunami Stantec Ltd. for the account of Agnico Eagle Mining Limited. The material in it reflects Nunami Stantec's best judgment in light of the information available to it at the time of preparation. Any use which a third party makes of this report, or any reliance on or decisions made based on it, are the responsibilities of such third parties. Nunami Stantec Ltd. accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions based on this report.

Respectfully Submitted.

NUNAMI STANTEC LIMITED

Gregory Crooks, M.Eng., P.Eng.
Digitally signed by Gregory Crooks, M.Eng., P.Eng.
Date: 2023.04.18 15:14:00 -04'00'

Gregory Crooks, M.Eng., P.Eng.(Ontario)
Principal, Environmental Services
Tel: 416 949 2788
gregory.crooks@stantec.com

Digitally signed by Kimberly Ireland
Date: 2023.04.18 14:52:08 -04'00'

Kimberly Ireland, P.Eng. (Ontario)
Associate, Senior Environmental Engineer
Tel: 905 381 3279
kim.ireland@stantec.com

Digitally signed by Lauren Campbell
Date: 2023.04.18 14:46:29 -04'00'

Lauren Campbell, M.Eng., P.Eng. (Ontario)
Air Quality Engineer
Tel: 289 925 5820
lauren.campbell@stantec.com

\\ca0224-ppfss01\work_group\01609\active\160930542\05_reporting\2022_Q1-Q3_Report\Final\rpt_160930542_2022_Q1_Q3_AE_ambient_monitoring_20230418_fnl.docx

7 References

Definitions of the acronyms and abbreviations used in this reference list can be found in the list of Abbreviations.

Alberta Environment and Parks. 2016. Alberta Ambient Air Quality Objectives and Guidelines Summary. Alberta Environment and Parks

ASTM. 2010. Standard Test Method for Collection and Measurement of Dustfall (Settleable Particulate Matter). Designation D 1739-98 Reapproved 2010, West Conshohocken, PA.

BC MoE. 2009. Air Monitoring Site Selection and Exposure Criteria. British Columbia Ministry of the Environment: Victoria, BC.

BC MOE. 2020. British Columbia Ambient Air Quality Objectives. BC Ministry of Environment. http://www.bcairquality.ca/reports/pdfs/aqotable.pdf (accessed March 2020).

CALA. 2016. Canadian Association for Laboratory Accreditation Quality Assurance. http://www.cala.ca/index.html, Ottawa, ON.

CCME. 2020. Particulate Matter and Ground-level Ozone. Canadian Council of Ministers of the Environment. http://www.ccme.ca/en/resources/air/pm_ozone.html (accessed March 2020).

Environment and Climate Change Canada. 2016. National Air Pollution Surveillance Program (NAPS). http://maps-cartes.ec.gc.ca/rnspa-naps/data.aspx (accessed November 2016).

ERM. 2016. Memorandum: Potential Dust Fall Associated with Subaerial Tailings Deposition and Wildlife Habitat Effects at TMAC Doris North Project, Nunavut.

Government of Nunavut. 2011. Environmental Guideline for Ambient Air Quality. Environmental Protection Service. http://gov.nu.ca/sites/default/files/guideline_-_ambient_air_quality_2011.pdf (accessed November 2016).

Miramar Hope Bay Ltd (Miramar). 2005. Environmental Impact Statement Air Quality Assessment Methods, Doris North Site, Nunavut, Canada. Prepared for Miramar Hope Bay Ltd.: North Vancouver, BC by Golder Associates.

Nunami Stantec Limited. 2017. Madrid-Boston Project: Air Quality Modeling Study. Prepared for TMAC Resources Inc. by Nunami Stantec Limited.

TMAC. 2016. Revisions to TMAC Resources Inc. Amendment Application No. 1 of Project Certificate No. 003 and Water License 2AM-DOH1323. Submitted June 2015 with approval received in 2016.

TMAC. 2017. Hope Bay Project Air Quality Management Plan. Rev 5. December 2017.

TMAC. 2019. Hope Bay Project Air Quality Management Plan. Rev 6. April 2019.

US EPA. 1999. Compendium Method IO-2.3 Sampling of Ambient Air for PM10 Concentration Using the Rupprecht and Patashnick (R&P) Low Volume Partisol Sampler. Center for Environmental Research Information - Office of Research and Development, Cincinnati, OH.

US EPA. 2009. Title 40: Protection of Environment Part 58 -Ambient air Quality Surveillance, Subpart G - Federal Monitoring Appendix E - Probe and Monitoring Path Siting Criteria for Ambient Air Quality Monitoring, Research Triangle Park, NC.

Appendix A Snow Core Laboratory Analysis

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2200455**	Page	: 1 of 6
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: 145 King Street East, Suite 400 Toronto ON Canada M5C 2Y7	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Snowcore Dustfall	Date Samples Received	: 11-May-2022 16:30
PO	: OL 1108073	Date Analysis Commenced	: 18-May-2022
C-O-C number	: ----	Issue Date	: 25-May-2022 15:39
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 7		
No. of samples analysed	: 7		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caleb Deroche	Lab Analyst	Metals, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Inorganics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
mg/L	milligrams per litre

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLM	*Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).*
RRV	*Reported result verified by repeat analysis.*

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF-SNOW	TIADF1-SNOW	TIADF2-SNOW	TIADF3-SNOW	DFA1-SNOW
					Client sampling date / time	06-May-2022 09:30	06-May-2022 14:50	06-May-2022 13:40	07-May-2022 14:45	06-May-2022 16:15
						YL2200455-001	YL2200455-002	YL2200455-003	YL2200455-004	YL2200455-005
						Result	Result	Result	Result	Result
Physical Tests										
hardness (as CaCO3), from total Ca/Mg	----	EC100A	0.60	mg/L		1.55	16.6	4.69	4.50	19.2
solids, total dissolved [TDS]	----	E162	10	mg/L		<10	63	19	19	38
solids, total suspended [TSS]	----	E160	3.0	mg/L		<3.0	3.6	<3.0	<3.0	26.0
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L		0.0297	0.0666	0.0353	0.0283	0.268
bromide	24959-67-9	E235.Br-L	0.050	mg/L		<0.050	0.132	<0.050	<0.050	0.099
chloride	16887-00-6	E235.Cl	0.50	mg/L		3.57	34.2	8.26	8.27	14.5
fluoride	16984-48-8	E235.F	0.020	mg/L		<0.020	<0.020	<0.020	<0.020	<0.020
nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L		0.0596	0.0720	0.0432	0.0648	0.242
nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	0.0013
sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L		<0.30	1.44	0.59	0.40	0.62
Total Metals										
aluminum, total	7429-90-5	E420	0.0030	mg/L		0.0157 RRV	0.0978	0.0807	0.0652	1.13
antimony, total	7440-36-0	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
arsenic, total	7440-38-2	E420	0.00010	mg/L		<0.00010	0.00012	<0.00010	<0.00010	0.00111
barium, total	7440-39-3	E420	0.00010	mg/L		0.00034 RRV	0.00060	0.00035	0.00037	0.00143
beryllium, total	7440-41-7	E420	0.000100	mg/L		<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
bismuth, total	7440-69-9	E420	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
boron, total	7440-42-8	E420	0.010	mg/L		<0.010	<0.010	<0.010	<0.010	<0.010
cadmium, total	7440-43-9	E420	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000227
calcium, total	7440-70-2	E420	0.050	mg/L		0.170 RRV	2.12	0.681	0.488	4.27
cesium, total	7440-46-2	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	0.000018
chromium, total	7440-47-3	E420	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	0.00382
cobalt, total	7440-48-4	E420	0.00010	mg/L		<0.00010	0.00020	<0.00010	<0.00010	0.00142
copper, total	7440-50-8	E420	0.00050	mg/L		<0.00050	0.00394	<0.00050	<0.00050	0.00777
iron, total	7439-89-6	E420	0.010	mg/L		0.028 RRV	0.199	0.169	0.136	2.67
lead, total	7439-92-1	E420	0.000050	mg/L		0.000058 RRV	<0.000050	0.000052	0.000072	0.000618
lithium, total	7439-93-2	E420	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
magnesium, total	7439-95-4	E420	0.0050	mg/L		0.274 RRV	2.75	0.727	0.798	2.08
manganese, total	7439-96-5	E420	0.00010	mg/L		0.00401 RRV	0.0102	0.00642	0.00482	0.0624

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF-SNOW	TIADF1-SNOW	TIADF2-SNOW	TIADF3-SNOW	DFA1-SNOW
					Client sampling date / time	06-May-2022 09:30	06-May-2022 14:50	06-May-2022 13:40	07-May-2022 14:45	06-May-2022 16:15
						YL2200455-001	YL2200455-002	YL2200455-003	YL2200455-004	YL2200455-005
						Result	Result	Result	Result	Result
Total Metals										
mercury, total	7439-97-6	E508	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000125
molybdenum, total	7439-98-7	E420	0.000050	mg/L		0.000085 RRV	0.000092	<0.000050	<0.000050	0.000223
nickel, total	7440-02-0	E420	0.00050	mg/L		<0.00050	0.00076	<0.00050	<0.00050	0.00241
phosphorus, total	7723-14-0	E420	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
potassium, total	7440-09-7	E420	0.050	mg/L		0.144 RRV	0.878	0.210	0.252	0.439
rubidium, total	7440-17-7	E420	0.00020	mg/L		<0.00020	0.00032	<0.00020	<0.00020	0.00033
selenium, total	7782-49-2	E420	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
silicon, total	7440-21-3	E420	0.10	mg/L		<0.10	0.16	0.13	0.11	1.42
silver, total	7440-22-4	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	0.000033
sodium, total	7440-23-5	E420	0.050	mg/L		1.58 RRV	16.0	3.78	3.52	6.05
strontium, total	7440-24-6	E420	0.00020	mg/L		0.00169 RRV	0.0208	0.00426	0.00453	0.00947
sulfur, total	7704-34-9	E420	0.50	mg/L		<0.50	<0.50	<0.50	<0.50	<0.50
tellurium, total	13494-80-9	E420	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
thallium, total	7440-28-0	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
thorium, total	7440-29-1	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
tin, total	7440-31-5	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
titanium, total	7440-32-6	E420	0.00030	mg/L		<0.00060 DLM	0.00648	0.00354	0.00221	0.0461
tungsten, total	7440-33-7	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	0.00013
uranium, total	7440-61-1	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
vanadium, total	7440-62-2	E420	0.00050	mg/L		<0.00050	0.00054	<0.00050	<0.00050	0.00428
zinc, total	7440-66-6	E420	0.0030	mg/L		<0.0030	0.0034	<0.0030	<0.0030	0.0142
zirconium, total	7440-67-7	E420	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CDF4-SNOW	DORIS-BLANKE	----	----	----
					Client sampling date / time	07-May-2022 16:00	05-May-2022 17:05	----	----	----
						YL2200455-006	YL2200455-007	--------	--------	--------
						Result	Result	----	----	----
Physical Tests										
hardness (as CaCO3), from total Ca/Mg	----	EC100A	0.60	mg/L		12.7	<0.60	----	----	----
solids, total dissolved [TDS]	----	E162	10	mg/L		15	<10	----	----	----
solids, total suspended [TSS]	----	E160	3.0	mg/L		19.2	<3.0	----	----	----
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L		0.0253	<0.0050	----	----	----
bromide	24959-67-9	E235.Br-L	0.050	mg/L		<0.050	<0.050	----	----	----
chloride	16887-00-6	E235.Cl	0.50	mg/L		2.25	<0.50	----	----	----
fluoride	16984-48-8	E235.F	0.020	mg/L		<0.020	<0.020	----	----	----
nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L		0.0448	<0.0050	----	----	----
nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L		<0.0010	<0.0010	----	----	----
sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L		0.32	<0.30	----	----	----
Total Metals										
aluminum, total	7429-90-5	E420	0.0030	mg/L		0.492	<0.0030	----	----	----
antimony, total	7440-36-0	E420	0.00010	mg/L		<0.00010	<0.00010	----	----	----
arsenic, total	7440-38-2	E420	0.00010	mg/L		0.00014	<0.00010	----	----	----
barium, total	7440-39-3	E420	0.00010	mg/L		0.00133	<0.00010	----	----	----
beryllium, total	7440-41-7	E420	0.000100	mg/L		<0.000100	<0.000100	----	----	----
bismuth, total	7440-69-9	E420	0.000050	mg/L		<0.000050	<0.000050	----	----	----
boron, total	7440-42-8	E420	0.010	mg/L		<0.010	<0.010	----	----	----
cadmium, total	7440-43-9	E420	0.0000050	mg/L		0.0000099	<0.0000050	----	----	----
calcium, total	7440-70-2	E420	0.050	mg/L		4.08	<0.050	----	----	----
cesium, total	7440-46-2	E420	0.000010	mg/L		<0.000010	<0.000010	----	----	----
chromium, total	7440-47-3	E420	0.00050	mg/L		0.00226	<0.00050	----	----	----
cobalt, total	7440-48-4	E420	0.00010	mg/L		0.00054	<0.00010	----	----	----
copper, total	7440-50-8	E420	0.00050	mg/L		0.00189	<0.00050	----	----	----
iron, total	7439-89-6	E420	0.010	mg/L		0.928	<0.010	----	----	----
lead, total	7439-92-1	E420	0.000050	mg/L		0.000147	<0.000050	----	----	----
lithium, total	7439-93-2	E420	0.0010	mg/L		<0.0010	<0.0010	----	----	----
magnesium, total	7439-95-4	E420	0.0050	mg/L		0.602	<0.0050	----	----	----
manganese, total	7439-96-5	E420	0.00010	mg/L		0.0278	<0.00010	----	----	----
mercury, total	7439-97-6	E508	0.0000050	mg/L		<0.0000050	<0.0000050	----	----	----

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CDF4-SNOW	DORIS-BLANKE	----	----	----
					Client sampling date / time	07-May-2022 16:00	05-May-2022 17:05	----	----	----
						YL2200455-006	YL2200455-007	--------	--------	--------
						Result	Result	----	----	----
Total Metals										
molybdenum, total	7439-98-7	E420	0.000050	mg/L		0.000063	<0.000050	----	----	----
nickel, total	7440-02-0	E420	0.00050	mg/L		0.00099	<0.00050	----	----	----
phosphorus, total	7723-14-0	E420	0.050	mg/L		<0.050	<0.050	----	----	----
potassium, total	7440-09-7	E420	0.050	mg/L		0.173	<0.050	----	----	----
rubidium, total	7440-17-7	E420	0.00020	mg/L		<0.00020	<0.00020	----	----	----
selenium, total	7782-49-2	E420	0.000050	mg/L		<0.000050	<0.000050	----	----	----
silicon, total	7440-21-3	E420	0.10	mg/L		0.70	<0.10	----	----	----
silver, total	7440-22-4	E420	0.000010	mg/L		<0.000010	<0.000010	----	----	----
sodium, total	7440-23-5	E420	0.050	mg/L		1.05	<0.050	----	----	----
strontium, total	7440-24-6	E420	0.00020	mg/L		0.00551	<0.00020	----	----	----
sulfur, total	7704-34-9	E420	0.50	mg/L		<0.50	<0.50	----	----	----
tellurium, total	13494-80-9	E420	0.00020	mg/L		<0.00020	<0.00020	----	----	----
thallium, total	7440-28-0	E420	0.000010	mg/L		<0.000010	<0.000010	----	----	----
thorium, total	7440-29-1	E420	0.00010	mg/L		<0.00010	<0.00010	----	----	----
tin, total	7440-31-5	E420	0.00010	mg/L		<0.00010	<0.00010	----	----	----
titanium, total	7440-32-6	E420	0.00030	mg/L		0.0252	<0.00030	----	----	----
tungsten, total	7440-33-7	E420	0.00010	mg/L		<0.00010	<0.00010	----	----	----
uranium, total	7440-61-1	E420	0.000010	mg/L		<0.000010	<0.000010	----	----	----
vanadium, total	7440-62-2	E420	0.00050	mg/L		0.00219	<0.00050	----	----	----
zinc, total	7440-66-6	E420	0.0030	mg/L		<0.0030	<0.0030	----	----	----
zirconium, total	7440-67-7	E420	0.00020	mg/L		<0.00020	<0.00020	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2200455**	Page	: 1 of 15
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: 145 King Street East, Suite 400 Toronto ON Canada M5C 2Y7	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Snowcore Dustfall	Date Samples Received	: 11-May-2022 16:30
PO	: OL 1108073	Issue Date	: 25-May-2022 15:38
C-O-C number	: ----		
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 7		
No. of samples analysed	: 7		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
CDF4-SNOW	E298	07-May-2022	18-May-2022	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
TIADF3-SNOW	E298	07-May-2022	18-May-2022	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
DFA1-SNOW	E298	06-May-2022	18-May-2022	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
TIADF1-SNOW	E298	06-May-2022	18-May-2022	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
TIADF2-SNOW	E298	06-May-2022	18-May-2022	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
CONTROLDF-SNOW	E298	06-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
DORIS-BLANKE	E298	05-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE CDF4-SNOW	E235.Br-L	07-May-2022	----	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE TIADF3-SNOW	E235.Br-L	07-May-2022	----	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE DFA1-SNOW	E235.Br-L	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE TIADF1-SNOW	E235.Br-L	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE TIADF2-SNOW	E235.Br-L	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE CONTROLDF-SNOW	E235.Br-L	06-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE DORIS-BLANKE	E235.Br-L	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE CDF4-SNOW	E235.Cl	07-May-2022	----	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE TIADF3-SNOW	E235.Cl	07-May-2022	----	----	----		19-May-2022	28 days	11 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride in Water by IC										
HDPE DFA1-SNOW	E235.Cl	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE TIADF1-SNOW	E235.Cl	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE TIADF2-SNOW	E235.Cl	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE CONTROLDF-SNOW	E235.Cl	06-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE DORIS-BLANKE	E235.Cl	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE CDF4-SNOW	E235.F	07-May-2022	----	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE TIADF3-SNOW	E235.F	07-May-2022	----	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE DFA1-SNOW	E235.F	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE TIADF1-SNOW	E235.F	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Fluoride in Water by IC										
HDPE TIADF2-SNOW	E235.F	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE CONTROLDF-SNOW	E235.F	06-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE DORIS-BLANKE	E235.F	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE CDF4-SNOW	E235.NO3-L	07-May-2022	----	----	----		19-May-2022	3 days	11 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE TIADF3-SNOW	E235.NO3-L	07-May-2022	----	----	----		19-May-2022	3 days	11 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE DFA1-SNOW	E235.NO3-L	06-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE TIADF1-SNOW	E235.NO3-L	06-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE TIADF2-SNOW	E235.NO3-L	06-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE CONTROLDF-SNOW	E235.NO3-L	06-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE DORIS-BLANKE	E235.NO3-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE CDF4-SNOW	E235.NO2-L	07-May-2022	----	----	----		19-May-2022	3 days	11 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE TIADF3-SNOW	E235.NO2-L	07-May-2022	----	----	----		19-May-2022	3 days	11 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE DFA1-SNOW	E235.NO2-L	06-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE TIADF1-SNOW	E235.NO2-L	06-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE TIADF2-SNOW	E235.NO2-L	06-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE CONTROLDF-SNOW	E235.NO2-L	06-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE DORIS-BLANKE	E235.NO2-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Sulfate in Water by IC										
HDPE CDF4-SNOW	E235.SO4	07-May-2022	----	----	----		19-May-2022	28 days	11 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate in Water by IC										
HDPE TIADF3-SNOW	E235.SO4	07-May-2022	----	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE DFA1-SNOW	E235.SO4	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE TIADF1-SNOW	E235.SO4	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE TIADF2-SNOW	E235.SO4	06-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE CONTROLDF-SNOW	E235.SO4	06-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE DORIS-BLANKE	E235.SO4	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Physical Tests : TDS by Gravimetry										
HDPE CDF4-SNOW	E162	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE TIADF3-SNOW	E162	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE CONTROLDF-SNOW	E162	06-May-2022	----	----	----		18-May-2022	7 days	12 days	× EHT

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TDS by Gravimetry										
HDPE DFA1-SNOW	E162	06-May-2022	----	----	----		18-May-2022	7 days	12 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE TIADF1-SNOW	E162	06-May-2022	----	----	----		18-May-2022	7 days	12 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE TIADF2-SNOW	E162	06-May-2022	----	----	----		18-May-2022	7 days	12 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE DORIS-BLANKE	E162	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE CDF4-SNOW	E160	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE TIADF3-SNOW	E160	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE CONTROLDF-SNOW	E160	06-May-2022	----	----	----		18-May-2022	7 days	12 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE DFA1-SNOW	E160	06-May-2022	----	----	----		18-May-2022	7 days	12 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE TIADF1-SNOW	E160	06-May-2022	----	----	----		18-May-2022	7 days	12 days	× EHT

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TSS by Gravimetry										
HDPE										
TIADF2-SNOW	E160	06-May-2022	----	----	----		18-May-2022	7 days	12 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE										
DORIS-BLANKE	E160	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
CDF4-SNOW	E508	07-May-2022	----	----	----		18-May-2022	28 days	11 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
TIADF3-SNOW	E508	07-May-2022	----	----	----		18-May-2022	28 days	11 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
CONTROLDF-SNOW	E508	06-May-2022	----	----	----		18-May-2022	28 days	12 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
DFA1-SNOW	E508	06-May-2022	----	----	----		18-May-2022	28 days	12 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
TIADF1-SNOW	E508	06-May-2022	----	----	----		18-May-2022	28 days	12 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
TIADF2-SNOW	E508	06-May-2022	----	----	----		18-May-2022	28 days	12 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial total (hydrochloric acid)										
DORIS-BLANKE	E508	05-May-2022	----	----	----		18-May-2022	28 days	13 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) CDF4-SNOW	E420	07-May-2022	----	----	----		19-May-2022	180 days	12 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) TIADF3-SNOW	E420	07-May-2022	----	----	----		19-May-2022	180 days	12 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) CONTROLDF-SNOW	E420	06-May-2022	----	----	----		19-May-2022	180 days	13 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) DFA1-SNOW	E420	06-May-2022	----	----	----		19-May-2022	180 days	13 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) TIADF1-SNOW	E420	06-May-2022	----	----	----		19-May-2022	180 days	13 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) TIADF2-SNOW	E420	06-May-2022	----	----	----		19-May-2022	180 days	13 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE total (nitric acid) DORIS-BLANKE	E420	05-May-2022	----	----	----		19-May-2022	180 days	14 days	✓

Legend & Qualifier Definitions

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

EHT: Exceeded ALS recommended hold time prior to analysis.

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence	E298	492754	1	8	12.5	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	492284	1	18	5.5	5.0	✓
Chloride in Water by IC	E235.Cl	492283	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	492282	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	492285	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	492286	1	18	5.5	5.0	✓
Sulfate in Water by IC	E235.SO4	492287	1	18	5.5	5.0	✓
TDS by Gravimetry	E162	492132	1	12	8.3	5.0	✓
Total Mercury in Water by CVAAS	E508	492177	1	16	6.2	5.0	✓
Total Metals in Water by CRC ICPMS	E420	492142	1	16	6.2	5.0	✓
TSS by Gravimetry	E160	492145	1	12	8.3	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence	E298	492754	1	8	12.5	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	492284	1	18	5.5	5.0	✓
Chloride in Water by IC	E235.Cl	492283	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	492282	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	492285	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	492286	1	18	5.5	5.0	✓
Sulfate in Water by IC	E235.SO4	492287	1	18	5.5	5.0	✓
TDS by Gravimetry	E162	492132	1	12	8.3	5.0	✓
Total Mercury in Water by CVAAS	E508	492177	1	16	6.2	5.0	✓
Total Metals in Water by CRC ICPMS	E420	492142	1	16	6.2	5.0	✓
TSS by Gravimetry	E160	492145	1	12	8.3	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence	E298	492754	1	8	12.5	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	492284	1	18	5.5	5.0	✓
Chloride in Water by IC	E235.Cl	492283	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	492282	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	492285	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	492286	1	18	5.5	5.0	✓
Sulfate in Water by IC	E235.SO4	492287	1	18	5.5	5.0	✓
TDS by Gravimetry	E162	492132	1	12	8.3	5.0	✓
Total Mercury in Water by CVAAS	E508	492177	1	16	6.2	5.0	✓
Total Metals in Water by CRC ICPMS	E420	492142	1	16	6.2	5.0	✓
TSS by Gravimetry	E160	492145	1	12	8.3	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence	E298	492754	1	8	12.5	5.0	✓

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Matrix Spikes (MS) - Continued							
Bromide in Water by IC (Low Level)	E235.Br-L	492284	1	18	5.5	5.0	✓
Chloride in Water by IC	E235.Cl	492283	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	492282	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	492285	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	492286	1	18	5.5	5.0	✓
Sulfate in Water by IC	E235.SO4	492287	1	18	5.5	5.0	✓
Total Mercury in Water by CVAAS	E508	492177	1	16	6.2	5.0	✓
Total Metals in Water by CRC ICPMS	E420	492142	1	16	6.2	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
TSS by Gravimetry	E160 Vancouver - Environmental	Water	APHA 2540 D (mod)	Total Suspended Solids (TSS) are determined by filtering a sample through a glass fibre filter, following by drying of the filter at 104 ± 1°C, with gravimetric measurement of the filtered solids. Samples containing very high dissolved solid content (i.e. seawaters, brackish waters) may produce a positive bias by this method. Alternate analysis methods are available for these types of samples.
TDS by Gravimetry	E162 Vancouver - Environmental	Water	APHA 2540 C (mod)	Total Dissolved Solids (TDS) are determined by filtering a sample through a glass fibre filter, with evaporation of the filtrate at 180 ± 2°C for 16 hours or to constant weight, with gravimetric measurement of the residue.
Bromide in Water by IC (Low Level)	E235.Br-L Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Chloride in Water by IC	E235.Cl Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Fluoride in Water by IC	E235.F Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC (Low Level)	E235.NO2-L Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate in Water by IC (Low Level)	E235.NO3-L Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate in Water by IC	E235.SO4 Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence	E298 Vancouver - Environmental	Water	J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in water is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Total Metals in Water by CRC ICPMS	E420 Vancouver - Environmental	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Total Mercury in Water by CVAAS	E508 Vancouver - Environmental	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
Hardness (Calculated) from Total Ca/Mg	EC100A Vancouver - Environmental	Water	APHA 2340B	"Hardness (as CaCO3), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed in $CaCO_3$ equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations. Hardness from total Ca/Mg is normally comparable to Dissolved Hardness in non-turbid waters.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP298 Vancouver - Environmental	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **YL2200455**	Page	: 1 of 10
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: 145 King Street East, Suite 400 Toronto ON Canada M5C 2Y7	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Snowcore Dustfall	Date Samples Received	: 11-May-2022 16:30
PO	: OL 1108073	Date Analysis Commenced	: 18-May-2022
C-O-C number	: ----	Issue Date	: 25-May-2022 15:38
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 7		
No. of samples analysed	: 7		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caleb Deroche	Lab Analyst	Vancouver Metals, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Vancouver Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Vancouver Inorganics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 492132)											
VA22B0701-014	Anonymous	solids, total dissolved [TDS]	----	E162	20	mg/L	526	541	2.81%	20%	----
Physical Tests (QC Lot: 492145)											
VA22B0701-014	Anonymous	solids, total suspended [TSS]	----	E160	3.0	mg/L	11.4	14.8	3.4	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492282)											
YL2200455-001	CONTROLDF-SNOW	fluoride	16984-48-8	E235.F	0.020	mg/L	<0.020	<0.020	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492283)											
YL2200455-001	CONTROLDF-SNOW	chloride	16887-00-6	E235.Cl	0.50	mg/L	3.57	3.60	0.02	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492284)											
YL2200455-001	CONTROLDF-SNOW	bromide	24959-67-9	E235.Br-L	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492285)											
YL2200455-001	CONTROLDF-SNOW	nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	0.0596	0.0603	1.18%	20%	----
Anions and Nutrients (QC Lot: 492286)											
YL2200455-001	CONTROLDF-SNOW	nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492287)											
YL2200455-001	CONTROLDF-SNOW	sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	<0.30	<0.30	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492754)											
YL2200455-001	CONTROLDF-SNOW	ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0297	0.0300	0.0004	Diff <2x LOR	----
Total Metals (QC Lot: 492142)											
CG2205706-001	Anonymous	aluminum, total	7429-90-5	E420	0.0060	mg/L	<0.0060	<0.0060	0	Diff <2x LOR	----
		antimony, total	7440-36-0	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E420	0.00020	mg/L	0.00026	0.00025	0.00002	Diff <2x LOR	----
		barium, total	7440-39-3	E420	0.00020	mg/L	0.0236	0.0234	0.848%	20%	----
		beryllium, total	7440-41-7	E420	0.000040	mg/L	<0.040 µg/L	<0.000040	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E420	0.000100	mg/L	<0.000100	<0.000100	0	Diff <2x LOR	----
		boron, total	7440-42-8	E420	0.020	mg/L	<0.020	<0.020	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E420	0.0000100	mg/L	0.0401 µg/L	0.0000393	0.0000008	Diff <2x LOR	----
		calcium, total	7440-70-2	E420	0.100	mg/L	386	387	0.330%	20%	----
		cesium, total	7440-46-2	E420	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		chromium, total	7440-47-3	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E420	0.00020	mg/L	0.24 µg/L	0.00024	0.0000002	Diff <2x LOR	----
		copper, total	7440-50-8	E420	0.00100	mg/L	<0.00100	<0.00100	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 492142) - continued											
CG2205706-001	Anonymous	iron, total	7439-89-6	E420	0.020	mg/L	0.165	0.166	0.0005	Diff <2x LOR	----
		lead, total	7439-92-1	E420	0.000100	mg/L	<0.000100	<0.000100	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E420	0.0020	mg/L	0.0333	0.0334	0.0364%	20%	----
		magnesium, total	7439-95-4	E420	0.0100	mg/L	302	298	1.34%	20%	----
		manganese, total	7439-96-5	E420	0.00020	mg/L	0.214	0.214	0.0306%	20%	----
		molybdenum, total	7439-98-7	E420	0.000100	mg/L	0.000638	0.000654	0.000017	Diff <2x LOR	----
		nickel, total	7440-02-0	E420	0.00100	mg/L	0.00261	0.00265	0.00003	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E420	0.100	mg/L	<0.100	<0.100	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E420	0.100	mg/L	5.13	5.06	1.40%	20%	----
		rubidium, total	7440-17-7	E420	0.00040	mg/L	0.00290	0.00285	0.00005	Diff <2x LOR	----
		selenium, total	7782-49-2	E420	0.000100	mg/L	5.72 µg/L	0.00538	6.05%	20%	----
		silicon, total	7440-21-3	E420	0.20	mg/L	4.62	4.53	1.94%	20%	----
		silver, total	7440-22-4	E420	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E420	0.100	mg/L	3.88	3.82	1.46%	20%	----
		strontium, total	7440-24-6	E420	0.00040	mg/L	0.257	0.257	0.243%	20%	----
		sulfur, total	7704-34-9	E420	1.00	mg/L	530	523	1.36%	20%	----
		tellurium, total	13494-80-9	E420	0.00040	mg/L	<0.00040	<0.00040	0	Diff <2x LOR	----
		thallium, total	7440-28-0	E420	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		thorium, total	7440-29-1	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		tin, total	7440-31-5	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E420	0.00060	mg/L	<0.00060	<0.00060	0	Diff <2x LOR	----
		tungsten, total	7440-33-7	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E420	0.000020	mg/L	0.00716	0.00722	0.885%	20%	----
		vanadium, total	7440-62-2	E420	0.00100	mg/L	<0.00100	<0.00100	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E420	0.0060	mg/L	<0.0060	<0.0060	0	Diff <2x LOR	----
		zirconium, total	7440-67-7	E420	0.00040	mg/L	<0.00040	<0.00040	0	Diff <2x LOR	----
Total Metals (QC Lot: 492177)											
VA22B0234-001	Anonymous	mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	<0.0000050	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 492132)						
solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
Physical Tests (QCLot: 492145)						
solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
Anions and Nutrients (QCLot: 492282)						
fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
Anions and Nutrients (QCLot: 492283)						
chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
Anions and Nutrients (QCLot: 492284)						
bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	----
Anions and Nutrients (QCLot: 492285)						
nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 492286)						
nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
Anions and Nutrients (QCLot: 492287)						
sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
Anions and Nutrients (QCLot: 492754)						
ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Total Metals (QCLot: 492142)						
aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	----
antimony, total	7440-36-0	E420	0.0001	mg/L	<0.00010	----
arsenic, total	7440-38-2	E420	0.0001	mg/L	<0.00010	----
barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	----
beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	----
bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	----
boron, total	7440-42-8	E420	0.01	mg/L	<0.010	----
cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	----
calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	----
cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	----
chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	----
cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	----
copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	----
iron, total	7439-89-6	E420	0.01	mg/L	<0.010	----
lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 492142) - continued						
lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	----
magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	----
manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	----
molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	----
nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	----
phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	----
potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	----
rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	----
selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	----
silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	----
silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	----
sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	----
strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	----
sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	----
tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	----
thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	----
thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	----
tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	----
titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	----
tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	----
uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	----
vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	----
zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	----
zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	----
Total Metals (QCLot: 492177)						
mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 492132)									
solids, total dissolved [TDS]	----	E162	10	mg/L	1000 mg/L	102	85.0	115	----
Physical Tests (QCLot: 492145)									
solids, total suspended [TSS]	----	E160	3	mg/L	150 mg/L	97.0	85.0	115	----
Anions and Nutrients (QCLot: 492282)									
fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	99.3	90.0	110	----
Anions and Nutrients (QCLot: 492283)									
chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	103	90.0	110	----
Anions and Nutrients (QCLot: 492284)									
bromide	24959-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	100	85.0	115	----
Anions and Nutrients (QCLot: 492285)									
nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	104	90.0	110	----
Anions and Nutrients (QCLot: 492286)									
nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	100	90.0	110	----
Anions and Nutrients (QCLot: 492287)									
sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	107	90.0	110	----
Anions and Nutrients (QCLot: 492754)									
ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	106	85.0	115	----
Total Metals (QCLot: 492142)									
aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	109	80.0	120	----
antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	102	80.0	120	----
arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	105	80.0	120	----
barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	107	80.0	120	----
beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	96.5	80.0	120	----
bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	97.8	80.0	120	----
boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	92.2	80.0	120	----
cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	102	80.0	120	----
calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	98.0	80.0	120	----
cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	105	80.0	120	----
chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	103	80.0	120	----
cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	102	80.0	120	----
copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	102	80.0	120	----
iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	102	80.0	120	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 492142) - continued									
lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	96.9	80.0	120	----
lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	97.4	80.0	120	----
magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	102	80.0	120	----
manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	103	80.0	120	----
molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	103	80.0	120	----
nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	103	80.0	120	----
phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	105	80.0	120	----
potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	105	80.0	120	----
rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	107	80.0	120	----
selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	108	80.0	120	----
silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	108	80.0	120	----
silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	94.2	80.0	120	----
sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	105	80.0	120	----
strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	101	80.0	120	----
sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	93.9	80.0	120	----
tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	103	80.0	120	----
thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	96.0	80.0	120	----
thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	96.6	80.0	120	----
tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	98.6	80.0	120	----
titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	97.2	80.0	120	----
tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	94.1	80.0	120	----
uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	100	80.0	120	----
vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	104	80.0	120	----
zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	102	80.0	120	----
zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	96.9	80.0	120	----
Total Metals (QCLot: 492177)									
mercury, total	7439-97-6	E508	0.000005	mg/L	0.0001 mg/L	107	80.0	120	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 492282)										
YL2200455-002	TIADF1-SNOW	fluoride	16984-48-8	E235.F	0.968 mg/L	1 mg/L	96.8	75.0	125	----
Anions and Nutrients (QCLot: 492283)										
YL2200455-002	TIADF1-SNOW	chloride	16887-00-6	E235.Cl	98.4 mg/L	100 mg/L	98.4	75.0	125	----
Anions and Nutrients (QCLot: 492284)										
YL2200455-002	TIADF1-SNOW	bromide	24959-67-9	E235.Br-L	0.480 mg/L	0.5 mg/L	96.0	75.0	125	----
Anions and Nutrients (QCLot: 492285)										
YL2200455-002	TIADF1-SNOW	nitrate (as N)	14797-55-8	E235.NO3-L	2.51 mg/L	2.5 mg/L	100	75.0	125	----
Anions and Nutrients (QCLot: 492286)										
YL2200455-002	TIADF1-SNOW	nitrite (as N)	14797-65-0	E235.NO2-L	0.481 mg/L	0.5 mg/L	96.2	75.0	125	----
Anions and Nutrients (QCLot: 492287)										
YL2200455-002	TIADF1-SNOW	sulfate (as SO4)	14808-79-8	E235.SO4	102 mg/L	100 mg/L	102	75.0	125	----
Anions and Nutrients (QCLot: 492754)										
YL2200455-002	TIADF1-SNOW	ammonia, total (as N)	7664-41-7	E298	0.0980 mg/L	0.1 mg/L	98.0	75.0	125	----
Total Metals (QCLot: 492142)										
CG2205706-002	Anonymous	aluminum, total	7429-90-5	E420	0.204 mg/L	0.2 mg/L	102	70.0	130	----
		antimony, total	7440-36-0	E420	0.0206 mg/L	0.02 mg/L	103	70.0	130	----
		arsenic, total	7440-38-2	E420	0.0214 mg/L	0.02 mg/L	107	70.0	130	----
		barium, total	7440-39-3	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		beryllium, total	7440-41-7	E420	0.0386 mg/L	0.04 mg/L	96.6	70.0	130	----
		bismuth, total	7440-69-9	E420	0.00896 mg/L	0.01 mg/L	89.6	70.0	130	----
		boron, total	7440-42-8	E420	0.093 mg/L	0.1 mg/L	92.9	70.0	130	----
		cadmium, total	7440-43-9	E420	0.00396 mg/L	0.004 mg/L	99.1	70.0	130	----
		calcium, total	7440-70-2	E420	ND mg/L	4 mg/L	ND	70.0	130	----
		cesium, total	7440-46-2	E420	0.0107 mg/L	0.01 mg/L	107	70.0	130	----
		chromium, total	7440-47-3	E420	0.0412 mg/L	0.04 mg/L	103	70.0	130	----
		cobalt, total	7440-48-4	E420	0.0196 mg/L	0.02 mg/L	97.9	70.0	130	----
		copper, total	7440-50-8	E420	0.0188 mg/L	0.02 mg/L	94.2	70.0	130	----
		iron, total	7439-89-6	E420	1.94 mg/L	2 mg/L	96.8	70.0	130	----
		lead, total	7439-92-1	E420	0.0178 mg/L	0.02 mg/L	89.2	70.0	130	----
		lithium, total	7439-93-2	E420	0.0990 mg/L	0.1 mg/L	99.0	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 492142) - continued										
CG2205706-002	Anonymous	magnesium, total	7439-95-4	E420	ND mg/L	1 mg/L	ND	70.0	130	----
		manganese, total	7439-96-5	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		molybdenum, total	7439-98-7	E420	0.0217 mg/L	0.02 mg/L	109	70.0	130	----
		nickel, total	7440-02-0	E420	0.0380 mg/L	0.04 mg/L	94.9	70.0	130	----
		phosphorus, total	7723-14-0	E420	10.9 mg/L	10 mg/L	109	70.0	130	----
		potassium, total	7440-09-7	E420	ND mg/L	4 mg/L	ND	70.0	130	----
		rubidium, total	7440-17-7	E420	0.0212 mg/L	0.02 mg/L	106	70.0	130	----
		selenium, total	7782-49-2	E420	0.0451 mg/L	0.04 mg/L	113	70.0	130	----
		silicon, total	7440-21-3	E420	10.1 mg/L	10 mg/L	101	70.0	130	----
		silver, total	7440-22-4	E420	0.00403 mg/L	0.004 mg/L	101	70.0	130	----
		sodium, total	7440-23-5	E420	ND mg/L	2 mg/L	ND	70.0	130	----
		strontium, total	7440-24-6	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		sulfur, total	7704-34-9	E420	ND mg/L	20 mg/L	ND	70.0	130	----
		tellurium, total	13494-80-9	E420	0.0424 mg/L	0.04 mg/L	106	70.0	130	----
		thallium, total	7440-28-0	E420	0.00358 mg/L	0.004 mg/L	89.6	70.0	130	----
		thorium, total	7440-29-1	E420	0.0205 mg/L	0.02 mg/L	102	70.0	130	----
		tin, total	7440-31-5	E420	0.0196 mg/L	0.02 mg/L	98.0	70.0	130	----
		titanium, total	7440-32-6	E420	0.0412 mg/L	0.04 mg/L	103	70.0	130	----
		tungsten, total	7440-33-7	E420	0.0187 mg/L	0.02 mg/L	93.6	70.0	130	----
		uranium, total	7440-61-1	E420	ND mg/L	0.004 mg/L	ND	70.0	130	----
		vanadium, total	7440-62-2	E420	0.106 mg/L	0.1 mg/L	106	70.0	130	----
		zinc, total	7440-66-6	E420	0.375 mg/L	0.4 mg/L	93.7	70.0	130	----
		zirconium, total	7440-67-7	E420	0.0409 mg/L	0.04 mg/L	102	70.0	130	----
Total Metals (QCLot: 492177)										
VA22B0234-002	Anonymous	mercury, total	7439-97-6	E508	0.0000970 mg/L	0.0001 mg/L	97.0	70.0	130	----

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other	● Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:	
Invoice To	Same as Report ? Y	Client / Project Information	Analysis Request
Hardcopy of Invoice with Report?		Job #:	Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE: OL 1108073	
Contact:		LSD:	
Address:		Job Ref: Doris Snowcore Dustfall	
Phone:	Fax:	Quote #:	
Lab Work Order # (lab use only)		ALS Contact: Amber Springer	Sampler: TL/WN

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	TIME	Sample Type	TDS	TSS	Anions	Total-Metals + Total Hg	Ammonia	Number of Containers
	CONTROLDF-SNOW	06-May-22	9:30	Water	X	X	X	X	X	4
	TIADF1-SNOW	06-May-22	14:50	Water	X	X	X	X	X	4
	TIADF2-SNOW	06-May-22	13:40	Water	X	X	X	X	X	4
	TIADF3-SNOW	07-May-22	14:45	Water	X	X	X	X	X	4
	DFA1-SNOW	06-May-22	16:15	Water	X	X	X	X	X	4
	CDF4-SNOW	07-May-22	16:00	Water	X	X	X	X	X	4
	DORIS -BLANKE	05-May-22	17:05	Water	X	X	X	X	X	4

Environmental Division
Yellowknife
Work Order Reference
YL2200455

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	11-May-22	7:00	MAg	May 11/22	16:30	4.9 °C				

GENF 18.01 Front

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution		Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other		◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax		○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1:	enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2:	Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:		Analysis Request
Invoice To	Same as Report ? Y	Client / Project Information		Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:		P
Company:		PO / AFE:	OL 1108073	
Contact:		LSD:		
Address:		Job Ref:	Doris Snowcore Dustfall	
Phone:	Fax:	Quote #:		
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler: TL/WN

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	TIME	Sample Type	TDS	TSS	Anions	Total-Metals + Total Hg	Ammonia							Number of Containers
	CONTROLDF-SNOW	06-May-22	9:30	Water	X	X	X	X	X							4
	TIADF1-SNOW	06-May-22	14:50	Water	X	X	X	X	X							4
	TIADF2-SNOW	06-May-22	13:40	Water	X	X	X	X	X							4
	TIADF3-SNOW	07-May-22	14:45	Water	X	X	X	X	X							4
	DFA1-SNOW	06-May-22	16:15	Water	X	X	X	X	X							4
	CDF4-SNOW	07-May-22	16:00	Water	X	X	X	X	X							4
	DORIS -BLANKE	05-May-22	17:05	Water	X	X	X	X	X							4

Environmental Division
Yellowknife
Work Order Reference
YL2200455

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	11-May-22	7:00		May 11/22	16:30	4.9 °C		MAY 2022	1:30	

12°C

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2200456**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: 145 King Street East, Suite 400 Toronto ON Canada M5C 2Y7	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall Snowcore	Date Samples Received	: 11-May-2022 16:30
PO	: OL 1108073	Date Analysis Commenced	: 18-May-2022
C-O-C number	: ----	Issue Date	: 25-May-2022 15:36
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 11		
No. of samples analysed	: 11		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caleb Deroche	Lab Analyst	Metals, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
mg/L	milligrams per litre

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLM	*Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).*

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01-SNOW	M-DF02-SNOW	M-DF03-SNOW	M-DF04-SNOW	M-DF05-SNOW
					Client sampling date / time	05-May-2022 14:15	05-May-2022 10:15	05-May-2022 13:25	05-May-2022 14:10	05-May-2022 13:25
						YL2200456-001	YL2200456-002	YL2200456-003	YL2200456-004	YL2200456-005
						Result	Result	Result	Result	Result
Physical Tests										
hardness (as CaCO3), from total Ca/Mg	----	EC100A	0.60	mg/L		3.09	1.27	1.35	4.95	0.94
solids, total dissolved [TDS]	----	E162	10	mg/L		14	<10	<10	13	<10
solids, total suspended [TSS]	----	E160	3.0	mg/L		<3.0	<3.0	3.5	8.1	<3.0
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L		0.0234	<0.0050	0.0116	0.0216	<0.0050
bromide	24959-67-9	E235.Br-L	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
chloride	16887-00-6	E235.Cl	0.50	mg/L		6.96	3.16	3.47	4.05	1.92
fluoride	16984-48-8	E235.F	0.020	mg/L		<0.020	<0.020	<0.020	<0.020	<0.020
nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L		0.0395	0.0253	0.0297	0.0368	0.0204
nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L		0.30	<0.30	<0.30	0.32	<0.30
Total Metals										
aluminum, total	7429-90-5	E420	0.0030	mg/L		0.0133	0.0102	0.0104	0.172	0.0068
antimony, total	7440-36-0	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
arsenic, total	7440-38-2	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
barium, total	7440-39-3	E420	0.00010	mg/L		0.00022	0.00020	0.00021	0.00606	0.00017
beryllium, total	7440-41-7	E420	0.000100	mg/L		<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
bismuth, total	7440-69-9	E420	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
boron, total	7440-42-8	E420	0.010	mg/L		<0.010	<0.010	<0.010	<0.010	<0.010
cadmium, total	7440-43-9	E420	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
calcium, total	7440-70-2	E420	0.050	mg/L		0.363	0.141	0.139	1.21	0.130
cesium, total	7440-46-2	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
chromium, total	7440-47-3	E420	0.00050	mg/L		0.00080	<0.00050	<0.00050	0.00079	<0.00050
cobalt, total	7440-48-4	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	0.00020	<0.00010
copper, total	7440-50-8	E420	0.00050	mg/L		<0.00050	<0.00050	<0.00050	0.00064	<0.00050
iron, total	7439-89-6	E420	0.010	mg/L		0.024	0.015	<0.010	0.341	<0.010
lead, total	7439-92-1	E420	0.000050	mg/L		<0.000050	<0.000050	<0.000050	0.000061	<0.000050
lithium, total	7439-93-2	E420	0.0010	mg/L		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
magnesium, total	7439-95-4	E420	0.0050	mg/L		0.531	0.224	0.243	0.469	0.150
manganese, total	7439-96-5	E420	0.00010	mg/L		0.00138	0.00145	0.00187	0.0118	0.00188

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01-SNOW	M-DF02-SNOW	M-DF03-SNOW	M-DF04-SNOW	M-DF05-SNOW
					Client sampling date / time	05-May-2022 14:15	05-May-2022 10:15	05-May-2022 13:25	05-May-2022 14:10	05-May-2022 13:25
						YL2200456-001	YL2200456-002	YL2200456-003	YL2200456-004	YL2200456-005
						Result	Result	Result	Result	Result
Total Metals										
mercury, total	7439-97-6	E508	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
molybdenum, total	7439-98-7	E420	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
nickel, total	7440-02-0	E420	0.00050	mg/L		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
phosphorus, total	7723-14-0	E420	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
potassium, total	7440-09-7	E420	0.050	mg/L		0.163	0.068	0.122	0.122	0.084
rubidium, total	7440-17-7	E420	0.00020	mg/L		<0.00020	<0.00020	0.00028	<0.00020	<0.00020
selenium, total	7782-49-2	E420	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
silicon, total	7440-21-3	E420	0.10	mg/L		<0.10	<0.10	<0.10	0.28	<0.10
silver, total	7440-22-4	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
sodium, total	7440-23-5	E420	0.050	mg/L		3.12	1.45	1.66	1.89	0.942
strontium, total	7440-24-6	E420	0.00020	mg/L		0.00384	0.00127	0.00147	0.00243	0.00094
sulfur, total	7704-34-9	E420	0.50	mg/L		<0.50	<0.50	<0.50	<0.50	<0.50
tellurium, total	13494-80-9	E420	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
thallium, total	7440-28-0	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
thorium, total	7440-29-1	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
tin, total	7440-31-5	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
titanium, total	7440-32-6	E420	0.00030	mg/L		<0.00030	0.00032	<0.00030	0.00738	<0.00030
tungsten, total	7440-33-7	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
uranium, total	7440-61-1	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
vanadium, total	7440-62-2	E420	0.00050	mg/L		<0.00050	<0.00050	<0.00050	0.00080	<0.00050
zinc, total	7440-66-6	E420	0.0030	mg/L		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
zirconium, total	7440-67-7	E420	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06-SNOW	M-DF07-SNOW	M-DF08-SNOW	M-DF09-SNOW	Madrid-BLANKE
					Client sampling date / time	07-May-2022 09:30	07-May-2022 11:10	07-May-2022 10:55	07-May-2022 10:20	05-May-2022 17:00
						YL2200456-006	YL2200456-007	YL2200456-008	YL2200456-009	YL2200456-010
						Result	Result	Result	Result	Result
Physical Tests										
hardness (as CaCO3), from total Ca/Mg	----	EC100A	0.60	mg/L		4.77	10.2	18.9	16.2	<0.60
solids, total dissolved [TDS]	----	E162	10	mg/L		16	16	14	25	<10
solids, total suspended [TSS]	----	E160	3.0	mg/L		7.1	36.1	37.5	30.5	<3.0
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L		0.0332	0.0148	0.0205	0.0117	<0.0050
bromide	24959-67-9	E235.Br-L	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
chloride	16887-00-6	E235.Cl	0.50	mg/L		6.58	4.88	2.00	11.1	<0.50
fluoride	16984-48-8	E235.F	0.020	mg/L		<0.020	<0.020	<0.020	<0.020	<0.020
nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L		0.0708	0.0280	0.0244	0.0298	<0.0050
nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L		<0.0010	<0.0010	0.0018	<0.0010	<0.0010
sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L		0.67	<0.30	<0.30	0.38	<0.30
Total Metals										
aluminum, total	7429-90-5	E420	0.0030	mg/L		0.219	1.19	2.88	1.80	<0.0030
antimony, total	7440-36-0	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
arsenic, total	7440-38-2	E420	0.00010	mg/L		<0.00010	0.00028	0.00049	0.00045	<0.00010
barium, total	7440-39-3	E420	0.00010	mg/L		0.00072	0.00118	0.00286	0.00136	<0.00010
beryllium, total	7440-41-7	E420	0.000100	mg/L		<0.000100	<0.000100	<0.000100	<0.000100	<0.000100
bismuth, total	7440-69-9	E420	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
boron, total	7440-42-8	E420	0.010	mg/L		<0.010	<0.010	<0.010	<0.010	<0.010
cadmium, total	7440-43-9	E420	0.0000050	mg/L		<0.0000050	0.0000057	0.0000148	0.0000088	<0.0000050
calcium, total	7440-70-2	E420	0.050	mg/L		0.807	1.91	3.80	2.62	<0.050
cesium, total	7440-46-2	E420	0.000010	mg/L		<0.000010	0.000015	0.000030	0.000021	<0.000010
chromium, total	7440-47-3	E420	0.00050	mg/L		0.00055	0.00218	0.00664	0.00328	<0.00050
cobalt, total	7440-48-4	E420	0.00010	mg/L		0.00021	0.00120	0.00288	0.00179	<0.00010
copper, total	7440-50-8	E420	0.00050	mg/L		0.00071	0.00283	0.00750	0.00338	<0.00050
iron, total	7439-89-6	E420	0.010	mg/L		0.469	2.59	6.14	3.77	<0.010
lead, total	7439-92-1	E420	0.000050	mg/L		0.000088	0.000098	0.000258	0.000167	<0.000050
lithium, total	7439-93-2	E420	0.0010	mg/L		<0.0010	<0.0010	0.0014	<0.0010	<0.0010
magnesium, total	7439-95-4	E420	0.0050	mg/L		0.669	1.31	2.29	2.34	<0.0050
manganese, total	7439-96-5	E420	0.00010	mg/L		0.0149	0.0596	0.116	0.0710	<0.00010
mercury, total	7439-97-6	E508	0.0000050	mg/L		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06-SNOW	M-DF07-SNOW	M-DF08-SNOW	M-DF09-SNOW	Madrid-BLANKE
					Client sampling date / time	07-May-2022 09:30	07-May-2022 11:10	07-May-2022 10:55	07-May-2022 10:20	05-May-2022 17:00
						YL2200456-006	YL2200456-007	YL2200456-008	YL2200456-009	YL2200456-010
						Result	Result	Result	Result	Result
Total Metals										
molybdenum, total	7439-98-7	E420	0.000050	mg/L		<0.000050	0.000055	0.000127	0.000059	<0.000050
nickel, total	7440-02-0	E420	0.00050	mg/L		<0.00050	0.00164	0.00437	0.00241	<0.00050
phosphorus, total	7723-14-0	E420	0.050	mg/L		<0.050	<0.050	<0.050	<0.050	<0.050
potassium, total	7440-09-7	E420	0.050	mg/L		0.227	0.204	0.300	0.485	<0.050
rubidium, total	7440-17-7	E420	0.00020	mg/L		<0.00020	0.00024	0.00054	0.00049	<0.00020
selenium, total	7782-49-2	E420	0.000050	mg/L		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
silicon, total	7440-21-3	E420	0.10	mg/L		0.35	1.44	3.48	2.31	<0.10
silver, total	7440-22-4	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
sodium, total	7440-23-5	E420	0.050	mg/L		3.26	2.42	1.04	4.81	<0.050
strontium, total	7440-24-6	E420	0.00020	mg/L		0.00309	0.00262	0.00261	0.00707	<0.00020
sulfur, total	7704-34-9	E420	0.50	mg/L		<0.50	<0.50	<0.50	<0.50	<0.50
tellurium, total	13494-80-9	E420	0.00020	mg/L		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
thallium, total	7440-28-0	E420	0.000010	mg/L		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
thorium, total	7440-29-1	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
tin, total	7440-31-5	E420	0.00010	mg/L		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
titanium, total	7440-32-6	E420	0.00030	mg/L		0.00502	0.0312	<0.0750 DLM	<0.0450 DLM	<0.00030
tungsten, total	7440-33-7	E420	0.00010	mg/L		<0.00010	0.00013	0.00030	<0.00010	<0.00010
uranium, total	7440-61-1	E420	0.000010	mg/L		<0.000010	<0.000010	0.000011	<0.000010	<0.000010
vanadium, total	7440-62-2	E420	0.00050	mg/L		0.00121	0.00674	0.0163	0.0105	<0.00050
zinc, total	7440-66-6	E420	0.0030	mg/L		<0.0030	0.0045	0.0101	0.0056	<0.0030
zirconium, total	7440-67-7	E420	0.00020	mg/L		<0.00020	<0.00020	0.00044	0.00039	<0.00020

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID: M-DF01-SNOW-DUPLICATE	----	----	----	----
					Client sampling date / time: 05-May-2022 14:20	----	----	----	----
					YL2200456-011	--------	--------	--------	--------
					Result	----	----	----	----
Physical Tests									
hardness (as CaCO3), from total Ca/Mg	----	EC100A	0.60	mg/L	2.80	----	----	----	----
solids, total dissolved [TDS]	----	E162	10	mg/L	16	----	----	----	----
solids, total suspended [TSS]	----	E160	3.0	mg/L	<3.0	----	----	----	----
Anions and Nutrients									
ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0165	----	----	----	----
bromide	24959-67-9	E235.Br-L	0.050	mg/L	<0.050	----	----	----	----
chloride	16887-00-6	E235.Cl	0.50	mg/L	6.78	----	----	----	----
fluoride	16984-48-8	E235.F	0.020	mg/L	<0.020	----	----	----	----
nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	0.0404	----	----	----	----
nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	----	----	----	----
sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	0.32	----	----	----	----
Total Metals									
aluminum, total	7429-90-5	E420	0.0030	mg/L	0.0178	----	----	----	----
antimony, total	7440-36-0	E420	0.00010	mg/L	<0.00010	----	----	----	----
arsenic, total	7440-38-2	E420	0.00010	mg/L	<0.00010	----	----	----	----
barium, total	7440-39-3	E420	0.00010	mg/L	0.00023	----	----	----	----
beryllium, total	7440-41-7	E420	0.000100	mg/L	<0.000100	----	----	----	----
bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	----	----	----	----
boron, total	7440-42-8	E420	0.010	mg/L	<0.010	----	----	----	----
cadmium, total	7440-43-9	E420	0.0000050	mg/L	<0.0000050	----	----	----	----
calcium, total	7440-70-2	E420	0.050	mg/L	0.262	----	----	----	----
cesium, total	7440-46-2	E420	0.000010	mg/L	<0.000010	----	----	----	----
chromium, total	7440-47-3	E420	0.00050	mg/L	<0.00050	----	----	----	----
cobalt, total	7440-48-4	E420	0.00010	mg/L	<0.00010	----	----	----	----
copper, total	7440-50-8	E420	0.00050	mg/L	<0.00050	----	----	----	----
iron, total	7439-89-6	E420	0.010	mg/L	0.031	----	----	----	----
lead, total	7439-92-1	E420	0.000050	mg/L	0.000052	----	----	----	----
lithium, total	7439-93-2	E420	0.0010	mg/L	<0.0010	----	----	----	----
magnesium, total	7439-95-4	E420	0.0050	mg/L	0.521	----	----	----	----
manganese, total	7439-96-5	E420	0.00010	mg/L	0.00172	----	----	----	----
mercury, total	7439-97-6	E508	0.0000050	mg/L	<0.0000050	----	----	----	----

Analytical Results

Sub-Matrix: **Water**
(Matrix: **Water**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01-SNOW-DUPLICATE	----	----	----	----
					Client sampling date / time	05-May-2022 14:20	----	----	----	----
						YL2200456-011	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
molybdenum, total	7439-98-7	E420	0.000050	mg/L		<0.000050	----	----	----	----
nickel, total	7440-02-0	E420	0.00050	mg/L		<0.00050	----	----	----	----
phosphorus, total	7723-14-0	E420	0.050	mg/L		<0.050	----	----	----	----
potassium, total	7440-09-7	E420	0.050	mg/L		0.169	----	----	----	----
rubidium, total	7440-17-7	E420	0.00020	mg/L		<0.00020	----	----	----	----
selenium, total	7782-49-2	E420	0.000050	mg/L		<0.000050	----	----	----	----
silicon, total	7440-21-3	E420	0.10	mg/L		<0.10	----	----	----	----
silver, total	7440-22-4	E420	0.000010	mg/L		<0.000010	----	----	----	----
sodium, total	7440-23-5	E420	0.050	mg/L		3.20	----	----	----	----
strontium, total	7440-24-6	E420	0.00020	mg/L		0.00303	----	----	----	----
sulfur, total	7704-34-9	E420	0.50	mg/L		<0.50	----	----	----	----
tellurium, total	13494-80-9	E420	0.00020	mg/L		<0.00020	----	----	----	----
thallium, total	7440-28-0	E420	0.000010	mg/L		<0.000010	----	----	----	----
thorium, total	7440-29-1	E420	0.00010	mg/L		<0.00010	----	----	----	----
tin, total	7440-31-5	E420	0.00010	mg/L		<0.00010	----	----	----	----
titanium, total	7440-32-6	E420	0.00030	mg/L		<0.00060 DLM	----	----	----	----
tungsten, total	7440-33-7	E420	0.00010	mg/L		<0.00010	----	----	----	----
uranium, total	7440-61-1	E420	0.000010	mg/L		<0.000010	----	----	----	----
vanadium, total	7440-62-2	E420	0.00050	mg/L		<0.00050	----	----	----	----
zinc, total	7440-66-6	E420	0.0030	mg/L		<0.0030	----	----	----	----
zirconium, total	7440-67-7	E420	0.00020	mg/L		<0.00020	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2200456**	Page	: 1 of 21
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: 145 King Street East, Suite 400 Toronto ON Canada M5C 2Y7	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall Snowcore	Date Samples Received	: 11-May-2022 16:30
PO	: OL 1108073	Issue Date	: 25-May-2022 15:36
C-O-C number	: ----		
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 11		
No. of samples analysed	: 11		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Matrix Spike outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- Analysis Holding Time Outliers exist - please see following pages for full details.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Water**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Total Metals	QC-493928-002	----	iron, total	7439-89-6	E420	121 % MES	80.0-120%	Recovery greater than upper control limit

Result Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF07-SNOW	E298	07-May-2022	18-May-2022	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF08-SNOW	E298	07-May-2022	18-May-2022	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF09-SNOW	E298	07-May-2022	18-May-2022	----	----		19-May-2022	28 days	11 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF06-SNOW	E298	07-May-2022	18-May-2022	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
Madrid-BLANKE	E298	05-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF01-SNOW	E298	05-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF01-SNOW-DUPLICATE	E298	05-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF02-SNOW	E298	05-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF03-SNOW	E298	05-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF04-SNOW	E298	05-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Ammonia by Fluorescence										
Amber glass total (sulfuric acid)										
M-DF05-SNOW	E298	05-May-2022	18-May-2022	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE										
M-DF06-SNOW	E235.Br-L	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE										
M-DF07-SNOW	E235.Br-L	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE										
M-DF08-SNOW	E235.Br-L	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE										
M-DF09-SNOW	E235.Br-L	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE										
Madrid-BLANKE	E235.Br-L	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE M-DF01-SNOW	E235.Br-L	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE M-DF01-SNOW-DUPLICATE	E235.Br-L	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE M-DF03-SNOW	E235.Br-L	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE M-DF04-SNOW	E235.Br-L	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE M-DF05-SNOW	E235.Br-L	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Bromide in Water by IC (Low Level)										
HDPE M-DF02-SNOW	E235.Br-L	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF06-SNOW	E235.Cl	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF07-SNOW	E235.Cl	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF08-SNOW	E235.Cl	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF09-SNOW	E235.Cl	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE Madrid-BLANKE	E235.Cl	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF01-SNOW	E235.Cl	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF01-SNOW-DUPLICATE	E235.Cl	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF03-SNOW	E235.Cl	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF04-SNOW	E235.Cl	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF05-SNOW	E235.Cl	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Chloride in Water by IC										
HDPE M-DF02-SNOW	E235.Cl	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF06-SNOW	E235.F	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF07-SNOW	E235.F	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF08-SNOW	E235.F	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF09-SNOW	E235.F	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE Madrid-BLANKE	E235.F	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF01-SNOW	E235.F	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF01-SNOW-DUPLICATE	E235.F	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF03-SNOW	E235.F	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF04-SNOW	E235.F	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF05-SNOW	E235.F	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Fluoride in Water by IC										
HDPE M-DF02-SNOW	E235.F	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF06-SNOW	E235.NO3-L	07-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF07-SNOW	E235.NO3-L	07-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF08-SNOW	E235.NO3-L	07-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF09-SNOW	E235.NO3-L	07-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE Madrid-BLANKE	E235.NO3-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF01-SNOW	E235.NO3-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF01-SNOW-DUPLICATE	E235.NO3-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF03-SNOW	E235.NO3-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF04-SNOW	E235.NO3-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF05-SNOW	E235.NO3-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrate in Water by IC (Low Level)										
HDPE M-DF02-SNOW	E235.NO3-L	05-May-2022	----	----	----		19-May-2022	3 days	14 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF06-SNOW	E235.NO2-L	07-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF07-SNOW	E235.NO2-L	07-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF08-SNOW	E235.NO2-L	07-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF09-SNOW	E235.NO2-L	07-May-2022	----	----	----		19-May-2022	3 days	12 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE Madrid-BLANKE	E235.NO2-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF01-SNOW	E235.NO2-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF01-SNOW-DUPLICATE	E235.NO2-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF03-SNOW	E235.NO2-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF04-SNOW	E235.NO2-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF05-SNOW	E235.NO2-L	05-May-2022	----	----	----		19-May-2022	3 days	13 days	× EHTR
Anions and Nutrients : Nitrite in Water by IC (Low Level)										
HDPE M-DF02-SNOW	E235.NO2-L	05-May-2022	----	----	----		19-May-2022	3 days	14 days	× EHTR
Anions and Nutrients : Sulfate in Water by IC										
HDPE M-DF06-SNOW	E235.SO4	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE M-DF07-SNOW	E235.SO4	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE M-DF08-SNOW	E235.SO4	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE M-DF09-SNOW	E235.SO4	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
Madrid-BLANKE	E235.SO4	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
M-DF01-SNOW	E235.SO4	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
M-DF01-SNOW-DUPLICATE	E235.SO4	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
M-DF03-SNOW	E235.SO4	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
M-DF04-SNOW	E235.SO4	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
M-DF05-SNOW	E235.SO4	05-May-2022	----	----	----		19-May-2022	28 days	13 days	✓
Anions and Nutrients : Sulfate in Water by IC										
HDPE										
M-DF02-SNOW	E235.SO4	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Physical Tests : TDS by Gravimetry										
HDPE										
M-DF06-SNOW	E162	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE										
M-DF07-SNOW	E162	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TDS by Gravimetry										
HDPE M-DF08-SNOW	E162	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE M-DF09-SNOW	E162	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE Madrid-BLANKE	E162	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE M-DF01-SNOW	E162	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE M-DF01-SNOW-DUPLICATE	E162	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE M-DF02-SNOW	E162	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE M-DF03-SNOW	E162	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE M-DF04-SNOW	E162	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TDS by Gravimetry										
HDPE M-DF05-SNOW	E162	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TSS by Gravimetry										
HDPE M-DF06-SNOW	E160	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE M-DF07-SNOW	E160	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE M-DF08-SNOW	E160	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE M-DF09-SNOW	E160	07-May-2022	----	----	----		18-May-2022	7 days	11 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE Madrid-BLANKE	E160	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE M-DF01-SNOW	E160	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE M-DF01-SNOW-DUPLICATE	E160	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE M-DF02-SNOW	E160	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE M-DF03-SNOW	E160	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Physical Tests : TSS by Gravimetry										
HDPE										
M-DF04-SNOW	E160	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Physical Tests : TSS by Gravimetry										
HDPE										
M-DF05-SNOW	E160	05-May-2022	----	----	----		18-May-2022	7 days	13 days	× EHT
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved)										
M-DF06-SNOW	E508	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved)										
M-DF07-SNOW	E508	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved)										
M-DF08-SNOW	E508	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved)										
M-DF09-SNOW	E508	07-May-2022	----	----	----		19-May-2022	28 days	12 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved)										
Madrid-BLANKE	E508	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved)										
M-DF01-SNOW	E508	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved)										
M-DF01-SNOW-DUPLICATE	E508	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) M-DF02-SNOW	E508	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) M-DF03-SNOW	E508	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) M-DF04-SNOW	E508	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Total Metals : Total Mercury in Water by CVAAS										
Glass vial - total (lab preserved) M-DF05-SNOW	E508	05-May-2022	----	----	----		19-May-2022	28 days	14 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF06-SNOW	E420	07-May-2022	----	----	----		19-May-2022	180 days	12 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF07-SNOW	E420	07-May-2022	----	----	----		19-May-2022	180 days	12 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF08-SNOW	E420	07-May-2022	----	----	----		20-May-2022	180 days	13 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF09-SNOW	E420	07-May-2022	----	----	----		20-May-2022	180 days	13 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF01-SNOW	E420	05-May-2022	----	----	----		19-May-2022	180 days	14 days	✓

Matrix: **Water**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF02-SNOW	E420	05-May-2022	----	----	----		19-May-2022	180 days	14 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF03-SNOW	E420	05-May-2022	----	----	----		19-May-2022	180 days	14 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF04-SNOW	E420	05-May-2022	----	----	----		19-May-2022	180 days	14 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF05-SNOW	E420	05-May-2022	----	----	----		19-May-2022	180 days	14 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) Madrid-BLANKE	E420	05-May-2022	----	----	----		20-May-2022	180 days	15 days	✓
Total Metals : Total Metals in Water by CRC ICPMS										
HDPE - total (lab preserved) M-DF01-SNOW-DUPLICATE	E420	05-May-2022	----	----	----		20-May-2022	180 days	15 days	✓

Legend & Qualifier Definitions

EHTR: Exceeded ALS recommended hold time prior to sample receipt.

EHT: Exceeded ALS recommended hold time prior to analysis.

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Water**

Evaluation: × = QC frequency outside specification; ✓ = QC frequency within specification.

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence	E298	492699	2	28	7.1	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	492284	1	18	5.5	5.0	✓
Chloride in Water by IC	E235.Cl	492283	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	492282	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	492285	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	492286	1	18	5.5	5.0	✓
Sulfate in Water by IC	E235.SO4	492287	1	18	5.5	5.0	✓
TDS by Gravimetry	E162	491886	1	11	9.0	5.0	✓
Total Mercury in Water by CVAAS	E508	493765	1	20	5.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	492886	2	40	5.0	5.0	✓
TSS by Gravimetry	E160	491884	1	11	9.0	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence	E298	492699	2	28	7.1	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	492284	1	18	5.5	5.0	✓
Chloride in Water by IC	E235.Cl	492283	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	492282	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	492285	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	492286	1	18	5.5	5.0	✓
Sulfate in Water by IC	E235.SO4	492287	1	18	5.5	5.0	✓
TDS by Gravimetry	E162	491886	1	11	9.0	5.0	✓
Total Mercury in Water by CVAAS	E508	493765	1	20	5.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	492886	2	40	5.0	5.0	✓
TSS by Gravimetry	E160	491884	1	11	9.0	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence	E298	492699	2	28	7.1	5.0	✓
Bromide in Water by IC (Low Level)	E235.Br-L	492284	1	18	5.5	5.0	✓
Chloride in Water by IC	E235.Cl	492283	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	492282	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	492285	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	492286	1	18	5.5	5.0	✓
Sulfate in Water by IC	E235.SO4	492287	1	18	5.5	5.0	✓
TDS by Gravimetry	E162	491886	1	11	9.0	5.0	✓
Total Mercury in Water by CVAAS	E508	493765	1	20	5.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	492886	2	40	5.0	5.0	✓
TSS by Gravimetry	E160	491884	1	11	9.0	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence	E298	492699	2	28	7.1	5.0	✓

Matrix: **Water**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Matrix Spikes (MS) - Continued							
Bromide in Water by IC (Low Level)	E235.Br-L	492284	1	18	5.5	5.0	✓
Chloride in Water by IC	E235.Cl	492283	1	18	5.5	5.0	✓
Fluoride in Water by IC	E235.F	492282	1	18	5.5	5.0	✓
Nitrate in Water by IC (Low Level)	E235.NO3-L	492285	1	18	5.5	5.0	✓
Nitrite in Water by IC (Low Level)	E235.NO2-L	492286	1	18	5.5	5.0	✓
Sulfate in Water by IC	E235.SO4	492287	1	18	5.5	5.0	✓
Total Mercury in Water by CVAAS	E508	493765	1	20	5.0	5.0	✓
Total Metals in Water by CRC ICPMS	E420	492886	2	40	5.0	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
TSS by Gravimetry	E160 Vancouver - Environmental	Water	APHA 2540 D (mod)	Total Suspended Solids (TSS) are determined by filtering a sample through a glass fibre filter, following by drying of the filter at 104 ± 1°C, with gravimetric measurement of the filtered solids. Samples containing very high dissolved solid content (i.e. seawaters, brackish waters) may produce a positive bias by this method. Alternate analysis methods are available for these types of samples.
TDS by Gravimetry	E162 Vancouver - Environmental	Water	APHA 2540 C (mod)	Total Dissolved Solids (TDS) are determined by filtering a sample through a glass fibre filter, with evaporation of the filtrate at 180 ± 2°C for 16 hours or to constant weight, with gravimetric measurement of the residue.
Bromide in Water by IC (Low Level)	E235.Br-L Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Chloride in Water by IC	E235.Cl Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Fluoride in Water by IC	E235.F Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrite in Water by IC (Low Level)	E235.NO2-L Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate in Water by IC (Low Level)	E235.NO3-L Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate in Water by IC	E235.SO4 Vancouver - Environmental	Water	EPA 300.1 (mod)	Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence	E298 Vancouver - Environmental	Water	J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in water is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Total Metals in Water by CRC ICPMS	E420 Vancouver - Environmental	Water	EPA 200.2/6020B (mod)	Water samples are digested with nitric and hydrochloric acids, and analyzed by Collision/Reaction Cell ICPMS. Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.
Total Mercury in Water by CVAAS	E508 Vancouver - Environmental	Water	EPA 1631E (mod)	Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS
Hardness (Calculated) from Total Ca/Mg	EC100A Vancouver - Environmental	Water	APHA 2340B	"Hardness (as CaCO3), from total Ca/Mg" is calculated from the sum of total Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. "Total Hardness" refers to the sum of Calcium and Magnesium Hardness. Hardness is normally or preferentially calculated from dissolved Calcium and Magnesium concentrations, because it is a property of water due to dissolved divalent cations. Hardness from total Ca/Mg is normally comparable to Dissolved Hardness in non-turbid waters.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Preparation for Ammonia	EP298 Vancouver - Environmental	Water		Sample preparation for Preserved Nutrients Water Quality Analysis.

QUALITY CONTROL REPORT

Work Order	: **YL2200456**	Page	: 1 of 15
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: 145 King Street East, Suite 400 Toronto ON Canada M5C 2Y7	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall Snowcore	Date Samples Received	: 11-May-2022 16:30
PO	: OL 1108073	Date Analysis Commenced	: 18-May-2022
C-O-C number	: ----	Issue Date	: 25-May-2022 15:36
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 11		
No. of samples analysed	: 11		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caleb Deroche	Lab Analyst	Vancouver Metals, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Vancouver Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Physical Tests (QC Lot: 491884)											
YL2200456-001	M-DF01-SNOW	solids, total suspended [TSS]	----	E160	3.0	mg/L	<3.0	<3.0	0	Diff <2x LOR	----
Physical Tests (QC Lot: 491886)											
YL2200456-001	M-DF01-SNOW	solids, total dissolved [TDS]	----	E162	10	mg/L	14	11	2	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492282)											
YL2200455-001	Anonymous	fluoride	16984-48-8	E235.F	0.020	mg/L	<0.020	<0.020	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492283)											
YL2200455-001	Anonymous	chloride	16887-00-6	E235.Cl	0.50	mg/L	3.57	3.60	0.02	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492284)											
YL2200455-001	Anonymous	bromide	24959-67-9	E235.Br-L	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492285)											
YL2200455-001	Anonymous	nitrate (as N)	14797-55-8	E235.NO3-L	0.0050	mg/L	0.0596	0.0603	1.18%	20%	----
Anions and Nutrients (QC Lot: 492286)											
YL2200455-001	Anonymous	nitrite (as N)	14797-65-0	E235.NO2-L	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492287)											
YL2200455-001	Anonymous	sulfate (as SO4)	14808-79-8	E235.SO4	0.30	mg/L	<0.30	<0.30	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492699)											
YL2200456-001	M-DF01-SNOW	ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0234	0.0226	0.0008	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 492754)											
YL2200455-001	Anonymous	ammonia, total (as N)	7664-41-7	E298	0.0050	mg/L	0.0297	0.0300	0.0004	Diff <2x LOR	----
Total Metals (QC Lot: 492886)											
FJ2201184-003	Anonymous	aluminum, total	7429-90-5	E420	0.0030	mg/L	159 µg/L	0.157	0.984%	20%	----
		antimony, total	7440-36-0	E420	0.00010	mg/L	0.10 µg/L	<0.00010	0.000005	Diff <2x LOR	----
		arsenic, total	7440-38-2	E420	0.00010	mg/L	0.34 µg/L	0.00031	0.00003	Diff <2x LOR	----
		barium, total	7440-39-3	E420	0.00010	mg/L	20.1 µg/L	0.0196	2.56%	20%	----
		beryllium, total	7440-41-7	E420	0.000100	mg/L	<0.100 µg/L	<0.000100	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.050 µg/L	<0.000050	0	Diff <2x LOR	----
		boron, total	7440-42-8	E420	0.010	mg/L	66 µg/L	0.067	0.0006	Diff <2x LOR	----
		cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.715 µg/L	0.000684	4.49%	20%	----
		calcium, total	7440-70-2	E420	0.050	mg/L	192000 µg/L	193	0.729%	20%	----
		cesium, total	7440-46-2	E420	0.000010	mg/L	0.020 µg/L	0.000017	0.000002	Diff <2x LOR	----
		chromium, total	7440-47-3	E420	0.00050	mg/L	<0.50 µg/L	<0.00050	0	Diff <2x LOR	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 492886) - continued											
FJ2201184-003	Anonymous	cobalt, total	7440-48-4	E420	0.00010	mg/L	20.4 µg/L	0.0208	1.70%	20%	----
		copper, total	7440-50-8	E420	0.00050	mg/L	2.61 µg/L	0.00266	0.00005	Diff <2x LOR	----
		iron, total	7439-89-6	E420	0.010	mg/L	3290 µg/L	3.37	2.39%	20%	----
		lead, total	7439-92-1	E420	0.000050	mg/L	<0.050 µg/L	<0.000050	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E420	0.0010	mg/L	33.5 µg/L	0.0340	1.54%	20%	----
		magnesium, total	7439-95-4	E420	0.0050	mg/L	62600 µg/L	64.2	2.41%	20%	----
		manganese, total	7439-96-5	E420	0.00010	mg/L	976 µg/L	0.973	0.314%	20%	----
		molybdenum, total	7439-98-7	E420	0.000050	mg/L	4.31 µg/L	0.00443	2.76%	20%	----
		nickel, total	7440-02-0	E420	0.00050	mg/L	83.6 µg/L	0.0856	2.29%	20%	----
		phosphorus, total	7723-14-0	E420	0.050	mg/L	<50 µg/L	<0.050	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E420	0.050	mg/L	4680 µg/L	4.76	1.56%	20%	----
		rubidium, total	7440-17-7	E420	0.00020	mg/L	1.98 µg/L	0.00212	6.56%	20%	----
		selenium, total	7782-49-2	E420	0.000050	mg/L	0.615 µg/L	0.000627	1.99%	20%	----
		silicon, total	7440-21-3	E420	0.10	mg/L	4110 µg/L	4.08	0.825%	20%	----
		silver, total	7440-22-4	E420	0.000010	mg/L	<0.010 µg/L	<0.000010	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E420	0.050	mg/L	48500 µg/L	49.2	1.44%	20%	----
		strontium, total	7440-24-6	E420	0.00020	mg/L	516 µg/L	0.519	0.636%	20%	----
		sulfur, total	7704-34-9	E420	0.50	mg/L	226000 µg/L	232	2.50%	20%	----
		tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.20 µg/L	<0.00020	0	Diff <2x LOR	----
		thallium, total	7440-28-0	E420	0.000010	mg/L	0.024 µg/L	0.000022	0.000002	Diff <2x LOR	----
		thorium, total	7440-29-1	E420	0.00010	mg/L	<0.10 µg/L	<0.00010	0	Diff <2x LOR	----
		tin, total	7440-31-5	E420	0.00010	mg/L	<0.10 µg/L	<0.00010	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E420	0.00060	mg/L	<0.60 µg/L	<0.00060	0	Diff <2x LOR	----
		tungsten, total	7440-33-7	E420	0.00010	mg/L	<0.10 µg/L	<0.00010	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E420	0.000010	mg/L	5.77 µg/L	0.00571	0.962%	20%	----
		vanadium, total	7440-62-2	E420	0.00050	mg/L	<0.50 µg/L	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E420	0.0030	mg/L	82.1 µg/L	0.0825	0.457%	20%	----
		zirconium, total	7440-67-7	E420	0.00020	mg/L	<0.20 µg/L	<0.00020	0	Diff <2x LOR	----
Total Metals (QC Lot: 493765)											
VA22B0775-001	Anonymous	mercury, total	7439-97-6	E508	0.0000050	mg/L	0.0000053	0.0000063	0.0000010	Diff <2x LOR	----
Total Metals (QC Lot: 493928)											
VA22A9519-001	Anonymous	aluminum, total	7429-90-5	E420	0.0030	mg/L	0.217	0.215	1.13%	20%	----
		antimony, total	7440-36-0	E420	0.00010	mg/L	0.00011	<0.00010	0.00001	Diff <2x LOR	----
		arsenic, total	7440-38-2	E420	0.00010	mg/L	0.00043	0.00044	0.00002	Diff <2x LOR	----
		barium, total	7440-39-3	E420	0.00010	mg/L	0.0483	0.0481	0.387%	20%	----

Sub-Matrix: **Water**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 493928) - continued											
VA22A9519-001	Anonymous	beryllium, total	7440-41-7	E420	0.000020	mg/L	<0.000020	<0.000020	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E420	0.000050	mg/L	<0.000050	<0.000050	0	Diff <2x LOR	----
		boron, total	7440-42-8	E420	0.010	mg/L	<0.010	<0.010	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E420	0.0000050	mg/L	0.0000217	0.0000171	0.0000046	Diff <2x LOR	----
		calcium, total	7440-70-2	E420	0.050	mg/L	13.9	13.8	0.528%	20%	----
		cesium, total	7440-46-2	E420	0.000010	mg/L	0.000016	0.000016	0.000001	Diff <2x LOR	----
		chromium, total	7440-47-3	E420	0.00050	mg/L	0.00105	<0.00050	0.00055	Diff <2x LOR	----
		cobalt, total	7440-48-4	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		copper, total	7440-50-8	E420	0.00050	mg/L	0.00106	0.00108	0.00002	Diff <2x LOR	----
		iron, total	7439-89-6	E420	0.010	mg/L	0.378	0.385	1.99%	20%	----
		lead, total	7439-92-1	E420	0.000050	mg/L	0.000075	0.000072	0.000003	Diff <2x LOR	----
		lithium, total	7439-93-2	E420	0.0010	mg/L	<0.0010	<0.0010	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E420	0.100	mg/L	1.98	1.97	0.688%	20%	----
		manganese, total	7439-96-5	E420	0.00010	mg/L	0.0253	0.0252	0.408%	20%	----
		molybdenum, total	7439-98-7	E420	0.000050	mg/L	0.000117	0.000073	0.000043	Diff <2x LOR	----
		nickel, total	7440-02-0	E420	0.00050	mg/L	0.00066	<0.00050	0.00016	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E420	0.050	mg/L	<0.050	<0.050	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E420	0.100	mg/L	0.274	0.268	0.006	Diff <2x LOR	----
		rubidium, total	7440-17-7	E420	0.00020	mg/L	0.00026	0.00021	0.00005	Diff <2x LOR	----
		selenium, total	7782-49-2	E420	0.000050	mg/L	0.000066	0.000052	0.000014	Diff <2x LOR	----
		silicon, total	7440-21-3	E420	0.10	mg/L	3.49	3.55	1.65%	20%	----
		silver, total	7440-22-4	E420	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E420	0.050	mg/L	1.27	1.28	0.889%	20%	----
		strontium, total	7440-24-6	E420	0.00020	mg/L	0.0461	0.0455	1.18%	20%	----
		sulfur, total	7704-34-9	E420	0.50	mg/L	0.83	0.99	0.16	Diff <2x LOR	----
		tellurium, total	13494-80-9	E420	0.00020	mg/L	<0.00020	<0.00020	0	Diff <2x LOR	----
		thallium, total	7440-28-0	E420	0.000010	mg/L	<0.000010	<0.000010	0	Diff <2x LOR	----
		thorium, total	7440-29-1	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		tin, total	7440-31-5	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E420	0.00330	mg/L	<0.00330	<0.00330	0	Diff <2x LOR	----
		tungsten, total	7440-33-7	E420	0.00010	mg/L	<0.00010	<0.00010	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E420	0.000010	mg/L	0.000012	0.000012	0.0000002	Diff <2x LOR	----
		vanadium, total	7440-62-2	E420	0.00050	mg/L	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E420	0.0030	mg/L	<0.0030	<0.0030	0	Diff <2x LOR	----
		zirconium, total	7440-67-7	E420	0.00020	mg/L	0.00025	<0.00020	0.00005	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Physical Tests (QCLot: 491884)						
solids, total suspended [TSS]	----	E160	3	mg/L	<3.0	----
Physical Tests (QCLot: 491886)						
solids, total dissolved [TDS]	----	E162	10	mg/L	<10	----
Anions and Nutrients (QCLot: 492282)						
fluoride	16984-48-8	E235.F	0.02	mg/L	<0.020	----
Anions and Nutrients (QCLot: 492283)						
chloride	16887-00-6	E235.Cl	0.5	mg/L	<0.50	----
Anions and Nutrients (QCLot: 492284)						
bromide	24959-67-9	E235.Br-L	0.05	mg/L	<0.050	----
Anions and Nutrients (QCLot: 492285)						
nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 492286)						
nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	<0.0010	----
Anions and Nutrients (QCLot: 492287)						
sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	<0.30	----
Anions and Nutrients (QCLot: 492699)						
ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Anions and Nutrients (QCLot: 492754)						
ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	<0.0050	----
Total Metals (QCLot: 492886)						
aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	----
antimony, total	7440-36-0	E420	0.0001	mg/L	<0.00010	----
arsenic, total	7440-38-2	E420	0.0001	mg/L	<0.00010	----
barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	----
beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	----
bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	----
boron, total	7440-42-8	E420	0.01	mg/L	<0.010	----
cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	----
calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	----
cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	----
chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	----
cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	----
copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 492886) - continued						
iron, total	7439-89-6	E420	0.01	mg/L	<0.010	----
lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	----
lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	----
magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	----
manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	----
molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	----
nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	----
phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	----
potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	----
rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	----
selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	----
silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	----
silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	----
sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	----
strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	----
sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	----
tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	----
thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	----
thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	----
tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	----
titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	----
tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	----
uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	----
vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	----
zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	----
zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	----
Total Metals (QCLot: 493765)						
mercury, total	7439-97-6	E508	0.000005	mg/L	<0.0000050	----
Total Metals (QCLot: 493928)						
aluminum, total	7429-90-5	E420	0.003	mg/L	<0.0030	----
antimony, total	7440-36-0	E420	0.0001	mg/L	<0.00010	----
arsenic, total	7440-38-2	E420	0.0001	mg/L	<0.00010	----
barium, total	7440-39-3	E420	0.0001	mg/L	<0.00010	----
beryllium, total	7440-41-7	E420	0.00002	mg/L	<0.000020	----
bismuth, total	7440-69-9	E420	0.00005	mg/L	<0.000050	----
boron, total	7440-42-8	E420	0.01	mg/L	<0.010	----

Sub-Matrix: **Water**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 493928) - continued						
cadmium, total	7440-43-9	E420	0.000005	mg/L	<0.0000050	----
calcium, total	7440-70-2	E420	0.05	mg/L	<0.050	----
cesium, total	7440-46-2	E420	0.00001	mg/L	<0.000010	----
chromium, total	7440-47-3	E420	0.0005	mg/L	<0.00050	----
cobalt, total	7440-48-4	E420	0.0001	mg/L	<0.00010	----
copper, total	7440-50-8	E420	0.0005	mg/L	<0.00050	----
iron, total	7439-89-6	E420	0.01	mg/L	<0.010	----
lead, total	7439-92-1	E420	0.00005	mg/L	<0.000050	----
lithium, total	7439-93-2	E420	0.001	mg/L	<0.0010	----
magnesium, total	7439-95-4	E420	0.005	mg/L	<0.0050	----
manganese, total	7439-96-5	E420	0.0001	mg/L	<0.00010	----
molybdenum, total	7439-98-7	E420	0.00005	mg/L	<0.000050	----
nickel, total	7440-02-0	E420	0.0005	mg/L	<0.00050	----
phosphorus, total	7723-14-0	E420	0.05	mg/L	<0.050	----
potassium, total	7440-09-7	E420	0.05	mg/L	<0.050	----
rubidium, total	7440-17-7	E420	0.0002	mg/L	<0.00020	----
selenium, total	7782-49-2	E420	0.00005	mg/L	<0.000050	----
silicon, total	7440-21-3	E420	0.1	mg/L	<0.10	----
silver, total	7440-22-4	E420	0.00001	mg/L	<0.000010	----
sodium, total	7440-23-5	E420	0.05	mg/L	<0.050	----
strontium, total	7440-24-6	E420	0.0002	mg/L	<0.00020	----
sulfur, total	7704-34-9	E420	0.5	mg/L	<0.50	----
tellurium, total	13494-80-9	E420	0.0002	mg/L	<0.00020	----
thallium, total	7440-28-0	E420	0.00001	mg/L	<0.000010	----
thorium, total	7440-29-1	E420	0.0001	mg/L	<0.00010	----
tin, total	7440-31-5	E420	0.0001	mg/L	<0.00010	----
titanium, total	7440-32-6	E420	0.0003	mg/L	<0.00030	----
tungsten, total	7440-33-7	E420	0.0001	mg/L	<0.00010	----
uranium, total	7440-61-1	E420	0.00001	mg/L	<0.000010	----
vanadium, total	7440-62-2	E420	0.0005	mg/L	<0.00050	----
zinc, total	7440-66-6	E420	0.003	mg/L	<0.0030	----
zirconium, total	7440-67-7	E420	0.0002	mg/L	<0.00020	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Physical Tests (QCLot: 491884)									
solids, total suspended [TSS]	----	E160	3	mg/L	150 mg/L	91.8	85.0	115	----
Physical Tests (QCLot: 491886)									
solids, total dissolved [TDS]	----	E162	10	mg/L	1000 mg/L	94.8	85.0	115	----
Anions and Nutrients (QCLot: 492282)									
fluoride	16984-48-8	E235.F	0.02	mg/L	1 mg/L	99.3	90.0	110	----
Anions and Nutrients (QCLot: 492283)									
chloride	16887-00-6	E235.Cl	0.5	mg/L	100 mg/L	103	90.0	110	----
Anions and Nutrients (QCLot: 492284)									
bromide	24959-67-9	E235.Br-L	0.05	mg/L	0.5 mg/L	100	85.0	115	----
Anions and Nutrients (QCLot: 492285)									
nitrate (as N)	14797-55-8	E235.NO3-L	0.005	mg/L	2.5 mg/L	104	90.0	110	----
Anions and Nutrients (QCLot: 492286)									
nitrite (as N)	14797-65-0	E235.NO2-L	0.001	mg/L	0.5 mg/L	100	90.0	110	----
Anions and Nutrients (QCLot: 492287)									
sulfate (as SO4)	14808-79-8	E235.SO4	0.3	mg/L	100 mg/L	107	90.0	110	----
Anions and Nutrients (QCLot: 492699)									
ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	103	85.0	115	----
Anions and Nutrients (QCLot: 492754)									
ammonia, total (as N)	7664-41-7	E298	0.005	mg/L	0.2 mg/L	106	85.0	115	----
Total Metals (QCLot: 492886)									
aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	98.1	80.0	120	----
antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	107	80.0	120	----
arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	98.5	80.0	120	----
barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	98.8	80.0	120	----
beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	97.9	80.0	120	----
bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	95.6	80.0	120	----
boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	97.5	80.0	120	----
cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	97.2	80.0	120	----
calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	98.0	80.0	120	----
cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	97.0	80.0	120	----
chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	95.9	80.0	120	----
cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	98.8	80.0	120	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 492886) - continued									
copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	95.3	80.0	120	----
iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	103	80.0	120	----
lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	95.0	80.0	120	----
lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	99.4	80.0	120	----
magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	97.2	80.0	120	----
manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	99.1	80.0	120	----
molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	101	80.0	120	----
nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	98.2	80.0	120	----
phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	110	80.0	120	----
potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	99.4	80.0	120	----
rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	104	80.0	120	----
selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	90.8	80.0	120	----
silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	101	80.0	120	----
silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	94.5	80.0	120	----
sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	99.5	80.0	120	----
strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	98.0	80.0	120	----
sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	90.0	80.0	120	----
tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	99.3	80.0	120	----
thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	97.6	80.0	120	----
thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	89.9	80.0	120	----
tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	98.2	80.0	120	----
titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	91.5	80.0	120	----
tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	97.0	80.0	120	----
uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	94.5	80.0	120	----
vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	98.9	80.0	120	----
zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	94.8	80.0	120	----
zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	94.9	80.0	120	----
Total Metals (QCLot: 493765)									
mercury, total	7439-97-6	E508	0.000005	mg/L	0.0001 mg/L	106	80.0	120	----
Total Metals (QCLot: 493928)									
aluminum, total	7429-90-5	E420	0.003	mg/L	2 mg/L	103	80.0	120	----
antimony, total	7440-36-0	E420	0.0001	mg/L	1 mg/L	111	80.0	120	----
arsenic, total	7440-38-2	E420	0.0001	mg/L	1 mg/L	105	80.0	120	----
barium, total	7440-39-3	E420	0.0001	mg/L	0.25 mg/L	109	80.0	120	----
beryllium, total	7440-41-7	E420	0.00002	mg/L	0.1 mg/L	99.8	80.0	120	----
bismuth, total	7440-69-9	E420	0.00005	mg/L	1 mg/L	108	80.0	120	----
boron, total	7440-42-8	E420	0.01	mg/L	1 mg/L	101	80.0	120	----

Sub-Matrix: **Water**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 493928) - continued									
cadmium, total	7440-43-9	E420	0.000005	mg/L	0.1 mg/L	106	80.0	120	----
calcium, total	7440-70-2	E420	0.05	mg/L	50 mg/L	104	80.0	120	----
cesium, total	7440-46-2	E420	0.00001	mg/L	0.05 mg/L	105	80.0	120	----
chromium, total	7440-47-3	E420	0.0005	mg/L	0.25 mg/L	102	80.0	120	----
cobalt, total	7440-48-4	E420	0.0001	mg/L	0.25 mg/L	101	80.0	120	----
copper, total	7440-50-8	E420	0.0005	mg/L	0.25 mg/L	101	80.0	120	----
iron, total	7439-89-6	E420	0.01	mg/L	1 mg/L	# 121	80.0	120	MES
lead, total	7439-92-1	E420	0.00005	mg/L	0.5 mg/L	108	80.0	120	----
lithium, total	7439-93-2	E420	0.001	mg/L	0.25 mg/L	100	80.0	120	----
magnesium, total	7439-95-4	E420	0.005	mg/L	50 mg/L	102	80.0	120	----
manganese, total	7439-96-5	E420	0.0001	mg/L	0.25 mg/L	106	80.0	120	----
molybdenum, total	7439-98-7	E420	0.00005	mg/L	0.25 mg/L	104	80.0	120	----
nickel, total	7440-02-0	E420	0.0005	mg/L	0.5 mg/L	101	80.0	120	----
phosphorus, total	7723-14-0	E420	0.05	mg/L	10 mg/L	116	80.0	120	----
potassium, total	7440-09-7	E420	0.05	mg/L	50 mg/L	103	80.0	120	----
rubidium, total	7440-17-7	E420	0.0002	mg/L	0.1 mg/L	111	80.0	120	----
selenium, total	7782-49-2	E420	0.00005	mg/L	1 mg/L	108	80.0	120	----
silicon, total	7440-21-3	E420	0.1	mg/L	10 mg/L	108	80.0	120	----
silver, total	7440-22-4	E420	0.00001	mg/L	0.1 mg/L	96.9	80.0	120	----
sodium, total	7440-23-5	E420	0.05	mg/L	50 mg/L	106	80.0	120	----
strontium, total	7440-24-6	E420	0.0002	mg/L	0.25 mg/L	101	80.0	120	----
sulfur, total	7704-34-9	E420	0.5	mg/L	50 mg/L	104	80.0	120	----
tellurium, total	13494-80-9	E420	0.0002	mg/L	0.1 mg/L	98.9	80.0	120	----
thallium, total	7440-28-0	E420	0.00001	mg/L	1 mg/L	111	80.0	120	----
thorium, total	7440-29-1	E420	0.0001	mg/L	0.1 mg/L	104	80.0	120	----
tin, total	7440-31-5	E420	0.0001	mg/L	0.5 mg/L	103	80.0	120	----
titanium, total	7440-32-6	E420	0.0003	mg/L	0.25 mg/L	96.2	80.0	120	----
tungsten, total	7440-33-7	E420	0.0001	mg/L	0.1 mg/L	107	80.0	120	----
uranium, total	7440-61-1	E420	0.00001	mg/L	0.005 mg/L	107	80.0	120	----
vanadium, total	7440-62-2	E420	0.0005	mg/L	0.5 mg/L	107	80.0	120	----
zinc, total	7440-66-6	E420	0.003	mg/L	0.5 mg/L	97.9	80.0	120	----
zirconium, total	7440-67-7	E420	0.0002	mg/L	0.1 mg/L	102	80.0	120	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 492282)										
YL2200455-002	Anonymous	fluoride	16984-48-8	E235.F	0.968 mg/L	1 mg/L	96.8	75.0	125	----
Anions and Nutrients (QCLot: 492283)										
YL2200455-002	Anonymous	chloride	16887-00-6	E235.Cl	98.4 mg/L	100 mg/L	98.4	75.0	125	----
Anions and Nutrients (QCLot: 492284)										
YL2200455-002	Anonymous	bromide	24959-67-9	E235.Br-L	0.480 mg/L	0.5 mg/L	96.0	75.0	125	----
Anions and Nutrients (QCLot: 492285)										
YL2200455-002	Anonymous	nitrate (as N)	14797-55-8	E235.NO3-L	2.51 mg/L	2.5 mg/L	100	75.0	125	----
Anions and Nutrients (QCLot: 492286)										
YL2200455-002	Anonymous	nitrite (as N)	14797-65-0	E235.NO2-L	0.481 mg/L	0.5 mg/L	96.2	75.0	125	----
Anions and Nutrients (QCLot: 492287)										
YL2200455-002	Anonymous	sulfate (as SO4)	14808-79-8	E235.SO4	102 mg/L	100 mg/L	102	75.0	125	----
Anions and Nutrients (QCLot: 492699)										
YL2200456-002	M-DF02-SNOW	ammonia, total (as N)	7664-41-7	E298	0.109 mg/L	0.1 mg/L	109	75.0	125	----
Anions and Nutrients (QCLot: 492754)										
YL2200455-002	Anonymous	ammonia, total (as N)	7664-41-7	E298	0.0980 mg/L	0.1 mg/L	98.0	75.0	125	----
Total Metals (QCLot: 492886)										
VA22A9539-001	Anonymous	aluminum, total	7429-90-5	E420	ND mg/L	0.2 mg/L	ND	70.0	130	----
		antimony, total	7440-36-0	E420	0.0196 mg/L	0.02 mg/L	98.1	70.0	130	----
		arsenic, total	7440-38-2	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		barium, total	7440-39-3	E420	0.0188 mg/L	0.02 mg/L	93.8	70.0	130	----
		beryllium, total	7440-41-7	E420	0.0374 mg/L	0.04 mg/L	93.6	70.0	130	----
		bismuth, total	7440-69-9	E420	0.00899 mg/L	0.01 mg/L	89.9	70.0	130	----
		boron, total	7440-42-8	E420	0.094 mg/L	0.1 mg/L	94.3	70.0	130	----
		cadmium, total	7440-43-9	E420	0.00400 mg/L	0.004 mg/L	99.9	70.0	130	----
		calcium, total	7440-70-2	E420	ND mg/L	4 mg/L	ND	70.0	130	----
		cesium, total	7440-46-2	E420	0.00947 mg/L	0.01 mg/L	94.7	70.0	130	----
		chromium, total	7440-47-3	E420	0.0392 mg/L	0.04 mg/L	97.9	70.0	130	----
		cobalt, total	7440-48-4	E420	0.0197 mg/L	0.02 mg/L	98.5	70.0	130	----
		copper, total	7440-50-8	E420	0.0191 mg/L	0.02 mg/L	95.5	70.0	130	----
		iron, total	7439-89-6	E420	1.92 mg/L	2 mg/L	96.2	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 492886) - continued										
VA22A9539-001	Anonymous	lead, total	7439-92-1	E420	0.0184 mg/L	0.02 mg/L	92.2	70.0	130	----
		lithium, total	7439-93-2	E420	0.0918 mg/L	0.1 mg/L	91.8	70.0	130	----
		magnesium, total	7439-95-4	E420	ND mg/L	1 mg/L	ND	70.0	130	----
		manganese, total	7439-96-5	E420	0.0187 mg/L	0.02 mg/L	93.5	70.0	130	----
		molybdenum, total	7439-98-7	E420	0.0196 mg/L	0.02 mg/L	98.2	70.0	130	----
		nickel, total	7440-02-0	E420	0.0391 mg/L	0.04 mg/L	97.8	70.0	130	----
		phosphorus, total	7723-14-0	E420	9.90 mg/L	10 mg/L	99.0	70.0	130	----
		potassium, total	7440-09-7	E420	3.73 mg/L	4 mg/L	93.3	70.0	130	----
		rubidium, total	7440-17-7	E420	0.0202 mg/L	0.02 mg/L	101	70.0	130	----
		selenium, total	7782-49-2	E420	0.0389 mg/L	0.04 mg/L	97.4	70.0	130	----
		silicon, total	7440-21-3	E420	9.02 mg/L	10 mg/L	90.2	70.0	130	----
		silver, total	7440-22-4	E420	0.00408 mg/L	0.004 mg/L	102	70.0	130	----
		sodium, total	7440-23-5	E420	ND mg/L	2 mg/L	ND	70.0	130	----
		strontium, total	7440-24-6	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		sulfur, total	7704-34-9	E420	18.4 mg/L	20 mg/L	91.8	70.0	130	----
		tellurium, total	13494-80-9	E420	0.0380 mg/L	0.04 mg/L	95.1	70.0	130	----
		thallium, total	7440-28-0	E420	0.00372 mg/L	0.004 mg/L	93.1	70.0	130	----
		thorium, total	7440-29-1	E420	0.0192 mg/L	0.02 mg/L	96.0	70.0	130	----
		tin, total	7440-31-5	E420	0.0192 mg/L	0.02 mg/L	96.0	70.0	130	----
		titanium, total	7440-32-6	E420	0.0338 mg/L	0.04 mg/L	84.5	70.0	130	----
		tungsten, total	7440-33-7	E420	0.0190 mg/L	0.02 mg/L	95.0	70.0	130	----
		uranium, total	7440-61-1	E420	ND mg/L	0.004 mg/L	ND	70.0	130	----
		vanadium, total	7440-62-2	E420	0.0969 mg/L	0.1 mg/L	96.9	70.0	130	----
		zinc, total	7440-66-6	E420	0.373 mg/L	0.4 mg/L	93.4	70.0	130	----
		zirconium, total	7440-67-7	E420	0.0379 mg/L	0.04 mg/L	94.8	70.0	130	----
Total Metals (QCLot: 493765)										
VA22B0775-002	Anonymous	mercury, total	7439-97-6	E508	0.0000902 mg/L	0.0001 mg/L	90.2	70.0	130	----
Total Metals (QCLot: 493928)										
VA22A9519-002	Anonymous	aluminum, total	7429-90-5	E420	0.175 mg/L	0.2 mg/L	87.6	70.0	130	----
		antimony, total	7440-36-0	E420	0.0189 mg/L	0.02 mg/L	94.6	70.0	130	----
		arsenic, total	7440-38-2	E420	0.0195 mg/L	0.02 mg/L	97.7	70.0	130	----
		barium, total	7440-39-3	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		beryllium, total	7440-41-7	E420	0.0372 mg/L	0.04 mg/L	93.0	70.0	130	----
		bismuth, total	7440-69-9	E420	0.00986 mg/L	0.01 mg/L	98.6	70.0	130	----
		boron, total	7440-42-8	E420	0.097 mg/L	0.1 mg/L	96.8	70.0	130	----
		cadmium, total	7440-43-9	E420	0.00398 mg/L	0.004 mg/L	99.6	70.0	130	----

Sub-Matrix: **Water**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Total Metals (QCLot: 493928) - continued										
VA22A9519-002	Anonymous	calcium, total	7440-70-2	E420	ND mg/L	4 mg/L	ND	70.0	130	----
		cesium, total	7440-46-2	E420	0.00932 mg/L	0.01 mg/L	93.2	70.0	130	----
		chromium, total	7440-47-3	E420	0.0395 mg/L	0.04 mg/L	98.8	70.0	130	----
		cobalt, total	7440-48-4	E420	0.0194 mg/L	0.02 mg/L	97.1	70.0	130	----
		copper, total	7440-50-8	E420	0.0194 mg/L	0.02 mg/L	97.1	70.0	130	----
		iron, total	7439-89-6	E420	1.90 mg/L	2 mg/L	95.1	70.0	130	----
		lead, total	7439-92-1	E420	0.0193 mg/L	0.02 mg/L	96.5	70.0	130	----
		lithium, total	7439-93-2	E420	0.0906 mg/L	0.1 mg/L	90.6	70.0	130	----
		magnesium, total	7439-95-4	E420	ND mg/L	1 mg/L	ND	70.0	130	----
		manganese, total	7439-96-5	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		molybdenum, total	7439-98-7	E420	0.0186 mg/L	0.02 mg/L	92.9	70.0	130	----
		nickel, total	7440-02-0	E420	0.0388 mg/L	0.04 mg/L	96.9	70.0	130	----
		phosphorus, total	7723-14-0	E420	9.56 mg/L	10 mg/L	95.6	70.0	130	----
		potassium, total	7440-09-7	E420	3.82 mg/L	4 mg/L	95.6	70.0	130	----
		rubidium, total	7440-17-7	E420	0.0207 mg/L	0.02 mg/L	104	70.0	130	----
		selenium, total	7782-49-2	E420	0.0404 mg/L	0.04 mg/L	101	70.0	130	----
		silicon, total	7440-21-3	E420	9.48 mg/L	10 mg/L	94.8	70.0	130	----
		silver, total	7440-22-4	E420	0.00389 mg/L	0.004 mg/L	97.2	70.0	130	----
		sodium, total	7440-23-5	E420	1.90 mg/L	2 mg/L	95.2	70.0	130	----
		strontium, total	7440-24-6	E420	ND mg/L	0.02 mg/L	ND	70.0	130	----
		sulfur, total	7704-34-9	E420	20.4 mg/L	20 mg/L	102	70.0	130	----
		tellurium, total	13494-80-9	E420	0.0359 mg/L	0.04 mg/L	89.7	70.0	130	----
		thallium, total	7440-28-0	E420	0.00387 mg/L	0.004 mg/L	96.8	70.0	130	----
		thorium, total	7440-29-1	E420	0.0199 mg/L	0.02 mg/L	99.6	70.0	130	----
		tin, total	7440-31-5	E420	0.0182 mg/L	0.02 mg/L	90.8	70.0	130	----
		titanium, total	7440-32-6	E420	0.0376 mg/L	0.04 mg/L	94.0	70.0	130	----
		tungsten, total	7440-33-7	E420	0.0194 mg/L	0.02 mg/L	96.8	70.0	130	----
		uranium, total	7440-61-1	E420	0.00389 mg/L	0.004 mg/L	97.3	70.0	130	----
		vanadium, total	7440-62-2	E420	0.100 mg/L	0.1 mg/L	100	70.0	130	----
		zinc, total	7440-66-6	E420	0.378 mg/L	0.4 mg/L	94.4	70.0	130	----
		zirconium, total	7440-67-7	E420	0.0377 mg/L	0.04 mg/L	94.3	70.0	130	----

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution		Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other		● Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax		○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com		○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com		○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:		Analysis Request
Invoice To	Same as Report ? Y	Client / Project Information		Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:		P
Company:		PO / AFE: OL 1108073		
Contact:		LSD:		
Address:		Job Ref: Madrid Dustfall Snowcore		
Phone:	Fax:	Quote #:		
Lab Work Order # (lab use only)		ALS Contact: Amber Springer	Sampler: WN/TL	

Sample #	Sample Identification (TH	Date In (dd-mmm-yy)	Time	Sample Type	TDS	TSS	Anions	Total-Metals + Total Hg	Ammonia								Number of Containers
	M-DF01-SNOW	05-May-22	14:15	Water	X	X	X	X	X								4
	M-DF02-SNOW	05-May-22	10:15	Water	X	X	X	X	X								4
	M-DF03-SNOW	05-May-22	13:25	Water	X	X	X	X	X								4
	M-DF04-SNOW	05-May-22	14:10	Water	X	X	X	X	X								4
	M-DF05-SNOW	05-May-22	13:25	Water	X	X	X	X	X								4
	M-DF06-SNOW	07-May-22	9:30	Water	X	X	X	X	X								4
	M-DF07-SNOW	07-May-22	11:10	Water	X	X	X	X	X								4
	M-DF08-SNOW	07-May-22	10:55	Water	X	X	X	X	X								4
	M-DF09-SNOW	07-May-22	10:20	Water	X	X	X	X	X								4
	Madrid-BLANKE	05-May-22	17:00	Water	X	X	X	X	X								4
	[illegible]BLANKE			Water	X	X	X	X	X								4
	MDF01-SNOW-DUPLICATE	05-May-22	14:20	Water	X	X	X	X	X								4

Environmental Division
Yellowknife
Work Order Reference
YL2200456

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	11-May-22	7:00	MA	May 11/22	16:30	4.9 °C				

ALS Environmental

Chain of Custody / Analytical Request Form
Canada Toll Free: 1 800 668 9878
www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution		Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other		◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax		○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com		○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com		○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:		**Analysis Request**
Invoice To	Same as Report ? Y	**Client / Project Information**		Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:		P
Company:		PO / AFE: OL 1108073		
Contact:		LSD:		
Address:		Job Ref: Madrid Dustfall Snowcore		
Phone:	Fax:	Quote #:		
Lab Work Order # (lab use only)		ALS Contact: Amber Springer	Sampler: WN/TL	

Sample #	Sample Identification (TH...)	Date In (dd-mmm-yy)	Time	Sample Type	TDS	TSS	Anions	Total-Metals + Total Hg	Ammonia							Number of Containers
	M-DF01-SNOW	05-May-22	14:15	Water	X	X	X	X	X							4
	M-DF02-SNOW	05-May-22	10:15	Water	X	X	X	X	X							4
	M-DF03-SNOW	05-May-22	13:25	Water	X	X	X	X	X							4
	M-DF04-SNOW	05-May-22	14:10	Water	X	X	X	X	X							4
	M-DF05-SNOW	05-May-22	13:25	Water	X	X	X	X	X							4
	M-DF06-SNOW	07-May-22	9:30	Water	X	X	X	X	X							4
	M-DF07-SNOW	07-May-22	11:10	Water	X	X	X	X	X							4
	M-DF08-SNOW	07-May-22	10:55	Water	X	X	X	X	X							4
	M-DF09-SNOW	07-May-22	10:20	Water	X	X	X	X	X							4
	Madrid-BLANKE	05-May-22	17:00	Water	X	X	X	X	X							4
	MDF01-SNOW-DUPLICATE	05-May-22	14:20	Water	X	X	X	X	X							4

Environmental Division
Yellowknife
Work Order Reference
YL2200456

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.
By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.
Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	11-May-22	7:00	MA	May 11/22	16:30	4.9 °C		7 MAY 2022	1:30	

12.9°C

GENF 18.01 Front

Appendix B Dustfall Canister Laboratory Analysis

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2200613**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 08-Jun-2022 14:37
PO	: OL 1108073	Date Analysis Commenced	: 13-Jun-2022
C-O-C number	: ----	Issue Date	: 27-Jun-2022 15:21
Sampler	: GDV		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Metals, Burnaby, British Columbia
Caleb Deroche	Lab Analyst	Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm^2	square centimetres
days	days
mg	milligram
$mg/dm^2.day$	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022
						YL2200613-001	YL2200613-002	YL2200613-003	YL2200613-004	YL2200613-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		32.0	32.0	32.0	31.0	31.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.21	<0.21	<0.21	<0.22	<0.22
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.11	<0.11	<0.11	<0.11	0.11
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.11	<0.11	<0.11	<0.11	<0.11
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	1.9
dustfall, total soluble	----	E881	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0011	<0.0014
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.19	<0.19	<0.19	<0.20	<0.20
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.013	<0.013	<0.013	<0.013	<0.013
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.025	<0.024	<0.024	<0.019	<0.025
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	<3.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	<0.019
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	<0.22
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.000226	0.000575	0.000310	<0.000175	0.000629
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000028	<0.0000028	<0.0000028	<0.0000029	<0.0000029
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000028	<0.0000028	<0.0000028	<0.0000029	<0.0000029
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000045	0.0000032	0.0000031	<0.0000029	0.0000038
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00028	<0.00028	<0.00028	<0.00029	<0.00029
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00118	0.00491	0.00130	0.00087	0.00972
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000028	<0.0000028	<0.0000028	<0.0000029	<0.0000029
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000028	<0.000028	<0.000028	<0.000029	<0.000029
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00084	0.00203	<0.00084	<0.00087	0.00134

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022
						YL2200613-001	YL2200613-002	YL2200613-003	YL2200613-004	YL2200613-005
						Result	Result	Result	Result	Result
Total Metals										
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00014	<0.00014	<0.00014	<0.00014	<0.00014
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00033	0.00113	0.00039	0.00025	0.00130
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000242	0.0000846	0.0000169	0.0000082	0.000109
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	0.0037	<0.0014
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	0.0026	<0.0014
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000028	<0.000028	<0.000028	<0.000029	<0.000029
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000028	<0.00000028	<0.00000028	<0.00000029	<0.00000029
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		<0.0000028	0.0000069	<0.0000028	<0.0000029	0.0000063
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000028	<0.0000028	<0.0000028	<0.0000029	<0.0000029
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000028	<0.0000028	<0.0000028	<0.0000029	<0.0000029
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00028	<0.00028	<0.00028	<0.00029	<0.00029
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000028	<0.000028	<0.000028	<0.000029	<0.000029
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000084	<0.000084	<0.000084	<0.000087	<0.000087
aluminum, total	7429-90-5	E447	0.0030	mg		0.0040	0.0102	0.0055	<0.0030	0.0108
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
barium, total	7440-39-3	E447	0.000050	mg		0.000080	0.000056	0.000055	<0.000050	0.000065
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
calcium, total	7440-70-2	E447	0.010	mg		0.021	0.087	0.023	0.015	0.167
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022
						YL2200613-001	YL2200613-002	YL2200613-003	YL2200613-004	YL2200613-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	E447	0.015	mg		<0.015	0.036	<0.015	<0.015	0.023
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
magnesium, total	7439-95-4	E447	0.0025	mg		0.0058	0.0201	0.0069	0.0043	0.0224
manganese, total	7439-96-5	E447	0.00010	mg		0.00043	0.00150	0.00030	0.00014	0.00188
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	<0.025	<0.025	0.064	<0.025
potassium, total	7440-09-7	E447	0.025	mg		<0.025	<0.025	<0.025	0.045	<0.025
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
silicon, total	7440-21-3	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	<0.025
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
sodium, total	7440-23-5	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	<0.025
strontium, total	7440-24-6	E447	0.000050	mg		<0.000050	0.000122	<0.000050	<0.000050	0.000108
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	<0.0015	<0.0015	<0.0015	<0.0015

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Dustfall (Matrix: Air)					Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	07-Jun-2022	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2200613-006	--------	--------	--------	--------	
					Result	----	----	----	----	
Field Tests										
area sampled, field	----	EF001A	0.010	cm²	55.4	----	----	----	----	
sampling time, field	----	EF001B	1.0	days	31.0	----	----	----	----	
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day	<0.22	----	----	----	----	
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day	0.19	----	----	----	----	
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day	<0.11	----	----	----	----	
dustfall, total insoluble	----	E882	1.9	mg	3.2	----	----	----	----	
dustfall, total soluble	----	E881	1.9	mg	<1.9	----	----	----	----	
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day	<0.0016	----	----	----	----	
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day	<0.20	----	----	----	----	
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day	<0.0011	----	----	----	----	
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day	<0.013	----	----	----	----	
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.027	----	----	----	----	
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----	----	----	----	
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----	----	----	----	
sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	----	----	----	----	
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day	0.000501	----	----	----	----	
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day	<0.0000029	----	----	----	----	
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day	<0.0000029	----	----	----	----	
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day	0.0000239	----	----	----	----	
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day	<0.000014	----	----	----	----	
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day	<0.000014	----	----	----	----	
boron, total	7440-42-8	EC447	0.00026	mg/dm².day	<0.00029	----	----	----	----	
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day	<0.0000013	----	----	----	----	
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day	0.0208	----	----	----	----	
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day	<0.000014	----	----	----	----	
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day	<0.0000029	----	----	----	----	
copper, total	7440-50-8	EC447	0.000026	mg/dm².day	<0.000029	----	----	----	----	
iron, total	7439-89-6	EC447	0.00079	mg/dm².day	0.00105	----	----	----	----	
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day	<0.0000014	----	----	----	----	

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	07-Jun-2022	----	----	----	----
						YL2200613-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00014	----	----	----	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00182	----	----	----	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.000197	----	----	----	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000014	----	----	----	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000014	----	----	----	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000014	----	----	----	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0014	----	----	----	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0014	----	----	----	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000029	----	----	----	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0014	----	----	----	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000029	----	----	----	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		<0.0014	----	----	----	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000105	----	----	----	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000029	----	----	----	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000029	----	----	----	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00029	----	----	----	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	----	----	----	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000029	----	----	----	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000087	----	----	----	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.0086	----	----	----	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	----	----	----	----
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	----	----	----	----
barium, total	7440-39-3	E447	0.000050	mg		0.000410	----	----	----	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	----	----	----	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	----	----	----	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	----	----	----	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	----	----	----	----
calcium, total	7440-70-2	E447	0.010	mg		0.357	----	----	----	----
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	----	----	----	----
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	----	----	----	----
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	----	----	----	----
iron, total	7439-89-6	E447	0.015	mg		0.018	----	----	----	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	07-Jun-2022	----	----	----	----
						YL2200613-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	----	----	----	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	----	----	----	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.0312	----	----	----	----
manganese, total	7439-96-5	E447	0.00010	mg		0.00339	----	----	----	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	----	----	----	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	----	----	----	----
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	----	----	----	----
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	----	----	----	----
potassium, total	7440-09-7	E447	0.025	mg		<0.025	----	----	----	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	----	----	----	----
silicon, total	7440-21-3	E447	0.025	mg		<0.025	----	----	----	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	----	----	----	----
sodium, total	7440-23-5	E447	0.025	mg		<0.025	----	----	----	----
strontium, total	7440-24-6	E447	0.000050	mg		0.000180	----	----	----	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	----	----	----	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	----	----	----	----
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	----	----	----	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	----	----	----	----
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	----	----	----	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2200613**	Page	: 1 of 13
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 08-Jun-2022 14:37
PO	: OL 1108073	Issue Date	: 27-Jun-2022 15:21
C-O-C number	: ----		
Sampler	: GDV		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CDF4	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CDF4	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
DFA1	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF1	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF2	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF3	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CDF4	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
DFA1	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF1	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF2	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF3	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
DFA1	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF1	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF2	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF3	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) CONTROLDF	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) DFA1	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF1	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF2	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF3	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	536065	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	536064	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	536067	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	536066	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	522229	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	522225	1	15	6.6	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	536065	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	536064	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	536067	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	536066	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	536063	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	522229	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	522225	1	15	6.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	536062	1	15	6.6	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	536065	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	536064	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	536067	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	536066	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	536063	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	522229	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	522225	1	15	6.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	536062	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	536065	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	536064	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	536067	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	536066	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	522229	1	15	6.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **YL2200613**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 08-Jun-2022 14:37
PO	: OL 1108073	Date Analysis Commenced	: 13-Jun-2022
C-O-C number	: ----	Issue Date	: 27-Jun-2022 15:21
Sampler	: GDV		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia
Caleb Deroche	Lab Analyst	Vancouver Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Vancouver Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 536064)											
YL2200611-001	Anonymous	chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	<3.4	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 536065)											
YL2200611-001	Anonymous	ammonia, total (as N)	7664-41-7	E301	0.023	mg	<0.023	<0.023	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 536066)											
YL2200611-001	Anonymous	sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	<0.22	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 536067)											
YL2200611-001	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
Total Metals (QC Lot: 522225)											
YL2200611-001	Anonymous	aluminum, total	7429-90-5	E447	0.0030	mg	<0.0030	<0.0030	0	Diff <2x LOR	----
		antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000050	mg	0.000081	0.000076	0.000004	Diff <2x LOR	----
		beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	<0.000020	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.010	mg	0.024	0.024	0.00006	Diff <2x LOR	----
		chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		iron, total	7439-89-6	E447	0.015	mg	<0.015	<0.015	0	Diff <2x LOR	----
		lead, total	7439-92-1	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	<0.0025	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E447	0.0025	mg	0.0060	0.0063	0.0003	Diff <2x LOR	----
		manganese, total	7439-96-5	E447	0.00010	mg	0.00027	0.00026	0.000007	Diff <2x LOR	----
		molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		silicon, total	7440-21-3	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 522225) - continued											
YL2200611-001	Anonymous	silver, total	7440-22-4	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		strontium, total	7440-24-6	E447	0.000050	mg	0.000058	0.000052	0.000006	Diff <2x LOR	----
		thallium, total	7440-28-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 522229)											
YL2200611-001	Anonymous	mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 536062)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Particulates (QCLot: 536063)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 536064)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 536065)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 536066)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 536067)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 522225)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 522225) - continued						
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 522229)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 536062)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	100	85.0	115	----
Particulates (QCLot: 536063)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	107	85.0	115	----
Anions and Nutrients (QCLot: 536064)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	103	90.0	110	----
Anions and Nutrients (QCLot: 536065)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	106	85.0	115	----
Anions and Nutrients (QCLot: 536066)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	105	90.0	110	----
Anions and Nutrients (QCLot: 536067)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	104	90.0	110	----
Total Metals (QCLot: 522225)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	108	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	111	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	103	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	105	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	102	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	103	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	101	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	104	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	104	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	101	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	102	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	103	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	108	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	107	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	101	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	110	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	104	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	107	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	101	80.0	120	----
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	117	80.0	120	----

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 522225) - continued									
potassium, total	7440-09-7	E447	0.025	mg	25 mg	109	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	105	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	101	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	94.2	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	108	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	105	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	96.1	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	105	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	106	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	105	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	105	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	106	80.0	120	----
Total Metals (QCLot: 522229)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	80.0	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 536064)										
YL2200611-002	Anonymous	chloride	16887-00-6	E244.Cl	33.1 mg	32 mg	103	75.0	125	----
Anions and Nutrients (QCLot: 536065)										
YL2200611-002	Anonymous	ammonia, total (as N)	7664-41-7	E301	ND mg	0.002 mg	ND	75.0	125	----
Anions and Nutrients (QCLot: 536066)										
YL2200611-002	Anonymous	sulfate	14808-79-8	E244.SO4	33.7 mg	32 mg	105	75.0	125	----
Anions and Nutrients (QCLot: 536067)										
YL2200611-002	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.833 mg	0.8 mg	104	75.0	125	----
Total Metals (QCLot: 522229)										
YL2200611-002	Anonymous	mercury, total	7439-97-6	E516	0.000238 mg	0.00025 mg	95.3	70.0	130	----

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other	● Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:	
Invoice To	Same as Report ? Y	**Client / Project Information**	**Analysis Request**
Hardcopy of Invoice with Report?		Job #:	Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE: OL 1108073	P
Contact:		LSD:	
Address:		Job Ref: Doris Dustfall	
Phone:	Fax:	Quote #:	

Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler:	GDV

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	CONTROLDF	06-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF1	06-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF2	06-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF3	07-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	DFA1	07-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	CDF4	07-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2200613

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Guillaume Dumont-Vandewinkel	8-Jun-22	7:00	MA	June 8/22	14:57	4.8 °C				

GENF 18.01 Front

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2200611**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 08-Jun-2022 14:37
PO	: OL 1108073	Date Analysis Commenced	: 13-Jun-2022
C-O-C number	: ----	Issue Date	: 27-Jun-2022 15:30
Sampler	: GDV		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Metals, Burnaby, British Columbia
Caleb Deroche	Lab Analyst	Metals, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm^2	square centimetres
days	days
mg	milligram
$mg/dm^2.day$	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022
						YL2200611-001	YL2200611-002	YL2200611-003	YL2200611-004	YL2200611-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		33.0	33.0	33.0	33.0	33.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.21	<0.21	<0.21	<0.21	<0.21
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.10	<0.10	<0.10	<0.10	<0.10
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.10	<0.10	<0.10	<0.10	<0.10
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
dustfall, total soluble	----	E881	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0012	<0.0013	<0.0011	0.0015	<0.0012
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.18	<0.18	<0.18	<0.18	<0.18
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.013	<0.013	<0.013	<0.013	<0.013
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.023	<0.024	<0.020	0.027	<0.023
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	<3.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	<0.019
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	<0.22
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		<0.000164	0.000180	<0.000164	<0.000164	<0.000164
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000027	<0.0000027	<0.0000027	<0.0000027	<0.0000027
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000027	<0.0000027	<0.0000027	<0.0000027	<0.0000027
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000044	0.0000034	0.0000037	0.0000028	0.0000039
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00131	0.00104	0.00115	0.00120	0.00137
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000027	<0.0000027	<0.0000027	<0.0000027	<0.0000027
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000027	<0.000027	<0.000027	<0.000027	0.000036
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00082	<0.00082	<0.00082	<0.00082	<0.00082

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022
						YL2200611-001	YL2200611-002	YL2200611-003	YL2200611-004	YL2200611-005
						Result	Result	Result	Result	Result
Total Metals										
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	0.0000017
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00014	<0.00014	<0.00014	<0.00014	<0.00014
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00033	0.00034	0.00032	0.00027	0.00037
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000148	0.0000126	0.0000115	0.0000137	0.0000109
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000027	<0.000027	<0.000027	<0.000027	<0.000027
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000027	<0.00000027	<0.00000027	<0.00000027	<0.00000027
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	0.0063
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000032	<0.0000027	<0.0000027	<0.0000027	0.0000032
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000027	<0.0000027	<0.0000027	<0.0000027	<0.0000027
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000027	<0.0000027	<0.0000027	<0.0000027	<0.0000027
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00027	<0.00027	<0.00027	<0.00027	<0.00027
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000027	<0.000027	<0.000027	<0.000027	<0.000027
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000082	<0.000082	<0.000082	<0.000082	<0.000082
aluminum, total	7429-90-5	E447	0.0030	mg		<0.0030	0.0033	<0.0030	<0.0030	<0.0030
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
barium, total	7440-39-3	E447	0.000050	mg		0.000081	0.000062	0.000068	0.000051	0.000071
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
calcium, total	7440-70-2	E447	0.010	mg		0.024	0.019	0.021	0.022	0.025
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	0.00066

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022
						YL2200611-001	YL2200611-002	YL2200611-003	YL2200611-004	YL2200611-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	E447	0.015	mg		<0.015	<0.015	<0.015	<0.015	<0.015
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	0.000031
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
magnesium, total	7439-95-4	E447	0.0025	mg		0.0060	0.0062	0.0058	0.0050	0.0067
manganese, total	7439-96-5	E447	0.00010	mg		0.00027	0.00023	0.00021	0.00025	0.00020
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	<0.025
potassium, total	7440-09-7	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	<0.025
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
silicon, total	7440-21-3	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	<0.025
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
sodium, total	7440-23-5	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	0.115
strontium, total	7440-24-6	E447	0.000050	mg		0.000058	<0.000050	<0.000050	<0.000050	0.000059
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	<0.0015	<0.0015	<0.0015	<0.0015

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	----
						YL2200611-006	YL2200611-007	YL2200611-008	YL2200611-009	--------
						Result	Result	Result	Result	----
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	----
sampling time, field	----	EF001B	1.0	days		31.0	31.0	31.0	31.0	----
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		0.32	0.33	<0.22	<0.22	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		0.32	0.33	0.15	0.12	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.11	<0.11	<0.11	<0.11	----
dustfall, total insoluble	----	E882	1.9	mg		5.5	5.7	2.6	2.0	----
dustfall, total soluble	----	E881	1.9	mg		<1.9	<1.9	<1.9	<1.9	----
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.20	<0.20	<0.20	<0.20	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0011	<0.0011	<0.0011	<0.0011	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.013	<0.013	<0.013	<0.013	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.024	<0.024	<0.024	<0.025	----
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	----
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	----
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.0148	0.0142	0.00710	0.00299	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000116	0.0000095	0.0000070	0.0000067	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00029	<0.00029	<0.00029	<0.00029	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.0293	0.0284	0.0140	0.00745	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		0.000028	0.000027	<0.000014	<0.000014	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		0.0000134	0.0000128	0.0000063	<0.0000029	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		0.000034	0.000030	<0.000029	<0.000029	----
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		0.0320	0.0312	0.0154	0.00670	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	----
						YL2200611-006	YL2200611-007	YL2200611-008	YL2200611-009	--------
						Result	Result	Result	Result	----
Total Metals										
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00014	<0.00014	<0.00014	<0.00014	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.0136	0.0131	0.00658	0.00317	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.000728	0.000722	0.000350	0.000174	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		0.000021	0.000019	<0.000014	<0.000014	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000029	<0.000029	<0.000029	<0.000029	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		0.0161	0.0152	0.0074	0.0030	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000029	<0.00000029	<0.00000029	<0.00000029	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000150	0.0000143	0.0000082	0.0000056	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		0.00032	0.00033	<0.00029	<0.00029	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		0.000086	0.000084	0.000042	<0.000029	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000087	<0.000087	<0.000087	<0.000087	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.254	0.244	0.122	0.0514	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
barium, total	7440-39-3	E447	0.000050	mg		0.000200	0.000163	0.000121	0.000115	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	----
calcium, total	7440-70-2	E447	0.010	mg		0.504	0.487	0.240	0.128	----
chromium, total	7440-47-3	E447	0.00025	mg		0.00048	0.00046	<0.00025	<0.00025	----
cobalt, total	7440-48-4	E447	0.000050	mg		0.000231	0.000220	0.000109	<0.000050	----
copper, total	7440-50-8	E447	0.00050	mg		0.00058	0.00052	<0.00050	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg		0.550	0.536	0.264	0.115	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	07-Jun-2022	07-Jun-2022	07-Jun-2022	07-Jun-2022	----
						YL2200611-006	YL2200611-007	YL2200611-008	YL2200611-009	--------
						Result	Result	Result	Result	----
Total Metals										
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.234	0.225	0.113	0.0544	----
manganese, total	7439-96-5	E447	0.00010	mg		0.0125	0.0124	0.00602	0.00298	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg		0.00036	0.00032	<0.00025	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg		0.277	0.262	0.127	0.052	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	----
strontium, total	7440-24-6	E447	0.000050	mg		0.000258	0.000245	0.000140	0.000097	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
titanium, total	7440-32-6	E447	0.0050	mg		0.0055	0.0057	<0.0050	<0.0050	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
vanadium, total	7440-62-2	E447	0.00050	mg		0.00148	0.00145	0.00073	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	<0.0015	<0.0015	<0.0015	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2200611**	Page	: 1 of 17
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 08-Jun-2022 14:37
PO	: OL 1108073	Issue Date	: 27-Jun-2022 15:30
C-O-C number	: ----		
Sampler	: GDV		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E301	07-Jun-2022	23-Jun-2022	----	----		25-Jun-2022	----	2 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.Cl	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.NO3	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.SO4	07-Jun-2022	23-Jun-2022	----	----		24-Jun-2022	----	1 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF01	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF02	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF03	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF04	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF05	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF06	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF07	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF08	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF09	EF001A	07-Jun-2022	----	----	----		24-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF01	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF02	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF03	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF04	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF05	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF06	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF07	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF08	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF09	EF001B	07-Jun-2022	----	----	----		14-Jun-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF01	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF02	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF03	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF04	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF05	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF06	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF07	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E882	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF01	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF02	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF03	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF04	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF05	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF06	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF07	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E881	07-Jun-2022	23-Jun-2022	----	----		23-Jun-2022	----	0 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E516	07-Jun-2022	13-Jun-2022	180 days	7 days	✓	14-Jun-2022	180 days	1 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E447	07-Jun-2022	14-Jun-2022	----	----		15-Jun-2022	180 days	9 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	536065	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	536064	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	536067	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	536066	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	522229	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	522225	1	15	6.6	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	536065	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	536064	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	536067	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	536066	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	536063	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	522229	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	522225	1	15	6.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	536062	1	15	6.6	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	536065	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	536064	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	536067	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	536066	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	536063	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	522229	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	522225	1	15	6.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	536062	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	536065	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	536064	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	536067	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	536066	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	522229	1	15	6.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **YL2200611**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 08-Jun-2022 14:37
PO	: OL 1108073	Date Analysis Commenced	: 13-Jun-2022
C-O-C number	: ----	Issue Date	: 27-Jun-2022 15:30
Sampler	: GDV		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia
Caleb Deroche	Lab Analyst	Vancouver Metals, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Vancouver Metals, Burnaby, British Columbia
Lindsay Gung	Supervisor - Water Chemistry	Vancouver Inorganics, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 536064)											
YL2200611-001	M-DF01	chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	<3.4	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 536065)											
YL2200611-001	M-DF01	ammonia, total (as N)	7664-41-7	E301	0.023	mg	<0.023	<0.023	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 536066)											
YL2200611-001	M-DF01	sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	<0.22	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 536067)											
YL2200611-001	M-DF01	nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
Total Metals (QC Lot: 522225)											
YL2200611-001	M-DF01	aluminum, total	7429-90-5	E447	0.0030	mg	<0.0030	<0.0030	0	Diff <2x LOR	----
		antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000050	mg	0.000081	0.000076	0.000004	Diff <2x LOR	----
		beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	<0.000020	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.010	mg	0.024	0.024	0.00006	Diff <2x LOR	----
		chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		iron, total	7439-89-6	E447	0.015	mg	<0.015	<0.015	0	Diff <2x LOR	----
		lead, total	7439-92-1	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	<0.0025	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E447	0.0025	mg	0.0060	0.0063	0.0003	Diff <2x LOR	----
		manganese, total	7439-96-5	E447	0.00010	mg	0.00027	0.00026	0.000007	Diff <2x LOR	----
		molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		silicon, total	7440-21-3	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 522225) - continued											
YL2200611-001	M-DF01	silver, total	7440-22-4	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		strontium, total	7440-24-6	E447	0.000050	mg	0.000058	0.000052	0.000006	Diff <2x LOR	----
		thallium, total	7440-28-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 522229)											
YL2200611-001	M-DF01	mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 536062)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Particulates (QCLot: 536063)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 536064)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 536065)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 536066)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 536067)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 522225)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 522225) - continued						
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 522229)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 536062)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	100	85.0	115	----
Particulates (QCLot: 536063)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	107	85.0	115	----
Anions and Nutrients (QCLot: 536064)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	103	90.0	110	----
Anions and Nutrients (QCLot: 536065)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	106	85.0	115	----
Anions and Nutrients (QCLot: 536066)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	105	90.0	110	----
Anions and Nutrients (QCLot: 536067)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	104	90.0	110	----
Total Metals (QCLot: 522225)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	108	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	111	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	103	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	105	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	102	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	103	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	101	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	104	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	104	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	101	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	102	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	103	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	108	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	107	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	101	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	110	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	104	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	107	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	101	80.0	120	----
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	117	80.0	120	----

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 522225) - continued									
potassium, total	7440-09-7	E447	0.025	mg	25 mg	109	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	105	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	101	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	94.2	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	108	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	105	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	96.1	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	105	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	106	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	105	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	105	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	106	80.0	120	----
Total Metals (QCLot: 522229)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	80.0	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 536064)										
YL2200611-002	M-DF02	chloride	16887-00-6	E244.Cl	33.1 mg	32 mg	103	75.0	125	----
Anions and Nutrients (QCLot: 536065)										
YL2200611-002	M-DF02	ammonia, total (as N)	7664-41-7	E301	ND mg	0.002 mg	ND	75.0	125	----
Anions and Nutrients (QCLot: 536066)										
YL2200611-002	M-DF02	sulfate	14808-79-8	E244.SO4	33.7 mg	32 mg	105	75.0	125	----
Anions and Nutrients (QCLot: 536067)										
YL2200611-002	M-DF02	nitrate (as N)	14797-55-8	E244.NO3	0.833 mg	0.8 mg	104	75.0	125	----
Total Metals (QCLot: 522229)										
YL2200611-002	M-DF02	mercury, total	7439-97-6	E516	0.000238 mg	0.00025 mg	95.3	70.0	130	----

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution		Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other		◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax		○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com		○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com		○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:		
Invoice To	Same as Report ? Y	Client / Project Information		Analysis Request
Hardcopy of Invoice with Report?		Job #:		Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE: OL 1108073		P
Contact:		LSD:		
Address:		Job Ref: Madrid Dustfall		
Phone:	Fax:	Quote #:		
Lab Work Order # (lab use only)		ALS Contact: Amber Springer	Sampler: GDV	

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	M-DF01	05-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF02	05-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF03	05-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF04	05-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF05	05-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF06	07-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF07	07-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF08	07-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF09	07-May-22	07-Jun-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2200611

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Guillaume Dumont-Vandewinkel	8-Jun-22	7:00		JUNE 08-22	14:37	4.8 °C				

GENF 18.01 Front

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2200862**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 07-Jul-2022 17:15
PO	: OL 1108073	Date Analysis Commenced	: 19-Jul-2022
C-O-C number	: ----	Issue Date	: 02-Aug-2022 17:25
Sampler	: ----		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Janice Pearson	Account Manager Assistant	Administration, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Inorganics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Owen Cheng		Metals, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm^2	square centimetres
days	days
mg	milligram
$mg/dm^2.day$	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLB	*Detection Limit Raised. Analyte detected at comparable level in Method Blank.*

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022
						YL2200862-001	YL2200862-002	YL2200862-003	YL2200862-004	YL2200862-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		29.0	29.0	29.0	29.0	29.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.24	1.19	0.29	<0.24	0.25
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.12	0.32	0.29	<0.12	0.25
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.12	0.87	<0.12	0.22	<0.12
dustfall, total insoluble	----	E882	1.9	mg		<1.9	5.1	4.7	<1.9	4.0
dustfall, total soluble	----	E881	1.9	mg		<1.9	14.0	<1.9	3.6	<1.9
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		0.0025	0.0088	0.0210	0.0123	0.0037
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.21	<0.21	<0.21	<0.21	<0.21
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0012	<0.0012	<0.0012	<0.0012	<0.0012
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.014	<0.014	<0.014	<0.014	<0.014
ammonia, total (as N)	7664-41-7	E301	0.019	mg		0.040	0.142	0.338	0.197	0.060
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	<3.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	<0.019
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	<0.22
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.000386	0.00596	0.00192	0.000697	0.0105
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	<0.0000031
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	0.0000080
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		<0.0000062	<0.0000280	<0.0000249	<0.0000124	<0.0000124
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	<0.000016
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	<0.000016
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00199	0.0157	0.00902	0.00498	0.0348
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000016	0.000016	<0.000016	<0.000016	0.000044
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000031	0.0000050	<0.0000031	<0.0000031	0.0000116
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000031	0.000110	0.000044	<0.000031	0.000083
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00093	0.0123	0.00423	0.00124	0.0235

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022
						YL2200862-001	YL2200862-002	YL2200862-003	YL2200862-004	YL2200862-005
						Result	Result	Result	Result	Result
Total Metals										
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000016	0.0000038	<0.0000016	<0.0000016	0.0000029
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00072	0.00822	0.00597	0.00380	0.00983
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000255	0.000316	0.000155	0.0000896	0.000585
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000016	<0.0000016	<0.0000016	<0.0000016	<0.0000016
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000016	0.0000016	<0.0000016	<0.0000016	<0.0000016
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	0.000027
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		0.0027	0.0236	0.0309	0.0197	<0.0016
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		0.0042	0.0373	0.0360	0.0315	0.0027
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000031	<0.000031	<0.000031	<0.000031	<0.000031
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0016	0.0075	0.0024	<0.0016	0.0124
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000031	<0.00000031	<0.00000031	<0.00000031	<0.00000031
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0021	0.0082	0.0082	0.0068	0.0019
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000070	0.0000201	0.0000505	0.0000134	0.0000190
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	<0.0000031
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	<0.0000031
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00031	<0.00031	<0.00031	<0.00031	0.00038
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000031	<0.000031	<0.000031	<0.000031	0.000048
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000093	0.000174	0.000324	0.000112	<0.000093
aluminum, total	7429-90-5	E447	0.0030	mg		0.0062	0.0957	0.0309	0.0112	0.169
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	0.000129
barium, total	7440-39-3	E447	0.000050	mg		<0.000100 DLB	<0.000450 DLB	<0.000400 DLB	<0.000200 DLB	<0.000200 DLB
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
calcium, total	7440-70-2	E447	0.010	mg		0.032	0.252	0.145	0.080	0.559
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	0.00025	<0.00025	<0.00025	0.00071
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	0.000080	<0.000050	<0.000050	0.000186
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	0.00177	0.00071	<0.00050	0.00133

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022
						YL2200862-001	YL2200862-002	YL2200862-003	YL2200862-004	YL2200862-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	E447	0.015	mg		<0.015	0.197	0.068	0.020	0.378
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	0.000062	<0.000025	<0.000025	0.000047
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
magnesium, total	7439-95-4	E447	0.0025	mg		0.0116	0.132	0.0959	0.0611	0.158
manganese, total	7439-96-5	E447	0.00010	mg		0.00041	0.00507	0.00249	0.00144	0.00940
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	0.000026	<0.000025	<0.000025	<0.000025
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	0.00044
phosphorus, total	7723-14-0	E447	0.025	mg		0.043	0.379	0.496	0.316	<0.025
potassium, total	7440-09-7	E447	0.025	mg		0.068	0.599	0.579	0.506	0.044
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
silicon, total	7440-21-3	E447	0.025	mg		<0.025	0.120	0.039	<0.025	0.200
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
sodium, total	7440-23-5	E447	0.025	mg		0.034	0.132	0.131	0.110	0.030
strontium, total	7440-24-6	E447	0.000050	mg		0.000112	0.000323	0.000812	0.000216	0.000306
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	0.0061
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	0.00078
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	0.0028	0.0052	0.0018	<0.0015

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID: CDF4	----	----	----	----
					Client sampling date / time: 06-Jul-2022	----	----	----	----
					YL2200862-006	--------	--------	--------	--------
					Result	----	----	----	----
Field Tests									
area sampled, field	----	EF001A	0.010	cm²	55.4	----	----	----	----
sampling time, field	----	EF001B	1.0	days	29.0	----	----	----	----
Particulates									
dustfall, total	----	EC880T.A	0.10	mg/dm².day	<0.24	----	----	----	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day	0.18	----	----	----	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day	<0.12	----	----	----	----
dustfall, total insoluble	----	E882	1.9	mg	2.9	----	----	----	----
dustfall, total soluble	----	E881	1.9	mg	<1.9	----	----	----	----
Anions and Nutrients									
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day	0.0024	----	----	----	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day	<0.21	----	----	----	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day	<0.0012	----	----	----	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day	<0.014	----	----	----	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.039	----	----	----	----
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----	----	----	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----	----	----	----
sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	----	----	----	----
Total Metals									
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day	0.0101	----	----	----	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day	<0.0000031	----	----	----	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day	0.0000034	----	----	----	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day	<0.0000124	----	----	----	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day	<0.000016	----	----	----	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day	<0.000016	----	----	----	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day	<0.00031	----	----	----	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day	<0.0000013	----	----	----	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day	0.0276	----	----	----	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day	0.000042	----	----	----	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day	0.0000105	----	----	----	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day	0.000069	----	----	----	----
iron, total	7439-89-6	EC447	0.00079	mg/dm².day	0.0209	----	----	----	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day	0.0000024	----	----	----	----

Analytical Results

Sub-Matrix: Dustfall (Matrix: Air)					Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	06-Jul-2022	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit		YL2200862-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00016	----	----	----	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00884	----	----	----	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.000494	----	----	----	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000016	----	----	----	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000016	----	----	----	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		0.000024	----	----	----	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0016	----	----	----	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0016	----	----	----	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000031	----	----	----	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		0.0125	----	----	----	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000031	----	----	----	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0026	----	----	----	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000152	----	----	----	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000031	----	----	----	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000031	----	----	----	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		0.00037	----	----	----	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	----	----	----	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		0.000047	----	----	----	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000093	----	----	----	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.163	----	----	----	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	----	----	----	----
arsenic, total	7440-38-2	E447	0.000050	mg		0.000054	----	----	----	----
barium, total	7440-39-3	E447	0.000050	mg		<0.000200 DLB	----	----	----	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	----	----	----	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	----	----	----	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	----	----	----	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	----	----	----	----
calcium, total	7440-70-2	E447	0.010	mg		0.444	----	----	----	----
chromium, total	7440-47-3	E447	0.00025	mg		0.00068	----	----	----	----
cobalt, total	7440-48-4	E447	0.000050	mg		0.000169	----	----	----	----
copper, total	7440-50-8	E447	0.00050	mg		0.00111	----	----	----	----
iron, total	7439-89-6	E447	0.015	mg		0.336	----	----	----	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	06-Jul-2022	----	----	----	----
						YL2200862-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
lead, total	7439-92-1	E447	0.000025	mg		0.000038	----	----	----	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	----	----	----	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.142	----	----	----	----
manganese, total	7439-96-5	E447	0.00010	mg		0.00793	----	----	----	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	----	----	----	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	----	----	----	----
nickel, total	7440-02-0	E447	0.00025	mg		0.00039	----	----	----	----
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	----	----	----	----
potassium, total	7440-09-7	E447	0.025	mg		<0.025	----	----	----	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	----	----	----	----
silicon, total	7440-21-3	E447	0.025	mg		0.201	----	----	----	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	----	----	----	----
sodium, total	7440-23-5	E447	0.025	mg		0.041	----	----	----	----
strontium, total	7440-24-6	E447	0.000050	mg		0.000245	----	----	----	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	----	----	----	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	----	----	----	----
titanium, total	7440-32-6	E447	0.0050	mg		0.0060	----	----	----	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	----	----	----	----
vanadium, total	7440-62-2	E447	0.00050	mg		0.00076	----	----	----	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2200862**	Page	: 1 of 14
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 07-Jul-2022 17:15
PO	: OL 1108073	Issue Date	: 02-Aug-2022 17:26
C-O-C number	: ----		
Sampler	: ----		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- Method Blank value outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Air**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Method Blank (MB) Values								
Total Metals	QC-579618-001	----	barium, total	7440-39-3	E447	0.000132 MB-LOR mg	0.00005 mg	Blank result exceeds permitted value

Result Qualifiers

Qualifier	Description
MB-LOR	*Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CDF4	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CDF4	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
DFA1	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF1	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF2	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF3	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CDF4	EF001B	06-Jul-2022	----	----	----		19-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001B	06-Jul-2022	----	----	----		19-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
DFA1	EF001B	06-Jul-2022	----	----	----		19-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF1	EF001B	06-Jul-2022	----	----	----		19-Jul-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF2	EF001B	06-Jul-2022	----	----	----		19-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF3	EF001B	06-Jul-2022	----	----	----		19-Jul-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
DFA1	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF1	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF2	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF3	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) CONTROLDF	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) DFA1	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF1	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF2	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF3	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E516	06-Jul-2022	27-Jul-2022	180 days	22 days	✓	27-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E516	06-Jul-2022	27-Jul-2022	180 days	22 days	✓	27-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E516	06-Jul-2022	27-Jul-2022	180 days	22 days	✓	27-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E516	06-Jul-2022	27-Jul-2022	180 days	22 days	✓	27-Jul-2022	180 days	0 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E516	06-Jul-2022	27-Jul-2022	180 days	22 days	✓	27-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E516	06-Jul-2022	27-Jul-2022	180 days	22 days	✓	27-Jul-2022	180 days	0 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E447	06-Jul-2022	28-Jul-2022	----	----		29-Jul-2022	180 days	24 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E447	06-Jul-2022	28-Jul-2022	----	----		29-Jul-2022	180 days	24 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E447	06-Jul-2022	28-Jul-2022	----	----		29-Jul-2022	180 days	24 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E447	06-Jul-2022	28-Jul-2022	----	----		29-Jul-2022	180 days	24 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E447	06-Jul-2022	28-Jul-2022	----	----		29-Jul-2022	180 days	24 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E447	06-Jul-2022	28-Jul-2022	----	----		29-Jul-2022	180 days	24 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	569904	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	569903	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	569906	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	569905	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	579620	1	6	16.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	579618	1	6	16.6	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	569904	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	569903	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	569906	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	569905	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	569900	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	579620	1	6	16.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	579618	1	6	16.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	569899	1	15	6.6	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	569904	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	569903	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	569906	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	569905	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	569900	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	579620	1	6	16.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	579618	1	6	16.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	569899	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	569904	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	569903	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	569906	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	569905	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	579620	1	6	16.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **YL2200862**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 07-Jul-2022 17:15
PO	: OL 1108073	Date Analysis Commenced	: 19-Jul-2022
C-O-C number	: ----	Issue Date	: 02-Aug-2022 17:26
Sampler	: ----		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Janice Pearson	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Inorganics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Vancouver Metals, Burnaby, British Columbia
Owen Cheng		Vancouver Metals, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 569903)											
YL2200862-001	CONTROLDF	chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	<3.4	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 569904)											
YL2200862-001	CONTROLDF	ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.040	0.043	0.003	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 569905)											
YL2200862-001	CONTROLDF	sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	<0.22	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 569906)											
YL2200862-001	CONTROLDF	nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
Total Metals (QC Lot: 579618)											
YL2200862-001	CONTROLDF	aluminum, total	7429-90-5	E447	0.0030	mg	0.0062	0.0050	0.0011	Diff <2x LOR	----
		antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000100	mg	<0.000100	<0.000100	0	Diff <2x LOR	----
		beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	<0.000020	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.010	mg	0.032	0.030	0.002	Diff <2x LOR	----
		chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		iron, total	7439-89-6	E447	0.015	mg	<0.015	<0.015	0	Diff <2x LOR	----
		lead, total	7439-92-1	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	<0.0025	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E447	0.0025	mg	0.0116	0.0103	0.0012	Diff <2x LOR	----
		manganese, total	7439-96-5	E447	0.00010	mg	0.00041	0.00034	0.00007	Diff <2x LOR	----
		molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.025	mg	0.043	0.042	0.001	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.025	mg	0.068	0.064	0.004	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		silicon, total	7440-21-3	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 579618) - continued											
YL2200862-001	CONTROLDF	silver, total	7440-22-4	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.025	mg	0.034	0.031	0.002	Diff <2x LOR	----
		strontium, total	7440-24-6	E447	0.000050	mg	0.000112	0.000109	0.000004	Diff <2x LOR	----
		thallium, total	7440-28-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 579620)											
YL2200862-001	CONTROLDF	mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 569899)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Particulates (QCLot: 569900)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 569903)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 569904)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 569905)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 569906)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 579618)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	# 0.000132	MB-LOR
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 579618) - continued						
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 579620)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000020	----

Qualifiers

Qualifier	Description
MB-LOR	*Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.*

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 569899)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	102	85.0	115	----
Particulates (QCLot: 569900)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	109	85.0	115	----
Anions and Nutrients (QCLot: 569903)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	102	90.0	110	----
Anions and Nutrients (QCLot: 569904)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	98.7	85.0	115	----
Anions and Nutrients (QCLot: 569905)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	104	90.0	110	----
Anions and Nutrients (QCLot: 569906)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	103	90.0	110	----
Total Metals (QCLot: 579618)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	105	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	111	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	104	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	104	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	102	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	109	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	101	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	104	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	107	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	104	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	104	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	103	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	116	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	107	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	106	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	106	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	106	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	108	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	103	80.0	120	----
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	112	80.0	120	----

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 579618) - continued									
potassium, total	7440-09-7	E447	0.025	mg	25 mg	105	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	107	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	110	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	97.2	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	103	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	113	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	88.6	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	105	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	97.1	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	110	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	105	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	104	80.0	120	----
Total Metals (QCLot: 579620)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	89.8	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 569903)										
YL2200862-002	TIADF1	chloride	16887-00-6	E244.Cl	20.2 mg	19.5 mg	103	75.0	125	----
Anions and Nutrients (QCLot: 569904)										
YL2200862-002	TIADF1	ammonia, total (as N)	7664-41-7	E301	ND mg	0.039 mg	ND	75.0	125	MS-B
Anions and Nutrients (QCLot: 569905)										
YL2200862-002	TIADF1	sulfate	14808-79-8	E244.SO4	20.5 mg	19.5 mg	105	75.0	125	----
Anions and Nutrients (QCLot: 569906)										
YL2200862-002	TIADF1	nitrate (as N)	14797-55-8	E244.NO3	0.502 mg	0.4875 mg	103	75.0	125	----
Total Metals (QCLot: 579620)										
YL2200862-002	TIADF1	mercury, total	7439-97-6	E516	0.000220 mg	0.00023 mg	95.5	70.0	130	----

Qualifiers

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

ALS Environmental

Chain of Custody / Analytical Request Form
Canada Toll Free: 1 800 668 9878
www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution				Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard	☐ Other			◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF	☑ Excel	☑ Digital	☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1:	enviro.data@agnicoeagle.com			○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2:	Gregory.Crooks@stantec.com			○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:				Analysis Request
Invoice To	Same as Report ? Y	Client / Project Information				Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:				P
Company:		PO / AFE:	OL 1108073			
Contact:		LSD:				
Address:		Job Ref:	Doris Dustfall			
Phone:	Fax:	Quote #:				
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler:		

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	CONTROLDF	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF1	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF2	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF3	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	DFA1	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	CDF4	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2200862

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Ty Lausch	7-Jul-22	7:30		JULY 07/22	16:15	15.0 °C				

GENF 18.01 Front

ALS Environmental

Chain of Custody / Analytical Request Form
Canada Toll Free: 1 800 668 9878
www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution		Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other		◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax		○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1:	enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2:	Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:		**Analysis Request**
Invoice To	Same as Report ? Y	**Client / Project Information**		Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:		P
Company:		PO / AFE:	OL 1108073	
Contact:		LSD:		
Address:		Job Ref:	Doris Dustfall	
Phone:	Fax:	Quote #:		
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler:

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	CONTROLDF	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF1	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF2	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF3	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	DFA1	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	CDF4	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2200862

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.
By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.
Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date: JULY	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Ty Lausch	7-Jul-22	7:30		07/22	16:15	15.0 °C	AS	07/12/22	1224	

GENF 18.01 Front

25°
Ice Pack

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution		Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other		◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax		○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1:	enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2:	Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:		**Analysis Request**
Invoice To	Same as Report ? Y	**Client / Project Information**		Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:		P
Company:		PO / AFE:	OL 1108073	
Contact:		LSD:		
Address:		Job Ref:	Doris Dustfall	
Phone:	Fax:	Quote #:		
Lab Work Order # (lab use only)		**ALS Contact:**	Amber Springer **Sampler:**	

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	CONTROLDF	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF1	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF2	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF3	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	DFA1	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	CDF4	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2200862

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date: JULY	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Ty Lausch	7-Jul-22	7:30		07/22	16:15	15.0 °C	AB	07/12/22	1224	

GENF 18.01 Front

25C
IcePack

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2200863**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 07-Jul-2022 17:15
PO	: OL 1108073	Date Analysis Commenced	: 14-Jul-2022
C-O-C number	: ----	Issue Date	: 27-Jul-2022 11:36
Sampler	: TO/JT		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Metals, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Inorganics, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia
Owen Cheng		Metals, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm^2	square centimetres
days	days
mg	milligram
$mg/dm^2.day$	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022
						YL2200863-001	YL2200863-002	YL2200863-003	YL2200863-004	YL2200863-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		29.0	29.0	29.0	29.0	29.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.24	<0.24	0.27	<0.24	<0.24
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.12	<0.12	<0.12	<0.12	<0.12
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.12	0.21	0.27	<0.12	<0.12
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
dustfall, total soluble	----	E881	1.9	mg		<1.9	3.4	4.3	<1.9	<1.9
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0012	0.0019	0.0050	0.0036	<0.0012
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.21	<0.21	<0.21	<0.21	<0.21
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0012	<0.0012	<0.0012	<0.0012	<0.0012
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.014	<0.014	<0.014	<0.014	<0.014
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.019	0.031	0.081	0.058	<0.019
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	<3.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	<0.019
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	<0.22
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.000199	0.000330	0.000212	0.000921	<0.000187
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	<0.0000031
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	<0.0000031
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000039	0.0000149	0.0000060	0.0000052	0.0000034
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	<0.000016
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	<0.000016
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00199	0.00392	0.00324	0.00461	0.00124
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	<0.000016
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	<0.0000031
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000031	<0.000031	<0.000031	<0.000031	<0.000031
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00093	<0.00093	<0.00093	0.00212	<0.00093

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022
						YL2200863-001	YL2200863-002	YL2200863-003	YL2200863-004	YL2200863-005
						Result	Result	Result	Result	Result
Total Metals										
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000016	<0.0000016	<0.0000016	<0.0000016	<0.0000016
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00016	<0.00016	<0.00016	<0.00016	<0.00016
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00037	0.00169	0.00396	0.00253	0.00052
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000249	0.0000473	0.0000921	0.0000840	0.0000118
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000016	<0.0000016	<0.0000016	<0.0000016	<0.0000016
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000016	<0.0000016	<0.0000016	<0.0000016	<0.0000016
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	<0.000016
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0016	0.0074	0.0200	0.0095	0.0023
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0016	0.0108	0.0310	0.0163	0.0029
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000031	<0.000031	<0.000031	<0.000031	<0.000031
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000031	<0.00000031	<0.00000031	<0.00000031	<0.00000031
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		<0.0016	0.0031	0.0067	0.0044	<0.0016
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		<0.0000031	0.0000220	0.0000055	0.0000054	0.0000102
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	<0.0000031
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	<0.0000031
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00031	<0.00031	<0.00031	<0.00031	<0.00031
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000031	<0.000031	<0.000031	<0.000031	<0.000031
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000093	<0.000093	0.000093	<0.000093	<0.000093
aluminum, total	7429-90-5	E447	0.0030	mg		0.0032	0.0053	0.0034	0.0148	<0.0030
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
barium, total	7440-39-3	E447	0.000050	mg		0.000063	0.000239	0.000096	0.000084	0.000055
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
calcium, total	7440-70-2	E447	0.010	mg		0.032	0.063	0.052	0.074	0.020
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022
						YL2200863-001	YL2200863-002	YL2200863-003	YL2200863-004	YL2200863-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	E447	0.015	mg		<0.015	<0.015	<0.015	0.034	<0.015
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
magnesium, total	7439-95-4	E447	0.0025	mg		0.0060	0.0272	0.0636	0.0407	0.0083
manganese, total	7439-96-5	E447	0.00010	mg		0.00040	0.00076	0.00148	0.00135	0.00019
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	0.119	0.321	0.152	0.037
potassium, total	7440-09-7	E447	0.025	mg		<0.025	0.174	0.499	0.262	0.047
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
silicon, total	7440-21-3	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	<0.025
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
sodium, total	7440-23-5	E447	0.025	mg		<0.025	0.050	0.108	0.070	<0.025
strontium, total	7440-24-6	E447	0.000050	mg		<0.000050	0.000353	0.000089	0.000087	0.000164
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	<0.0015	0.0015	<0.0015	<0.0015

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	----
						YL2200863-006	YL2200863-007	YL2200863-008	YL2200863-009	--------
						Result	Result	Result	Result	----
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	----
sampling time, field	----	EF001B	1.0	days		29.0	29.0	29.0	29.0	----
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		0.85	2.22	0.60	0.27	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		0.72	1.56	0.60	0.27	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		0.12	0.66	<0.12	<0.12	----
dustfall, total insoluble	----	E882	1.9	mg		11.6	25.0	9.6	4.3	----
dustfall, total soluble	----	E881	1.9	mg		2.0	10.6	<1.9	<1.9	----
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		0.0040	0.0062	<0.0012	<0.0012	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.21	<0.21	<0.21	<0.21	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0012	<0.0012	<0.0012	<0.0012	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.014	<0.014	<0.014	<0.014	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg		0.065	0.100	<0.019	<0.019	----
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	----
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	----
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.00541	0.0277	0.00261	0.00846	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000031	0.0000038	<0.0000031	<0.0000031	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000117	0.0000129	0.0000091	0.0000108	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000016	<0.000016	<0.000016	<0.000016	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00031	<0.00031	<0.00031	<0.00031	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.0549	0.0401	0.0505	0.0266	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000016	0.000067	<0.000016	0.000021	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		0.0000059	0.0000254	0.0000032	0.0000078	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		0.000038	0.000056	<0.000031	<0.000031	----
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		0.0115	0.0647	0.00560	0.0192	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000016	<0.0000016	<0.0000016	<0.0000016	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	----
						YL2200863-006	YL2200863-007	YL2200863-008	YL2200863-009	--------
						Result	Result	Result	Result	----
Total Metals										
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00016	<0.00016	<0.00016	<0.00016	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00859	0.0262	0.00539	0.00884	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.000513	0.00114	0.000522	0.000536	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000016	<0.0000016	<0.0000016	<0.0000016	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000016	<0.0000016	<0.0000016	<0.0000016	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000016	0.000043	<0.000016	0.000016	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		0.0167	0.0206	0.0042	0.0045	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		0.0220	0.0296	0.0067	0.0083	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000031	<0.000031	<0.000031	<0.000031	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		0.0065	0.0367	0.0033	0.0099	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000031	<0.00000031	<0.00000031	<0.00000031	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0057	0.0065	0.0021	0.0041	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000338	0.0000236	0.0000393	0.0000195	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000031	<0.0000031	<0.0000031	<0.0000031	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00031	<0.00031	<0.00031	<0.00031	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		0.000031	0.000159	<0.000031	0.000050	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000093	0.000149	<0.000093	<0.000093	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.0869	0.445	0.0419	0.136	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	0.000061	<0.000050	<0.000050	----
barium, total	7440-39-3	E447	0.000050	mg		0.000188	0.000208	0.000146	0.000173	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	----
calcium, total	7440-70-2	E447	0.010	mg		0.882	0.644	0.812	0.428	----
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	0.00107	<0.00025	0.00034	----
cobalt, total	7440-48-4	E447	0.000050	mg		0.000095	0.000409	0.000052	0.000125	----
copper, total	7440-50-8	E447	0.00050	mg		0.00062	0.00090	<0.00050	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg		0.185	1.04	0.090	0.308	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	06-Jul-2022	06-Jul-2022	06-Jul-2022	06-Jul-2022	----
						YL2200863-006	YL2200863-007	YL2200863-008	YL2200863-009	--------
						Result	Result	Result	Result	----
Total Metals										
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.138	0.421	0.0866	0.142	----
manganese, total	7439-96-5	E447	0.00010	mg		0.00824	0.0184	0.00838	0.00862	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	0.00069	<0.00025	0.00026	----
phosphorus, total	7723-14-0	E447	0.025	mg		0.268	0.331	0.068	0.073	----
potassium, total	7440-09-7	E447	0.025	mg		0.353	0.475	0.107	0.134	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg		0.104	0.590	0.053	0.159	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg		0.091	0.105	0.034	0.066	----
strontium, total	7440-24-6	E447	0.000050	mg		0.000543	0.000379	0.000632	0.000313	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
vanadium, total	7440-62-2	E447	0.00050	mg		0.00050	0.00256	<0.00050	0.00080	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	0.0024	<0.0015	<0.0015	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2200863**	Page	: 1 of 17
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 07-Jul-2022 17:15
PO	: OL 1108073	Issue Date	: 27-Jul-2022 11:36
C-O-C number	: ----		
Sampler	: TO/JT		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E301	06-Jul-2022	20-Jul-2022	----	----		22-Jul-2022	----	2 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.Cl	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.NO3	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.SO4	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF01	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF02	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF03	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF04	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF05	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF06	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF07	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF08	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF09	EF001A	06-Jul-2022	----	----	----		27-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF01	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF02	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF03	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF04	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF05	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF06	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF07	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF08	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF09	EF001B	06-Jul-2022	----	----	----		14-Jul-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF01	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF02	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF03	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF04	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF05	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF06	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF07	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E882	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF01	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF02	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF03	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF04	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF05	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF06	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF07	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E881	06-Jul-2022	20-Jul-2022	----	----		20-Jul-2022	----	0 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E516	06-Jul-2022	18-Jul-2022	180 days	13 days	✓	19-Jul-2022	180 days	0 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E447	06-Jul-2022	19-Jul-2022	----	----		20-Jul-2022	180 days	14 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	569904	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	569903	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	569906	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	569905	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	567586	1	9	11.1	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	567587	1	9	11.1	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	569904	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	569903	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	569906	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	569905	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	569900	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	567586	1	9	11.1	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	567587	1	9	11.1	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	569899	1	15	6.6	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	569904	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	569903	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	569906	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	569905	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	569900	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	567586	1	9	11.1	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	567587	1	9	11.1	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	569899	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	569904	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	569903	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	569906	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	569905	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	567586	1	9	11.1	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

QUALITY CONTROL REPORT

Work Order	: **YL2200863**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 07-Jul-2022 17:15
PO	: OL 1108073	Date Analysis Commenced	: 14-Jul-2022
C-O-C number	: ----	Issue Date	: 27-Jul-2022 11:36
Sampler	: TO/JT		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Inorganics, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Metals, Burnaby, British Columbia
Owen Cheng		Vancouver Metals, Burnaby, British Columbia
Robin Weeks	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 569903)											
YL2200862-001	Anonymous	chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	<3.4	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 569904)											
YL2200862-001	Anonymous	ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.040	0.043	0.003	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 569905)											
YL2200862-001	Anonymous	sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	<0.22	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 569906)											
YL2200862-001	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
Total Metals (QC Lot: 567586)											
YL2200863-001	M-DF01	mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
Total Metals (QC Lot: 567587)											
YL2200863-001	M-DF01	aluminum, total	7429-90-5	E447	0.0030	mg	0.0032	0.0041	0.0009	Diff <2x LOR	----
		antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000050	mg	0.000063	<0.000050	0.000013	Diff <2x LOR	----
		beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	<0.000020	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.010	mg	0.032	0.033	0.002	Diff <2x LOR	----
		chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		iron, total	7439-89-6	E447	0.015	mg	<0.015	<0.015	0	Diff <2x LOR	----
		lead, total	7439-92-1	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	<0.0025	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E447	0.0025	mg	0.0060	0.0060	0.000002	Diff <2x LOR	----
		manganese, total	7439-96-5	E447	0.00010	mg	0.00040	0.00049	0.00009	Diff <2x LOR	----
		molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 567587) - continued											
YL2200863-001	M-DF01	selenium, total	7782-49-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		silicon, total	7440-21-3	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		silver, total	7440-22-4	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		strontium, total	7440-24-6	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		thallium, total	7440-28-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	<0.0015	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 569899)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Particulates (QCLot: 569900)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 569903)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 569904)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 569905)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 569906)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 567586)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000020	----
Total Metals (QCLot: 567587)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 567587) - continued						
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 569899)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	102	85.0	115	----
Particulates (QCLot: 569900)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	109	85.0	115	----
Anions and Nutrients (QCLot: 569903)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	102	90.0	110	----
Anions and Nutrients (QCLot: 569904)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	98.7	85.0	115	----
Anions and Nutrients (QCLot: 569905)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	104	90.0	110	----
Anions and Nutrients (QCLot: 569906)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	103	90.0	110	----
Total Metals (QCLot: 567586)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	90.6	70.0	130	----
Total Metals (QCLot: 567587)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	103	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	105	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	101	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	100	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	99.3	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	102	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	97.2	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	100	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	103	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	100	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	99.5	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	102	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	114	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	99.4	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	97.4	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	103	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	107	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	101	80.0	120	----

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 567587) - continued									
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	100	80.0	120	----
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	105	80.0	120	----
potassium, total	7440-09-7	E447	0.025	mg	25 mg	100	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	98.5	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	96.1	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	92.3	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	101	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	102	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	89.1	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	97.8	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	97.2	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	98.9	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	103	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	102	80.0	120	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 569903)										
YL2200862-002	Anonymous	chloride	16887-00-6	E244.Cl	20.2 mg	19.5 mg	103	75.0	125	----
Anions and Nutrients (QCLot: 569904)										
YL2200862-002	Anonymous	ammonia, total (as N)	7664-41-7	E301	ND mg	0.039 mg	ND	75.0	125	MS-B
Anions and Nutrients (QCLot: 569905)										
YL2200862-002	Anonymous	sulfate	14808-79-8	E244.SO4	20.5 mg	19.5 mg	105	75.0	125	----
Anions and Nutrients (QCLot: 569906)										
YL2200862-002	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.502 mg	0.4875 mg	103	75.0	125	----
Total Metals (QCLot: 567586)										
YL2200863-002	M-DF02	mercury, total	7439-97-6	E516	0.000220 mg	0.00025 mg	88.0	70.0	130	----

Qualifiers

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution				Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard	☐ Other			◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF	☑ Excel	☑ Digital	☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1:	enviro.data@agnicoeagle.com			○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2:	Gregory.Crooks@stantec.com			○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:				
Invoice To	Same as Report ? Y	Client / Project Information				Analysis Request
Hardcopy of Invoice with Report?		Job #:				Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE:	OL 1108073			P
Contact:		LSD:				
Address:		Job Ref:	Madrid Dustfall			
Phone:	Fax:	Quote #:				
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler:	TO/JT	

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	M-DF01	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF02	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF03	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF04	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF05	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF06	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF07	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF08	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF09	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2200863

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Ty Lausch	7-Jul-22	7:30	SA	JULY 07/22	16:15	15.0 °C				

GENF 18.01 Front

ALS Environmental

Chain of Custody / Analytical Request Form
Canada Toll Free: 1 800 668 9878
www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		**Report Format / Distribution**				**Service Requested** (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard	☐ Other			◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF	☑ Excel	☑ Digital	☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1:	enviro.data@agnicoeagle.com			○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2:	Gregory.Crooks@stantec.com			○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:				**Analysis Request**
Invoice To	Same as Report ? Y	**Client / Project Information**				Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:				P
Company:		PO / AFE:	OL 1108073			
Contact:		LSD:				
Address:		Job Ref:	Madrid Dustfall			
Phone:	Fax:	Quote #:				
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler:	TO/JT	

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	M-DF01	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF02	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF03	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF04	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF05	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF06	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF07	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF08	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF09	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2200863

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.
By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.
Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)			SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Ty Lausch	7-Jul-22	7:30	SA	JULY 07/22	16:15	15.0 °C	AB	07/12/22	2245	

GENF 18.01 Front

25°C
Icepack

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution		Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other		◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax		○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1:	enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2:	Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:		**Analysis Request**
Invoice To	Same as Report ? Y	Client / Project Information		Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:		P
Company:		PO / AFE:	OL 1108073	
Contact:		LSD:		
Address:		Job Ref:	Madrid Dustfall	
Phone:	Fax:	Quote #:		
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler: TO/JT

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	M-DF01	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF02	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF03	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF04	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF05	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF06	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF07	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF08	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF09	07-Jun-22	06-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2200863

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Ty Lausch	7-Jul-22	7:30	SA	JULY 07/22	16:15	15.0 °C	AB	07/12/22	12:45	

25 c
Icepack

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2201120**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 03-Aug-2022 15:35
PO	: OL 1108073	Date Analysis Commenced	: 11-Aug-2022
C-O-C number	: ----	Issue Date	: 19-Aug-2022 11:38
Sampler	: JN/WN		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Dan Gebert	Laboratory Analyst	Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Inorganics, Burnaby, British Columbia
Owen Cheng		Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm²	square centimetres
days	days
mg	milligram
mg/dm².day	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLIS	*Detection Limit Adjusted due to insufficient sample.*

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022
						YL2201120-001	YL2201120-002	YL2201120-003	YL2201120-004	YL2201120-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		54.0	54.0	54.0	54.0	54.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.13	<0.13	<0.13	<0.13	<0.13
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.10	<0.10	<0.10	<0.10	<0.10
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.10	<0.10	<0.10	<0.10	<0.10
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	2.9
dustfall, total soluble	----	E881	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		0.0024	0.0040	0.0022	<0.0017	<0.0022
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.18	<0.18	<0.18	<0.18	<0.18
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.013	<0.013	<0.013	<0.013	<0.013
ammonia, total (as N)	7664-41-7	E301	0.019	mg		0.073	0.120	0.066	<0.052 DLIS	<0.066 DLIS
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	<3.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	<0.019
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	<0.22
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.000204	0.000234	<0.000160	<0.000160	0.000872
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		<0.0000026	0.0000045	0.0000072	<0.0000026	<0.0000026
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	<0.000013
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	<0.000013
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00157	0.00167	0.00124	0.00080	0.00444
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	<0.000013
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000026	<0.000026	0.000032	<0.000026	<0.000026
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00079	<0.00079	<0.00079	<0.00079	0.00194

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022
						YL2201120-001	YL2201120-002	YL2201120-003	YL2201120-004	YL2201120-005
						Result	Result	Result	Result	Result
Total Metals										
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00033	0.00071	0.00146	0.00062	0.00153
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000107	0.0000298	0.000143	0.0000134	0.0000672
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	<0.000013
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0013	0.0025	0.0103	0.0018	0.0027
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		0.0022	0.0036	0.0122	0.0034	0.0062
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000026	<0.000026	<0.000026	<0.000026	<0.000026
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000026	<0.00000026	<0.00000026	<0.00000026	<0.00000026
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0016	0.0018	0.0038	0.0035	0.0042
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000030	0.0000038	0.0000050	0.0000031	0.0000040
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000070	<0.000070	0.000100	<0.000070	<0.000070
aluminum, total	7429-90-5	E447	0.0030	mg		0.0061	0.0070	0.0043	<0.0030	0.0261
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
barium, total	7440-39-3	E447	0.000050	mg		0.000058	0.000135	0.000215	0.000067	0.000054
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
calcium, total	7440-70-2	E447	0.010	mg		0.047	0.050	0.037	0.024	0.133
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	<0.00050	0.00097	<0.00050	<0.00050

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022
						YL2201120-001	YL2201120-002	YL2201120-003	YL2201120-004	YL2201120-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	E447	0.015	mg		<0.015	0.016	<0.015	<0.015	0.058
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
magnesium, total	7439-95-4	E447	0.0025	mg		0.0099	0.0213	0.0437	0.0185	0.0457
manganese, total	7439-96-5	E447	0.00010	mg		0.00032	0.00089	0.00428	0.00040	0.00201
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	0.074	0.307	0.053	0.082
potassium, total	7440-09-7	E447	0.025	mg		0.065	0.108	0.364	0.103	0.187
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
silicon, total	7440-21-3	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	0.026
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
sodium, total	7440-23-5	E447	0.025	mg		0.048	0.054	0.115	0.105	0.127
strontium, total	7440-24-6	E447	0.000050	mg		0.000091	0.000114	0.000149	0.000092	0.000120
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	<0.0015	0.0030	<0.0015	<0.0015

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID: CDF4	----	----	----	----
					Client sampling date / time: 31-Jul-2022	----	----	----	----
					YL2201120-006	--------	--------	--------	--------
					Result	----	----	----	----
Field Tests									
area sampled, field	----	EF001A	0.010	cm²	55.4	----	----	----	----
sampling time, field	----	EF001B	1.0	days	54.0	----	----	----	----
Particulates									
dustfall, total	----	EC880T.A	0.10	mg/dm².day	0.15	----	----	----	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day	0.15	----	----	----	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day	<0.10	----	----	----	----
dustfall, total insoluble	----	E882	1.9	mg	4.6	----	----	----	----
dustfall, total soluble	----	E881	1.9	mg	<1.9	----	----	----	----
Anions and Nutrients									
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day	<0.0024	----	----	----	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day	<0.18	----	----	----	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day	<0.0010	----	----	----	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day	<0.013	----	----	----	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.071 DLIS	----	----	----	----
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----	----	----	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----	----	----	----
sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	----	----	----	----
Total Metals									
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day	0.00351	----	----	----	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day	<0.0000026	----	----	----	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day	<0.0000026	----	----	----	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day	0.0000060	----	----	----	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day	<0.000013	----	----	----	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day	<0.000013	----	----	----	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day	<0.00026	----	----	----	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day	<0.0000013	----	----	----	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day	0.0128	----	----	----	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day	<0.000013	----	----	----	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day	0.0000037	----	----	----	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day	0.000028	----	----	----	----
iron, total	7439-89-6	EC447	0.00079	mg/dm².day	0.00749	----	----	----	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day	<0.0000013	----	----	----	----

Analytical Results

Sub-Matrix: Dustfall (Matrix: Air)					Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	31-Jul-2022	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit	YL2201120-006	--------	--------	--------	--------	
					Result	----	----	----	----	
Total Metals										
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day	<0.00013	----	----	----	----	
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day	0.00391	----	----	----	----	
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day	0.000201	----	----	----	----	
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day	<0.0000013	----	----	----	----	
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day	<0.0000013	----	----	----	----	
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day	<0.000013	----	----	----	----	
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day	<0.0013	----	----	----	----	
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day	<0.0013	----	----	----	----	
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day	<0.000026	----	----	----	----	
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day	0.0039	----	----	----	----	
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day	<0.00000026	----	----	----	----	
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day	0.0059	----	----	----	----	
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day	0.0000114	----	----	----	----	
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day	<0.0000026	----	----	----	----	
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day	<0.0000026	----	----	----	----	
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day	<0.00026	----	----	----	----	
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day	<0.0000026	----	----	----	----	
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day	<0.000020	----	----	----	----	
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day	<0.000070	----	----	----	----	
aluminum, total	7429-90-5	E447	0.0030	mg	0.105	----	----	----	----	
antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	----	----	----	----	
arsenic, total	7440-38-2	E447	0.000050	mg	0.000068	----	----	----	----	
barium, total	7440-39-3	E447	0.000050	mg	0.000178	----	----	----	----	
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----	----	----	----	
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----	----	----	----	
boron, total	7440-42-8	E447	0.0050	mg	<0.0050	----	----	----	----	
cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	----	----	----	----	
calcium, total	7440-70-2	E447	0.010	mg	0.384	----	----	----	----	
chromium, total	7440-47-3	E447	0.00025	mg	0.00036	----	----	----	----	
cobalt, total	7440-48-4	E447	0.000050	mg	0.000111	----	----	----	----	
copper, total	7440-50-8	E447	0.00050	mg	0.00084	----	----	----	----	
iron, total	7439-89-6	E447	0.015	mg	0.224	----	----	----	----	

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	31-Jul-2022	----	----	----	----
						YL2201120-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
lead, total	7439-92-1	E447	0.000025	mg		0.000028	----	----	----	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	----	----	----	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.117	----	----	----	----
manganese, total	7439-96-5	E447	0.00010	mg		0.00601	----	----	----	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	----	----	----	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	----	----	----	----
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	----	----	----	----
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	----	----	----	----
potassium, total	7440-09-7	E447	0.025	mg		0.038	----	----	----	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	----	----	----	----
silicon, total	7440-21-3	E447	0.025	mg		0.118	----	----	----	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	----	----	----	----
sodium, total	7440-23-5	E447	0.025	mg		0.176	----	----	----	----
strontium, total	7440-24-6	E447	0.000050	mg		0.000340	----	----	----	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	----	----	----	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	----	----	----	----
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	----	----	----	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	----	----	----	----
vanadium, total	7440-62-2	E447	0.00050	mg		0.00052	----	----	----	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2201120**	Page	: 1 of 13
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 03-Aug-2022 15:35
PO	: OL 1108073	Issue Date	: 19-Aug-2022 11:38
C-O-C number	: ----		
Sampler	: JN/WN		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CDF4	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CDF4	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CDF4	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
DFA1	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF1	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF2	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF3	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CDF4	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
DFA1	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF1	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF2	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF3	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
DFA1	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF1	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF2	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF3	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) CONTROLDF	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) DFA1	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF1	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF2	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF3	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	598579	1	17	5.8	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	598577	1	17	5.8	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	598580	1	17	5.8	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	598578	1	17	5.8	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	603574	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	603573	1	17	5.8	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	598579	1	17	5.8	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	598577	1	17	5.8	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	598580	1	17	5.8	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	598578	1	17	5.8	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	598581	1	17	5.8	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	603574	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	603573	1	17	5.8	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	598582	1	17	5.8	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	598579	1	17	5.8	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	598577	1	17	5.8	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	598580	1	17	5.8	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	598578	1	17	5.8	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	598581	1	17	5.8	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	603574	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	603573	1	17	5.8	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	598582	1	17	5.8	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	598579	1	17	5.8	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	598577	1	17	5.8	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	598580	1	17	5.8	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	598578	1	17	5.8	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	603574	1	15	6.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **YL2201120**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 03-Aug-2022 15:35
PO	: OL 1108073	Date Analysis Commenced	: 11-Aug-2022
C-O-C number	: ----	Issue Date	: 19-Aug-2022 11:38
Sampler	: JN/WN		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Dan Gebert	Laboratory Analyst	Vancouver Metals, Burnaby, British Columbia
Ophelia Chiu	Department Manager - Organics	Vancouver Inorganics, Burnaby, British Columbia
Owen Cheng		Vancouver Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 598577)											
VA22B8068-001	Anonymous	chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	<3.4	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 598578)											
VA22B8068-001	Anonymous	sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	<0.22	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 598579)											
VA22B8068-001	Anonymous	ammonia, total (as N)	7664-41-7	E301	0.048	mg	<0.048	<0.048	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 598580)											
VA22B8068-001	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	0.028	0.028	0.0005	Diff <2x LOR	----
Total Metals (QC Lot: 603573)											
VA22B8068-002	Anonymous	antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000050	mg	0.000077	0.000114	0.000038	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000050	mg	0.00532	0.00647	19.6%	20%	----
		beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	<0.000020	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.010	mg	0.368	0.389	5.68%	20%	----
		chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000050	mg	0.000076	0.000103	0.000028	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	<0.0025	0	Diff <2x LOR	----
		manganese, total	7439-96-5	E447	0.00010	mg	0.0150	0.0174	14.8%	20%	----
		molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.025	mg	0.046	0.063	0.016	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.025	mg	0.107	0.128	0.021	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		silver, total	7440-22-4	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.025	mg	<0.025	0.025	0.0005	Diff <2x LOR	----
		strontium, total	7440-24-6	E447	0.000050	mg	0.00228	0.00243	6.35%	20%	----
		thallium, total	7440-28-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 603573) - continued											
VA22B8068-002	Anonymous	titanium, total	7440-32-6	E447	0.0050	mg	<0.0050	0.0078	0.0028	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0015	mg	0.0072	0.0076	0.0004	Diff <2x LOR	----
Total Metals (QC Lot: 603574)											
YL2201120-001	CONTROLDF	mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 598581)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Particulates (QCLot: 598582)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 598577)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 598578)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 598579)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 598580)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 603573)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 603573) - continued						
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 603574)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000020	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 598581)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	98.7	85.0	115	----
Particulates (QCLot: 598582)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	100	85.0	115	----
Anions and Nutrients (QCLot: 598577)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	99.7	90.0	110	----
Anions and Nutrients (QCLot: 598578)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	102	90.0	110	----
Anions and Nutrients (QCLot: 598579)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	98.1	85.0	115	----
Anions and Nutrients (QCLot: 598580)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	100	90.0	110	----
Total Metals (QCLot: 603573)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	109	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	113	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	108	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	111	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	109	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	102	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	107	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	106	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	107	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	107	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	107	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	107	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	112	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	106	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	110	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	112	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	111	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	116	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	106	80.0	120	----
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	114	80.0	120	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Total Metals (QCLot: 603573) - continued									
potassium, total	7440-09-7	E447	0.025	mg	25 mg	113	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	109	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	109	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	101	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	112	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	115	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	103	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	106	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	108	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	107	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	108	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	109	80.0	120	----
Total Metals (QCLot: 603574)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	95.6	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Matrix Spike (MS) Report: Spike Concentration	Spike: Target	Recovery (%): MS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Anions and Nutrients (QCLot: 598577)										
VA22B8068-003	Anonymous	chloride	16887-00-6	E244.Cl	27.1 mg	27 mg	100	75.0	125	----
Anions and Nutrients (QCLot: 598578)										
VA22B8068-003	Anonymous	sulfate	14808-79-8	E244.SO4	27.4 mg	27 mg	102	75.0	125	----
Anions and Nutrients (QCLot: 598579)										
VA22B8068-003	Anonymous	ammonia, total (as N)	7664-41-7	E301	ND mg	1.35 mg	ND	75.0	125	MS-B
Anions and Nutrients (QCLot: 598580)										
VA22B8068-003	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.676 mg	0.675 mg	100	75.0	125	----
Total Metals (QCLot: 603574)										
YL2201120-002	TIADF1	mercury, total	7439-97-6	E516	0.000209 mg	0.00022 mg	95.2	70.0	130	----

Qualifiers

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other	◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:	
Invoice To	Same as Report ? Y	Client / Project Information	Analysis Request
Hardcopy of Invoice with Report?		Job #:	Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE: OL 1108073	
Contact:		LSD:	
Address:		Job Ref: Doris Dustfall	
Phone:	Fax:	Quote #:	
Lab Work Order # (lab use only)		ALS Contact: Amber Springer	Sampler: JN/WN

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
					P												
	CONTROLDF	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF1	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF2	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF3	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	DFA1	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	CDF4	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2201120

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Sys_loc code: Identical to sample ID's

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	2-Aug-22	7:00	MA	Aug 3/22	15:35	5.9 °C				

GENF 18.01 Front

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other	◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:	
Invoice To	Same as Report ? Y	Client / Project Information	Analysis Request
Hardcopy of Invoice with Report?		Job #:	Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE: OL 1108073	
Contact:		LSD:	
Address:		Job Ref: Doris Dustfall	
Phone:	Fax:	Quote #:	
Lab Work Order # (lab use only)		ALS Contact: Amber Springer	Sampler: JN/WN

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
					P												
	CONTROLDF	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF1	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF2	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF3	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	DFA1	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	CDF4	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2201120

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Sys_loc code: Identical to sample ID's

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	2-Aug-22	7:00	MA	Aug 3/22	15:35	5.9 °C				

GENF 18.01 Front

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2201122**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 03-Aug-2022 15:35
PO	: OL 1108073	Date Analysis Commenced	: 11-Aug-2022
C-O-C number	: ----	Issue Date	: 19-Aug-2022 11:38
Sampler	: JN/WN		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Dan Gebert	Laboratory Analyst	Metals, Burnaby, British Columbia
Owen Cheng		Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Administration, Burnaby, British Columbia
Tracy Harley	Supervisor - Water Quality Instrumentation	Inorganics, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm^2	square centimetres
days	days
mg	milligram
$mg/dm^2.day$	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLIS	*Detection Limit Adjusted due to insufficient sample.*

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022
						YL2201122-001	YL2201122-002	YL2201122-003	YL2201122-004	YL2201122-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		54.0	54.0	54.0	54.0	54.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.13	<0.13	<0.13	<0.13	<0.13
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.10	<0.10	<0.10	<0.10	<0.10
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.10	<0.10	<0.10	<0.10	<0.10
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
dustfall, total soluble	----	E881	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0019	<0.0022	<0.0024	<0.0021	<0.0016
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.18	<0.18	<0.18	<0.18	<0.18
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.013	<0.013	<0.013	<0.013	<0.013
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.057 DLIS	<0.067 DLIS	<0.072 DLIS	<0.062 DLIS	<0.048 DLIS
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	<3.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	<0.019
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	<0.22
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		<0.000160	<0.000160	<0.000160	<0.000160	<0.000160
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		0.0000084	<0.0000026	<0.0000026	<0.0000026	<0.0000026
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000052	0.0000032	<0.0000026	0.0000029	<0.0000026
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	<0.000013
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	<0.000013
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00110	0.00164	0.00070	0.00114	0.00087
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	<0.000013
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000026	<0.000026	<0.000026	<0.000026	<0.000026
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00079	<0.00079	<0.00079	<0.00079	<0.00079

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022
						YL2201122-001	YL2201122-002	YL2201122-003	YL2201122-004	YL2201122-005
						Result	Result	Result	Result	Result
Total Metals										
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00013	<0.00013	<0.00013	<0.00013	<0.00013
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00033	0.00070	0.00057	0.00064	0.00048
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000140	0.0000190	0.0000154	0.0000194	0.0000174
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	<0.000013
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0013	<0.0013	0.0018	0.0020	0.0018
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0013	0.0025	0.0027	0.0035	0.0032
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000026	<0.000026	<0.000026	<0.000026	<0.000026
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0013	<0.0013	<0.0013	<0.0013	<0.0013
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000026	<0.00000026	<0.00000026	<0.00000026	<0.00000026
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0015	0.0040	0.0018	0.0022	0.0018
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000027	0.0000048	<0.0000026	0.0000039	0.0000026
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00026	<0.00026	<0.00026	<0.00026	<0.00026
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000070	<0.000070	<0.000070	<0.000070	<0.000070
aluminum, total	7429-90-5	E447	0.0030	mg		<0.0030	0.0033	0.0030	0.0034	<0.0030
antimony, total	7440-36-0	E447	0.000050	mg		0.000251	<0.000050	<0.000050	<0.000050	<0.000050
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
barium, total	7440-39-3	E447	0.000050	mg		0.000155	0.000096	<0.000050	0.000088	0.000067
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
calcium, total	7440-70-2	E447	0.010	mg		0.033	0.049	0.021	0.034	0.026
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022
						YL2201122-001	YL2201122-002	YL2201122-003	YL2201122-004	YL2201122-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	E447	0.015	mg		<0.015	<0.015	<0.015	<0.015	<0.015
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
magnesium, total	7439-95-4	E447	0.0025	mg		0.0099	0.0211	0.0171	0.0193	0.0144
manganese, total	7439-96-5	E447	0.00010	mg		0.00042	0.00057	0.00046	0.00058	0.00052
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	0.038	0.054	0.061	0.053
potassium, total	7440-09-7	E447	0.025	mg		0.033	0.076	0.081	0.105	0.097
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
silicon, total	7440-21-3	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	<0.025
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
sodium, total	7440-23-5	E447	0.025	mg		0.044	0.119	0.053	0.067	0.054
strontium, total	7440-24-6	E447	0.000050	mg		0.000080	0.000145	0.000076	0.000116	0.000079
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	<0.0015	<0.0015	<0.0015	<0.0015

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	----
						YL2201122-006	YL2201122-007	YL2201122-008	YL2201122-009	--------
						Result	Result	Result	Result	----
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	----
sampling time, field	----	EF001B	1.0	days		54.0	54.0	54.0	54.0	----
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		0.71	0.21	0.17	<0.13	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		0.47	0.21	0.17	<0.10	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		0.24	<0.10	<0.10	<0.10	----
dustfall, total insoluble	----	E882	1.9	mg		14.1	6.4	5.1	2.4	----
dustfall, total soluble	----	E881	1.9	mg		7.1	<1.9	<1.9	<1.9	----
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		0.0444	<0.0016	<0.0019	<0.0021	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.18	<0.18	<0.18	<0.18	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0010	<0.0010	<0.0010	<0.0010	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.013	<0.013	<0.013	<0.013	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg		1.33	<0.048 DLIS	<0.057 DLIS	<0.062 DLIS	----
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	----
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	----
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.00253	0.00488	0.00431	0.00172	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000038	0.0000149	0.0000031	<0.0000026	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00026	<0.00026	<0.00026	<0.00026	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.0103	0.0136	0.0111	0.00478	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000026	0.0000047	0.0000039	<0.0000026	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000026	0.000027	<0.000026	<0.000026	----
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		0.00568	0.0111	0.00946	0.00374	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	----
						YL2201122-006	YL2201122-007	YL2201122-008	YL2201122-009	--------
						Result	Result	Result	Result	----
Total Metals										
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00013	<0.00013	<0.00013	<0.00013	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00341	0.00558	0.00518	0.00224	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.000192	0.000306	0.000248	0.000105	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000013	<0.000013	<0.000013	<0.000013	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		0.0055	0.0062	0.0048	0.0021	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		0.0058	0.0091	0.0074	0.0039	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000026	<0.000026	<0.000026	<0.000026	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		0.0029	0.0053	0.0046	0.0018	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000026	<0.00000026	<0.00000026	<0.00000026	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0028	0.0036	0.0043	0.0024	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000080	0.0000103	0.0000090	0.0000047	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00026	<0.00026	<0.00026	<0.00026	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000020	0.000028	0.000025	<0.000020	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000070	<0.000070	<0.000070	<0.000070	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.0758	0.146	0.129	0.0514	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
barium, total	7440-39-3	E447	0.000050	mg		0.000113	0.000447	0.000092	0.000055	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	----
calcium, total	7440-70-2	E447	0.010	mg		0.309	0.408	0.332	0.143	----
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	0.00034	0.00029	<0.00025	----
cobalt, total	7440-48-4	E447	0.000050	mg		0.000072	0.000140	0.000116	<0.000050	----
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	0.00082	<0.00050	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg		0.170	0.333	0.283	0.112	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	31-Jul-2022	31-Jul-2022	31-Jul-2022	31-Jul-2022	----
						YL2201122-006	YL2201122-007	YL2201122-008	YL2201122-009	--------
						Result	Result	Result	Result	----
Total Metals										
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	0.000029	<0.000025	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.102	0.167	0.155	0.0669	----
manganese, total	7439-96-5	E447	0.00010	mg		0.00575	0.00914	0.00741	0.00313	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg		0.165	0.187	0.145	0.062	----
potassium, total	7440-09-7	E447	0.025	mg		0.174	0.272	0.221	0.116	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg		0.086	0.160	0.138	0.054	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg		0.084	0.109	0.130	0.073	----
strontium, total	7440-24-6	E447	0.000050	mg		0.000238	0.000309	0.000268	0.000140	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	0.00084	0.00074	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	0.0019	0.0020	<0.0015	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2201122**	Page	: 1 of 17
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 03-Aug-2022 15:35
PO	: OL 1108073	Issue Date	: 19-Aug-2022 11:39
C-O-C number	: ----		
Sampler	: JN/WN		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E301	31-Jul-2022	11-Aug-2022	----	----		15-Aug-2022	----	4 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.Cl	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.NO3	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.SO4	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF01	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF02	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF03	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF04	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF05	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF06	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF07	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF08	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF09	EF001A	31-Jul-2022	----	----	----		11-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF01	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF02	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF03	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF04	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF05	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF06	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF07	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF08	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF09	EF001B	31-Jul-2022	----	----	----		12-Aug-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF01	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF02	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF03	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF04	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF05	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF06	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF07	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E882	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF01	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF02	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF03	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF04	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF05	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF06	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF07	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E881	31-Jul-2022	11-Aug-2022	----	----		12-Aug-2022	----	1 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E516	31-Jul-2022	15-Aug-2022	180 days	16 days	✓	16-Aug-2022	180 days	1 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E447	31-Jul-2022	16-Aug-2022	----	----		16-Aug-2022	180 days	17 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	598579	1	17	5.8	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	598577	1	17	5.8	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	598580	1	17	5.8	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	598578	1	17	5.8	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	603574	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	603573	1	17	5.8	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	598579	1	17	5.8	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	598577	1	17	5.8	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	598580	1	17	5.8	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	598578	1	17	5.8	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	598581	1	17	5.8	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	603574	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	603573	1	17	5.8	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	598582	1	17	5.8	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	598579	1	17	5.8	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	598577	1	17	5.8	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	598580	1	17	5.8	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	598578	1	17	5.8	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	598581	1	17	5.8	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	603574	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	603573	1	17	5.8	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	598582	1	17	5.8	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	598579	1	17	5.8	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	598577	1	17	5.8	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	598580	1	17	5.8	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	598578	1	17	5.8	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	603574	1	15	6.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **YL2201122**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 03-Aug-2022 15:35
PO	: OL 1108073	Date Analysis Commenced	: 11-Aug-2022
C-O-C number	: ----	Issue Date	: 19-Aug-2022 11:39
Sampler	: JN/WN		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Dan Gebert	Laboratory Analyst	Vancouver Metals, Burnaby, British Columbia
Owen Cheng		Vancouver Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia
Tracy Harley	Supervisor - Water Quality Instrumentation	Vancouver Inorganics, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 598577)											
VA22B8068-001	Anonymous	chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	<3.4	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 598578)											
VA22B8068-001	Anonymous	sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	<0.22	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 598579)											
VA22B8068-001	Anonymous	ammonia, total (as N)	7664-41-7	E301	0.048	mg	<0.048	<0.048	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 598580)											
VA22B8068-001	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	0.028	0.028	0.0005	Diff <2x LOR	----
Total Metals (QC Lot: 603573)											
VA22B8068-002	Anonymous	antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000050	mg	0.000077	0.000114	0.000038	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000050	mg	0.00532	0.00647	19.6%	20%	----
		beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	<0.000020	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.010	mg	0.368	0.389	5.68%	20%	----
		chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000050	mg	0.000076	0.000103	0.000028	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	<0.0025	0	Diff <2x LOR	----
		manganese, total	7439-96-5	E447	0.00010	mg	0.0150	0.0174	14.8%	20%	----
		molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.025	mg	0.046	0.063	0.016	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.025	mg	0.107	0.128	0.021	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		silver, total	7440-22-4	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.025	mg	<0.025	0.025	0.0005	Diff <2x LOR	----
		strontium, total	7440-24-6	E447	0.000050	mg	0.00228	0.00243	6.35%	20%	----
		thallium, total	7440-28-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 603573) - continued											
VA22B8068-002	Anonymous	titanium, total	7440-32-6	E447	0.0050	mg	<0.0050	0.0078	0.0028	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0015	mg	0.0072	0.0076	0.0004	Diff <2x LOR	----
Total Metals (QC Lot: 603574)											
YL2201120-001	Anonymous	mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 598581)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Particulates (QCLot: 598582)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 598577)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 598578)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 598579)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 598580)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 603573)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 603573) - continued						
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 603574)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000020	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 598581)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	98.7	85.0	115	----
Particulates (QCLot: 598582)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	100	85.0	115	----
Anions and Nutrients (QCLot: 598577)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	99.7	90.0	110	----
Anions and Nutrients (QCLot: 598578)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	102	90.0	110	----
Anions and Nutrients (QCLot: 598579)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	98.1	85.0	115	----
Anions and Nutrients (QCLot: 598580)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	100	90.0	110	----
Total Metals (QCLot: 603573)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	109	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	113	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	108	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	111	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	109	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	102	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	107	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	106	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	107	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	107	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	107	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	107	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	112	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	106	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	110	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	112	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	111	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	116	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	106	80.0	120	----
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	114	80.0	120	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report: Spike Concentration	LCS Recovery (%)	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Total Metals (QCLot: 603573) - continued									
potassium, total	7440-09-7	E447	0.025	mg	25 mg	113	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	109	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	109	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	101	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	112	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	115	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	103	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	106	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	108	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	107	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	108	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	109	80.0	120	----
Total Metals (QCLot: 603574)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	95.6	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Matrix Spike (MS) Report: Spike Concentration	Spike Target	Recovery (%) MS	Recovery Limits (%): Low	Recovery Limits (%): High	Qualifier
Anions and Nutrients (QCLot: 598577)										
VA22B8068-003	Anonymous	chloride	16887-00-6	E244.Cl	27.1 mg	27 mg	100	75.0	125	----
Anions and Nutrients (QCLot: 598578)										
VA22B8068-003	Anonymous	sulfate	14808-79-8	E244.SO4	27.4 mg	27 mg	102	75.0	125	----
Anions and Nutrients (QCLot: 598579)										
VA22B8068-003	Anonymous	ammonia, total (as N)	7664-41-7	E301	ND mg	1.35 mg	ND	75.0	125	MS-B
Anions and Nutrients (QCLot: 598580)										
VA22B8068-003	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.676 mg	0.675 mg	100	75.0	125	----
Total Metals (QCLot: 603574)										
YL2201120-002	Anonymous	mercury, total	7439-97-6	E516	0.000209 mg	0.00022 mg	95.2	70.0	130	----

Qualifiers

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other	◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:	
Invoice To	Same as Report ? Y	Client / Project Information	Analysis Request
Hardcopy of Invoice with Report?		Job #:	Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE: OL 1108073	
Contact:		LSD:	
Address:		Job Ref: Madrid Dustfall	
Phone:	Fax:	Quote #:	
Lab Work Order # (lab use only)		ALS Contact: Amber Springer	Sampler: JN/WN

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
					P												
	M-DF01	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF02	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF03	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF04	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF05	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF06	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF07	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF08	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF09	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2201122

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Sys loc code: Identical to sample ID's

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	3-Aug-22	7:00	MA	Aug 3/22	15:35	5.9 °C				

GENF 18.01 Front

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	TMAC Resources Ltd (Hope Bay)	☑ Standard ☐ Other	◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	181 University Ave. Suite 300	Email 1: enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	P.O. Box 44, Toronto, ON, M5H 3M7	Email 2: Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-416-628-0216 Fax:	Email 3:	
Invoice To	Same as Report ? Y	Client / Project Information	Analysis Request
Hardcopy of Invoice with Report?		Job #:	Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE: OL 1108073	
Contact:		LSD:	
Address:		Job Ref: Madrid Dustfall	
Phone:	Fax:	Quote #:	
Lab Work Order # (lab use only)		ALS Contact: Amber Springer	Sampler: JN/WN

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
					P												
	M-DF01	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF02	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF03	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF04	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF05	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF06	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF07	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF08	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF09	07-Jun-22	31-Jul-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2201122

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Sys loc code: Identical to sample ID's

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	3-Aug-22	7:00	MA	Aug 3/22	15:35	5.9 °C				

GENF 18.01 Front

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2201404**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 01-Sep-2022 15:45
PO	: OL 1108073	Date Analysis Commenced	: 09-Sep-2022
C-O-C number	: ----	Issue Date	: 16-Sep-2022 12:09
Sampler	: WN/GD		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Courtney Cox	Analsyt	Inorganics, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Metals, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Inorganics, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Metals, Burnaby, British Columbia
Owen Cheng		Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm^2	square centimetres
days	days
mg	milligram
$mg/dm^2.day$	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022
						YL2201404-001	YL2201404-002	YL2201404-003	YL2201404-004	YL2201404-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		31.0	31.0	31.0	31.0	31.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.22	<0.22	<0.22	<0.22	1.44
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.11	<0.11	<0.11	<0.11	0.49
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		0.12	0.13	0.20	<0.11	0.94
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	8.5
dustfall, total soluble	----	E881	1.9	mg		2.0	2.3	3.4	<1.9	16.2
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0011	0.0031	0.0012	0.0013	0.162
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.20	<0.20	<0.20	<0.20	<0.20
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0011	0.0012	<0.0011	<0.0011	<0.0011
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.013	<0.013	<0.013	<0.013	<0.013
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.019	0.054	0.021	0.022	2.78
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	<3.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	0.021	<0.019	<0.019	<0.019
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	<0.22	<0.22	<0.22	<0.22
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		<0.000175	0.00123	0.000419	0.000413	0.00769
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	<0.0000029
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	0.0000095
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000041	0.0000052	0.0000049	0.0000038	0.0000137
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00256	0.00757	0.00431	0.00396	0.0331
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	0.000033
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	0.0000092
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000029	<0.000029	<0.000029	<0.000029	0.000123
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00087	0.00268	<0.00087	<0.00087	0.0175

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022
						YL2201404-001	YL2201404-002	YL2201404-003	YL2201404-004	YL2201404-005
						Result	Result	Result	Result	Result
Total Metals										
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	0.0000025
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00014	<0.00014	<0.00014	<0.00014	<0.00014
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00515	0.00675	0.00350	0.00582	0.0179
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000192	0.0000897	0.0000373	0.0000338	0.000428
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	0.0000016
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	0.000023
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	0.0340
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		0.0025	0.0040	0.0017	0.0028	0.0447
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000029	<0.000029	<0.000029	<0.000029	<0.000029
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0014	0.0016	<0.0014	<0.0014	0.0100
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000029	<0.00000029	<0.00000029	<0.00000029	0.00000083
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0396	0.0465	0.0256	0.0436	0.0646
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000296	0.0000353	0.0000194	0.0000323	0.0000505
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	<0.0000029
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		0.0000040	<0.0000029	<0.0000029	<0.0000029	<0.0000029
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000029	<0.000029	<0.000029	<0.000029	0.000034
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000087	<0.000087	<0.000087	<0.000087	0.000367
aluminum, total	7429-90-5	E447	0.0030	mg		<0.0030	0.0211	0.0072	0.0071	0.132
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	0.000164
barium, total	7440-39-3	E447	0.000050	mg		0.000071	0.000089	0.000085	0.000065	0.000236
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
calcium, total	7440-70-2	E447	0.010	mg		0.044	0.130	0.074	0.068	0.568
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	0.00056
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	0.000158
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	0.00211

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022
						YL2201404-001	YL2201404-002	YL2201404-003	YL2201404-004	YL2201404-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	E447	0.015	mg		<0.015	0.046	<0.015	<0.015	0.301
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	0.000043
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
magnesium, total	7439-95-4	E447	0.0025	mg		0.0884	0.116	0.0602	0.0999	0.308
manganese, total	7439-96-5	E447	0.00010	mg		0.00033	0.00154	0.00064	0.00058	0.00736
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	0.000028
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	0.00039
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	0.584
potassium, total	7440-09-7	E447	0.025	mg		0.043	0.068	0.030	0.048	0.767
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
silicon, total	7440-21-3	E447	0.025	mg		<0.025	0.027	<0.025	<0.025	0.171
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000143
sodium, total	7440-23-5	E447	0.025	mg		0.681	0.798	0.439	0.748	1.11
strontium, total	7440-24-6	E447	0.000050	mg		0.000508	0.000607	0.000334	0.000555	0.000868
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
tin, total	7440-31-5	E447	0.000050	mg		0.000068	<0.000050	<0.000050	<0.000050	<0.000050
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	0.00059
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	<0.0015	<0.0015	<0.0015	0.0063

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID: CDF4	----	----	----	----
					Client sampling date / time: 31-Aug-2022	----	----	----	----
					YL2201404-006	--------	--------	--------	--------
					Result	----	----	----	----
Field Tests									
area sampled, field	----	EF001A	0.010	cm²	55.4	----	----	----	----
sampling time, field	----	EF001B	1.0	days	31.0	----	----	----	----
Particulates									
dustfall, total	----	EC880T.A	0.10	mg/dm².day	0.46	----	----	----	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day	0.23	----	----	----	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day	0.23	----	----	----	----
dustfall, total insoluble	----	E882	1.9	mg	4.0	----	----	----	----
dustfall, total soluble	----	E881	1.9	mg	4.0	----	----	----	----
Anions and Nutrients									
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day	0.0016	----	----	----	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day	<0.20	----	----	----	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day	<0.0011	----	----	----	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day	0.015	----	----	----	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.028	----	----	----	----
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----	----	----	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----	----	----	----
sulfate	14808-79-8	E244.SO4	0.22	mg	0.26	----	----	----	----
Total Metals									
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day	0.00588	----	----	----	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day	<0.0000029	----	----	----	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day	<0.0000029	----	----	----	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day	0.0000107	----	----	----	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day	<0.000014	----	----	----	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day	<0.000014	----	----	----	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day	<0.00029	----	----	----	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day	<0.0000013	----	----	----	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day	0.0318	----	----	----	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day	0.000020	----	----	----	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day	0.0000064	----	----	----	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day	<0.000029	----	----	----	----
iron, total	7439-89-6	EC447	0.00079	mg/dm².day	0.0121	----	----	----	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day	<0.0000014	----	----	----	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	31-Aug-2022	----	----	----	----
						YL2201404-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00014	----	----	----	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.0143	----	----	----	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.000394	----	----	----	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000014	----	----	----	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000014	----	----	----	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000014	----	----	----	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0014	----	----	----	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		0.0032	----	----	----	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000029	----	----	----	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		0.0069	----	----	----	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000029	----	----	----	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0699	----	----	----	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000640	----	----	----	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000029	----	----	----	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000029	----	----	----	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00029	----	----	----	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	----	----	----	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		0.000030	----	----	----	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000087	----	----	----	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.101	----	----	----	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	----	----	----	----
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	----	----	----	----
barium, total	7440-39-3	E447	0.000050	mg		0.000184	----	----	----	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	----	----	----	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	----	----	----	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	----	----	----	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	----	----	----	----
calcium, total	7440-70-2	E447	0.010	mg		0.546	----	----	----	----
chromium, total	7440-47-3	E447	0.00025	mg		0.00034	----	----	----	----
cobalt, total	7440-48-4	E447	0.000050	mg		0.000110	----	----	----	----
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	----	----	----	----
iron, total	7439-89-6	E447	0.015	mg		0.208	----	----	----	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	31-Aug-2022	----	----	----	----
						YL2201404-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	----	----	----	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	----	----	----	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.246	----	----	----	----
manganese, total	7439-96-5	E447	0.00010	mg		0.00676	----	----	----	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	----	----	----	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	----	----	----	----
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	----	----	----	----
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	----	----	----	----
potassium, total	7440-09-7	E447	0.025	mg		0.055	----	----	----	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	----	----	----	----
silicon, total	7440-21-3	E447	0.025	mg		0.119	----	----	----	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	----	----	----	----
sodium, total	7440-23-5	E447	0.025	mg		1.20	----	----	----	----
strontium, total	7440-24-6	E447	0.000050	mg		0.00110	----	----	----	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	----	----	----	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	----	----	----	----
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	----	----	----	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	----	----	----	----
vanadium, total	7440-62-2	E447	0.00050	mg		0.00052	----	----	----	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2201404**	Page	: 1 of 14
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 01-Sep-2022 15:45
PO	: OL 1108073	Issue Date	: 16-Sep-2022 12:10
C-O-C number	: ----		
Sampler	: WN/GD		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Matrix Spike outliers occur.
- Laboratory Control Sample (LCS) outliers occur - please see following pages for full details.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Outliers : Quality Control Samples

Duplicates, Method Blanks, Laboratory Control Samples and Matrix Spikes

Matrix: **Air**

Analyte Group	Laboratory sample ID	Client/Ref Sample ID	Analyte	CAS Number	Method	Result	Limits	Comment
Laboratory Control Sample (LCS) Recoveries								
Total Metals	QC-647624-002	----	silver, total	7440-22-4	E447	79.1 % MES	80.0-120%	Recovery less than lower control limit

Result Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CDF4	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CDF4	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
DFA1	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF1	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF2	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF3	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CDF4	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
DFA1	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF1	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF2	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF3	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
DFA1	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF1	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF2	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF3	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) CONTROLDF	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) DFA1	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF1	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF2	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF3	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E516	31-Aug-2022	15-Sep-2022	180 days	15 days	✓	15-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E516	31-Aug-2022	15-Sep-2022	180 days	15 days	✓	15-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E516	31-Aug-2022	15-Sep-2022	180 days	15 days	✓	15-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E516	31-Aug-2022	15-Sep-2022	180 days	15 days	✓	15-Sep-2022	180 days	0 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E516	31-Aug-2022	15-Sep-2022	180 days	15 days	✓	15-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E516	31-Aug-2022	15-Sep-2022	180 days	15 days	✓	15-Sep-2022	180 days	0 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E447	31-Aug-2022	15-Sep-2022	----	----		15-Sep-2022	180 days	16 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E447	31-Aug-2022	15-Sep-2022	----	----		15-Sep-2022	180 days	16 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E447	31-Aug-2022	15-Sep-2022	----	----		15-Sep-2022	180 days	16 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E447	31-Aug-2022	15-Sep-2022	----	----		15-Sep-2022	180 days	16 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E447	31-Aug-2022	15-Sep-2022	----	----		15-Sep-2022	180 days	16 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E447	31-Aug-2022	15-Sep-2022	----	----		15-Sep-2022	180 days	16 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	639686	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	639685	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	639688	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	639687	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	647625	1	6	16.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	647624	1	6	16.6	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	639686	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	639685	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	639688	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	639687	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	639695	1	6	16.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	647625	1	6	16.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	647624	1	6	16.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	639694	1	6	16.6	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	639686	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	639685	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	639688	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	639687	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	639695	1	6	16.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	647625	1	6	16.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	647624	1	6	16.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	639694	1	6	16.6	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	639686	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	639685	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	639688	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	639687	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	647625	1	6	16.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **YL2201404**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 01-Sep-2022 15:45
PO	: OL 1108073	Date Analysis Commenced	: 09-Sep-2022
C-O-C number	: ----	Issue Date	: 16-Sep-2022 12:10
Sampler	: WN/GD		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Courtney Cox	Analsyt	Vancouver Inorganics, Burnaby, British Columbia
Kevin Duarte	Supervisor - Metals ICP Instrumentation	Vancouver Metals, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Vancouver Inorganics, Burnaby, British Columbia
Miles Gropen	Department Manager - Inorganics	Vancouver Metals, Burnaby, British Columbia
Owen Cheng		Vancouver Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 639685)											
YL2201404-001	CONTROLDF	chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	<3.4	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 639686)											
YL2201404-001	CONTROLDF	ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 639687)											
YL2201404-001	CONTROLDF	sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	<0.22	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 639688)											
YL2201404-001	CONTROLDF	nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
Total Metals (QC Lot: 647624)											
YL2201404-001	CONTROLDF	aluminum, total	7429-90-5	E447	0.0030	mg	<0.0030	<0.0030	0	Diff <2x LOR	----
		antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000050	mg	0.000071	0.000069	0.000002	Diff <2x LOR	----
		beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	<0.000020	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.010	mg	0.044	0.044	0.0009	Diff <2x LOR	----
		chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		iron, total	7439-89-6	E447	0.015	mg	<0.015	<0.015	0	Diff <2x LOR	----
		lead, total	7439-92-1	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	<0.0025	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E447	0.0025	mg	0.0884	0.0881	0.340%	20%	----
		manganese, total	7439-96-5	E447	0.00010	mg	0.00033	0.00034	0.00001	Diff <2x LOR	----
		molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.025	mg	0.043	0.042	0.001	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		silicon, total	7440-21-3	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 647624) - continued											
YL2201404-001	CONTROLDF	silver, total	7440-22-4	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.025	mg	0.681	0.687	0.823%	20%	----
		strontium, total	7440-24-6	E447	0.000050	mg	0.000508	0.000501	1.47%	20%	----
		thallium, total	7440-28-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000050	mg	0.000068	0.000053	0.000015	Diff <2x LOR	----
		titanium, total	7440-32-6	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 647625)											
YL2201404-001	CONTROLDF	mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 639694)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Particulates (QCLot: 639695)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 639685)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 639686)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 639687)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 639688)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 647624)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 647624) - continued						
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 647625)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 639694)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	101	85.0	115	----
Particulates (QCLot: 639695)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	105	85.0	115	----
Anions and Nutrients (QCLot: 639685)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	99.5	90.0	110	----
Anions and Nutrients (QCLot: 639686)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	101	85.0	115	----
Anions and Nutrients (QCLot: 639687)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	101	90.0	110	----
Anions and Nutrients (QCLot: 639688)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	100	90.0	110	----
Total Metals (QCLot: 647624)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	103	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	107	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	111	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	104	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	104	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	103	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	101	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	100	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	102	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	100	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	101	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	101	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	113	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	106	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	104	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	106	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	103	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	105	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	101	80.0	120	----
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	108	80.0	120	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
					Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 647624) - continued									
potassium, total	7440-09-7	E447	0.025	mg	25 mg	104	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	109	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	101	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	# 79.1	80.0	120	MES
sodium, total	7440-23-5	E447	0.025	mg	25 mg	105	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	102	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	101	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	101	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	103	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	101	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	102	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	97.0	80.0	120	----
Total Metals (QCLot: 647625)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	94.3	70.0	130	----

Qualifiers

Qualifier	Description
MES	*Data Quality Objective was marginally exceeded (by < 10% absolute) for < 10% of analytes in a Multi-Element Scan / Multi-Parameter Scan (considered acceptable as per OMOE & CCME).*

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 639685)										
YL2201404-002	TIADF1	chloride	16887-00-6	E244.Cl	31.5 mg	30 mg	105	75.0	125	----
Anions and Nutrients (QCLot: 639686)										
YL2201404-002	TIADF1	ammonia, total (as N)	7664-41-7	E301	0.058 mg	0.06 mg	96.4	75.0	125	----
Anions and Nutrients (QCLot: 639687)										
YL2201404-002	TIADF1	sulfate	14808-79-8	E244.SO4	31.8 mg	30 mg	106	75.0	125	----
Anions and Nutrients (QCLot: 639688)										
YL2201404-002	TIADF1	nitrate (as N)	14797-55-8	E244.NO3	0.789 mg	0.75 mg	105	75.0	125	----
Total Metals (QCLot: 647625)										
YL2201404-002	TIADF1	mercury, total	7439-97-6	E516	0.000156 mg	0.00021 mg	74.3	70.0	130	----

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution		Service Requested (Rush for routine analysis subject to availability)
Company:	Agnico Eagle Mines Ltd. - Hope Bay	☑ Standard ☐ Other		◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF ☑ Excel ☑ Digital ☐ Fax		○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	145 King Street East	Email 1:	enviro.data@agnicoeagle.com	○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	Suite 400, Toronto, On, M5C 2Y7	Email 2:	Gregory.Crooks@stantec.com	○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-819-759-3555 Fax:	Email 3:		
Invoice To	Same as Report ? Y	Client / Project Information		Analysis Request
Hardcopy of Invoice with Report?		Job #:		Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:		PO / AFE:	OL 1108073	
Contact:		LSD:		
Address:		Job Ref:	Doris Dustfall	
Phone:	Fax:	Quote #:	Q80651	
Lab Work Order # (lab use only)	YL2201404	ALS Contact:	Amber Springer	Sampler: WN/GD

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	P	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	CONTROLDF	31-07-2022	31-08-2022	Water		X	X	X	X	X	X	X	X	X	X	X		2
	TIADF1	31-07-2022	31-08-2022	Water		X	X	X	X	X	X	X	X	X	X	X		2
	TIADF2	31-07-2022	31-08-2022	Water		X	X	X	X	X	X	X	X	X	X	X		2
	TIADF3	31-07-2022	31-08-2022	Water		X	X	X	X	X	X	X	X	X	X	X		2
	DFA1	31-07-2022	31-08-2022	Water		X	X	X	X	X	X	X	X	X	X	X		2
	CDF4	31-07-2022	31-08-2022	Water		X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2201404

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Sys. loc code: Identical to sample IDs

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	1-Sep-22	9:00		SEPT 01/22	15:45	18.0 °C				

GENF 18.01 Front

ALS Environmental

CERTIFICATE OF ANALYSIS

Work Order	: **YL2201405**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 01-Sep-2022 15:45
PO	: OL 1108073	Date Analysis Commenced	: 08-Sep-2022
C-O-C number	: ----	Issue Date	: 15-Sep-2022 14:26
Sampler	: WN/GD		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Metals, Burnaby, British Columbia
Courtney Cox	Analsyt	Inorganics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Owen Cheng		Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances
LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm^2	square centimetres
days	days
mg	milligram
$mg/dm^2.day$	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022
						YL2201405-001	YL2201405-002	YL2201405-003	YL2201405-004	YL2201405-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		31.0	31.0	31.0	31.0	31.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.22	0.27	<0.22	<0.22	<0.22
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.11	<0.11	<0.11	<0.11	<0.11
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.11	0.27	0.11	0.15	<0.11
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
dustfall, total soluble	----	E881	1.9	mg		<1.9	4.6	1.9	2.6	<1.9
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0011	0.0058	0.0012	0.0014	0.0018
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.20	<0.20	<0.20	<0.20	<0.20
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0011	<0.0011	<0.0011	<0.0011	<0.0011
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.013	0.014	<0.013	<0.013	<0.013
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.019	0.099	0.020	0.024	0.031
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	<3.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	<0.019
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.22	0.24	<0.22	<0.22	<0.22
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.000215	0.000559	0.000262	0.000675	0.000256
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	<0.0000029
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	<0.0000029
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000048	0.0000036	0.0000210	0.0000090	0.0000037
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	<0.0000013
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00320	0.00384	0.00396	0.00658	0.00303
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	<0.0000029
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000029	<0.000029	<0.000029	<0.000029	<0.000029
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00087	0.00111	<0.00087	0.00140	<0.00087

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022
						YL2201405-001	YL2201405-002	YL2201405-003	YL2201405-004	YL2201405-005
						Result	Result	Result	Result	Result
Total Metals										
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00014	<0.00014	<0.00014	<0.00014	<0.00014
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00387	0.00419	0.00568	0.00433	0.00277
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000303	0.0000501	0.0000489	0.0000937	0.0000361
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	<0.0000014
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	<0.000014
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	0.0016
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		0.0020	0.0020	0.0041	0.0026	0.0037
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000029	<0.000029	<0.000029	<0.000029	<0.000029
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	<0.0014
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000029	<0.00000029	<0.00000029	<0.00000029	<0.00000029
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0303	0.0301	0.0420	0.0274	0.0189
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000222	0.0000218	0.0000305	0.0000223	0.0000137
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	<0.0000029
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	<0.0000029
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00029	<0.00029	<0.00029	<0.00029	<0.00029
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000029	<0.000029	<0.000029	<0.000029	<0.000029
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000087	<0.000087	0.000134	<0.000087	<0.000087
aluminum, total	7429-90-5	E447	0.0030	mg		0.0037	0.0096	0.0045	0.0116	0.0044
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
barium, total	7440-39-3	E447	0.000050	mg		0.000082	0.000062	0.000361	0.000155	0.000064
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
calcium, total	7440-70-2	E447	0.010	mg		0.055	0.066	0.068	0.113	0.052
chromium, total	7440-47-3	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
copper, total	7440-50-8	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022
						YL2201405-001	YL2201405-002	YL2201405-003	YL2201405-004	YL2201405-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	E447	0.015	mg		<0.015	0.019	<0.015	0.024	<0.015
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
magnesium, total	7439-95-4	E447	0.0025	mg		0.0665	0.0719	0.0975	0.0744	0.0476
manganese, total	7439-96-5	E447	0.00010	mg		0.00052	0.00086	0.00084	0.00161	0.00062
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	<0.000025
nickel, total	7440-02-0	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	<0.00025
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	0.028
potassium, total	7440-09-7	E447	0.025	mg		0.035	0.034	0.070	0.045	0.063
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
silicon, total	7440-21-3	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	<0.025
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
sodium, total	7440-23-5	E447	0.025	mg		0.521	0.517	0.722	0.471	0.325
strontium, total	7440-24-6	E447	0.000050	mg		0.000382	0.000374	0.000524	0.000383	0.000236
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
titanium, total	7440-32-6	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
zinc, total	7440-66-6	E447	0.0015	mg		<0.0015	<0.0015	0.0023	<0.0015	<0.0015

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	----
						YL2201405-006	YL2201405-007	YL2201405-008	YL2201405-009	--------
						Result	Result	Result	Result	----
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	----
sampling time, field	----	EF001B	1.0	days		31.0	31.0	31.0	31.0	----
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		0.88	2.94	1.37	0.97	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		0.60	2.46	1.08	0.63	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		0.28	0.48	0.29	0.34	----
dustfall, total insoluble	----	E882	1.9	mg		10.4	42.3	18.5	10.8	----
dustfall, total soluble	----	E881	1.9	mg		4.8	8.2	5.0	5.9	----
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0011	<0.0011	<0.0012	0.0112	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.20	<0.20	<0.20	<0.20	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0011	<0.0011	<0.0011	<0.0011	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		0.030	<0.013	<0.013	<0.013	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.019	<0.019	<0.020	0.192	----
chloride	16887-00-6	E244.Cl	3.4	mg		<3.4	<3.4	<3.4	<3.4	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.019	<0.019	<0.019	<0.019	----
sulfate	14808-79-8	E244.SO4	0.22	mg		0.52	<0.22	<0.22	<0.22	----
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.0275	0.0972	0.0588	0.0166	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		0.0000037	0.0000110	0.0000074	<0.0000029	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000242	0.0000466	0.0000335	0.0000134	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000014	<0.000014	<0.000014	<0.000014	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00029	<0.00029	<0.00029	<0.00029	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000013	<0.0000013	<0.0000013	<0.0000013	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.0652	0.181	0.124	0.0463	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		0.000064	0.000225	0.000138	0.000040	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		0.0000263	0.0000902	0.0000562	0.0000155	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		0.000059	0.000214	0.000126	0.000031	----
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		0.0600	0.208	0.132	0.0360	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000014	0.0000037	0.0000030	<0.0000014	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	----
						YL2201405-006	YL2201405-007	YL2201405-008	YL2201405-009	--------
						Result	Result	Result	Result	----
Total Metals										
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00014	<0.00014	<0.00014	<0.00014	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.0318	0.0873	0.0600	0.0199	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.00141	0.00458	0.00299	0.00106	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000014	<0.0000014	<0.0000014	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		0.000043	0.000146	0.000091	0.000027	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0014	<0.0014	<0.0014	<0.0014	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		0.0046	0.0062	0.0055	0.0032	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000029	<0.000029	<0.000029	<0.000029	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		0.0322	0.115	0.0722	0.0185	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000029	<0.00000029	<0.00000029	<0.00000029	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0574	0.0450	0.0588	0.0293	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000704	0.000132	0.000102	0.0000428	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000029	<0.0000029	<0.0000029	<0.0000029	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		0.00062	0.00233	0.00147	0.00034	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		0.000160	0.000565	0.000361	0.000100	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		0.000105	0.000320	0.000198	<0.000087	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.473	1.67	1.01	0.285	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
arsenic, total	7440-38-2	E447	0.000050	mg		0.000064	0.000189	0.000128	<0.000050	----
barium, total	7440-39-3	E447	0.000050	mg		0.000416	0.000801	0.000576	0.000230	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00025	<0.00025	<0.00025	<0.00025	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0050	<0.0050	<0.0050	<0.0050	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000020	<0.000020	<0.000020	<0.000020	----
calcium, total	7440-70-2	E447	0.010	mg		1.12	3.11	2.13	0.795	----
chromium, total	7440-47-3	E447	0.00025	mg		0.00110	0.00387	0.00238	0.00068	----
cobalt, total	7440-48-4	E447	0.000050	mg		0.000452	0.00155	0.000965	0.000267	----
copper, total	7440-50-8	E447	0.00050	mg		0.00101	0.00367	0.00216	0.00053	----
iron, total	7439-89-6	E447	0.015	mg		1.03	3.57	2.27	0.619	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	31-Aug-2022	31-Aug-2022	31-Aug-2022	31-Aug-2022	----
						YL2201405-006	YL2201405-007	YL2201405-008	YL2201405-009	--------
						Result	Result	Result	Result	----
Total Metals										
lead, total	7439-92-1	E447	0.000025	mg		<0.000025	0.000063	0.000052	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0025	<0.0025	<0.0025	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.547	1.50	1.03	0.342	----
manganese, total	7439-96-5	E447	0.00010	mg		0.0243	0.0786	0.0513	0.0182	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000025	<0.000025	<0.000025	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg		0.00074	0.00250	0.00156	0.00046	----
phosphorus, total	7723-14-0	E447	0.025	mg		<0.025	<0.025	<0.025	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg		0.080	0.107	0.094	0.055	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00050	<0.00050	<0.00050	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg		0.553	1.97	1.24	0.318	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg		0.985	0.772	1.01	0.503	----
strontium, total	7440-24-6	E447	0.000050	mg		0.00121	0.00226	0.00176	0.000736	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000050	<0.000050	<0.000050	<0.000050	----
titanium, total	7440-32-6	E447	0.0050	mg		0.0106	0.0400	0.0252	0.0059	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000050	<0.0000050	<0.0000050	<0.0000050	----
vanadium, total	7440-62-2	E447	0.00050	mg		0.00274	0.00971	0.00620	0.00171	----
zinc, total	7440-66-6	E447	0.0015	mg		0.0018	0.0055	0.0034	<0.0015	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2201405**	Page	: 1 of 17
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 01-Sep-2022 15:45
PO	: OL 1108073	Issue Date	: 15-Sep-2022 14:26
C-O-C number	: ----		
Sampler	: WN/GD		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E301	31-Aug-2022	09-Sep-2022	----	----		13-Sep-2022	----	4 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.Cl	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.NO3	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.SO4	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF01	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF02	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF03	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF04	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF05	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF06	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF07	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF08	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF09	EF001A	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF01	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF02	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF03	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF04	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF05	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF06	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF07	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF08	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF09	EF001B	31-Aug-2022	----	----	----		09-Sep-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF01	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF02	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF03	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF04	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF05	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF06	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF07	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E882	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF01	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF02	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF03	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF04	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF05	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF06	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF07	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E881	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	----	0 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E516	31-Aug-2022	08-Sep-2022	180 days	9 days	✓	09-Sep-2022	180 days	0 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E447	31-Aug-2022	09-Sep-2022	----	----		09-Sep-2022	180 days	10 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	639686	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	639685	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	639688	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	639687	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	638758	1	9	11.1	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	638757	1	9	11.1	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	639686	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	639685	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	639688	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	639687	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	639469	1	9	11.1	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	638758	1	9	11.1	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	638757	1	9	11.1	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	639468	1	9	11.1	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	639686	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	639685	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	639688	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	639687	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	639469	1	9	11.1	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	638758	1	9	11.1	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	638757	1	9	11.1	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	639468	1	9	11.1	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	639686	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	639685	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	639688	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	639687	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	638758	1	9	11.1	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

ALS Environmental

QUALITY CONTROL REPORT

Work Order	: **YL2201405**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 01-Sep-2022 15:45
PO	: OL 1108073	Date Analysis Commenced	: 08-Sep-2022
C-O-C number	: ----	Issue Date	: 15-Sep-2022 14:26
Sampler	: WN/GD		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Angela Ren	Team Leader - Metals	Vancouver Metals, Burnaby, British Columbia
Courtney Cox	Analsyt	Vancouver Inorganics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Vancouver Metals, Burnaby, British Columbia
Owen Cheng		Vancouver Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 639685)											
YL2201404-001	Anonymous	chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	<3.4	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 639686)											
YL2201404-001	Anonymous	ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 639687)											
YL2201404-001	Anonymous	sulfate	14808-79-8	E244.SO4	0.22	mg	<0.22	<0.22	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 639688)											
YL2201404-001	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
Total Metals (QC Lot: 638757)											
YL2201405-001	M-DF01	aluminum, total	7429-90-5	E447	0.0030	mg	0.0037	0.0038	0.0001	Diff <2x LOR	----
		antimony, total	7440-36-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000050	mg	0.000082	0.000078	0.000004	Diff <2x LOR	----
		beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000020	mg	<0.000020	<0.000020	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.010	mg	0.055	0.053	0.002	Diff <2x LOR	----
		chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		iron, total	7439-89-6	E447	0.015	mg	<0.015	<0.015	0	Diff <2x LOR	----
		lead, total	7439-92-1	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	<0.0025	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E447	0.0025	mg	0.0665	0.0622	6.74%	20%	----
		manganese, total	7439-96-5	E447	0.00010	mg	0.00052	0.00050	0.00003	Diff <2x LOR	----
		molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	<0.00025	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.025	mg	0.035	0.033	0.002	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		silicon, total	7440-21-3	E447	0.025	mg	<0.025	<0.025	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 638757) - continued											
YL2201405-001	M-DF01	silver, total	7440-22-4	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.025	mg	0.521	0.471	9.91%	20%	----
		strontium, total	7440-24-6	E447	0.000050	mg	0.000382	0.000362	0.000020	Diff <2x LOR	----
		thallium, total	7440-28-0	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000050	mg	<0.000050	<0.000050	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E447	0.0050	mg	<0.0050	<0.0050	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000050	mg	<0.0000050	<0.0000050	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00050	mg	<0.00050	<0.00050	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	<0.0015	0	Diff <2x LOR	----
Total Metals (QC Lot: 638758)											
YL2201405-001	M-DF01	mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	<0.000025	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 639468)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Particulates (QCLot: 639469)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 639685)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 639686)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 639687)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 639688)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 638757)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 638757) - continued						
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 638758)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000025	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 639468)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	101	85.0	115	----
Particulates (QCLot: 639469)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	105	85.0	115	----
Anions and Nutrients (QCLot: 639685)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	99.5	90.0	110	----
Anions and Nutrients (QCLot: 639686)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	101	85.0	115	----
Anions and Nutrients (QCLot: 639687)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	101	90.0	110	----
Anions and Nutrients (QCLot: 639688)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	100	90.0	110	----
Total Metals (QCLot: 638757)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	110	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	118	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	115	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	109	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	104	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	112	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	98.6	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	112	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	108	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	110	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	108	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	108	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	115	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	114	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	109	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	112	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	109	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	113	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	109	80.0	120	----
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	115	80.0	120	----

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 638757) - continued									
potassium, total	7440-09-7	E447	0.025	mg	25 mg	111	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	108	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	112	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	101	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	111	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	108	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	110	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	111	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	107	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	115	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	110	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	110	80.0	120	----
Total Metals (QCLot: 638758)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	96.3	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 639685)										
YL2201404-002	Anonymous	chloride	16887-00-6	E244.Cl	31.5 mg	30 mg	105	75.0	125	----
Anions and Nutrients (QCLot: 639686)										
YL2201404-002	Anonymous	ammonia, total (as N)	7664-41-7	E301	0.058 mg	0.06 mg	96.4	75.0	125	----
Anions and Nutrients (QCLot: 639687)										
YL2201404-002	Anonymous	sulfate	14808-79-8	E244.SO4	31.8 mg	30 mg	106	75.0	125	----
Anions and Nutrients (QCLot: 639688)										
YL2201404-002	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.789 mg	0.75 mg	105	75.0	125	----
Total Metals (QCLot: 638758)										
YL2201405-002	M-DF02	mercury, total	7439-97-6	E516	0.000187 mg	0.00022 mg	85.1	70.0	130	----

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page 1 of 1

Report To:		Report Format / Distribution				Service Requested (Rush for routine analysis subject to availability)
Company:	Agnico Eagle Mines Ltd. - Hope Bay	☑ Standard	☐ Other			◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF	☑ Excel	☑ Digital	☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	145 King Street East	Email 1:	enviro.data@agnicoeagle.com			○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	Suite 400, Toronto, On, M5C 2Y7	Email 2:	Gregory.Crooks@stantec.com			○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-819-759-3555 Fax:	Email 3:				Analysis Request
Invoice To	Same as Report ? Y	Client / Project Information				Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:				P
Company:		PO / AFE:	OL 1108073			
Contact:		LSD:				
Address:		Job Ref:	Madrid Dustfall			
Phone:	Fax:	Quote #:	Q80651			
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler:	WN/GD	

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	M-DF01	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF02	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF03	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF04	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF05	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF06	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF07	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF08	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF09	31-07-2022	31-08-2022	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2201405

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Sys. loc. code identical to sample IDs

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date: SEPT 01/22	Time: 15:45	Temperature: 18.0 °C	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	1-Sep-22	9:00								

GENF 18.01 Front

CERTIFICATE OF ANALYSIS

Work Order	: **YL2201805**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 06-Oct-2022 14:30
PO	: OL 1108073	Date Analysis Commenced	: 14-Oct-2022
C-O-C number	: ----	Issue Date	: 24-Oct-2022 16:06
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caitlin Macey	Team Leader - Inorganics	Inorganics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Kinny Wu	Lab Analyst	Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances

LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm^2	square centimetres
days	days
mg	milligram
$mg/dm^2.day$	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLA	*Detection Limit adjusted for required dilution.*

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	30-Sep-2022	29-Sep-2022	30-Sep-2022	30-Sep-2022	29-Sep-2022
						YL2201805-001	YL2201805-002	YL2201805-003	YL2201805-004	YL2201805-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		30.0	29.0	30.0	30.0	29.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.23	<0.24	<0.23	<0.23	<0.24
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.11	<0.12	<0.11	<0.11	<0.12
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		<0.11	0.15	0.14	<0.11	0.14
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
dustfall, total soluble	----	E881	1.9	mg		<1.9	2.4	2.4	<1.9	2.2
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0028	<0.0034	<0.0035	<0.0015	0.0032
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.25	<0.30	<0.31	<0.20	<0.26
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0014	<0.0017	<0.0017	<0.0011	<0.0014
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.016	<0.020	<0.020	<0.013	<0.017
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.046	<0.054	<0.058	<0.025	0.051
chloride	16887-00-6	E244.Cl	3.4	mg		<4.1	<4.8	<5.2	<3.4	<4.1
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.023	<0.027	<0.029	<0.019	<0.023
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.27	<0.32	<0.34	<0.22	<0.27
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.000229	<0.000236	<0.000180	<0.000180	0.000834
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000040	<0.0000030	<0.0000030	<0.0000037
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000040	<0.0000030	<0.0000030	<0.0000037
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000108	0.0000090	0.0000042	<0.0000030	0.0000078
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000018	<0.000020	<0.000015	<0.000015	<0.000019
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000018	<0.000020	<0.000015	<0.000015	<0.000019
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00037	<0.00040	<0.00030	<0.00030	<0.00037
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000014	<0.0000016	<0.0000013	<0.0000013	<0.0000015
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00241	0.00404	0.00704	<0.00060	0.00610
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000018	<0.000020	<0.000015	<0.000015	<0.000019
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000040	<0.0000030	<0.0000030	<0.0000037
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000037	<0.000040	<0.000030	<0.000030	<0.000037

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	30-Sep-2022	29-Sep-2022	30-Sep-2022	30-Sep-2022	29-Sep-2022
						YL2201805-001	YL2201805-002	YL2201805-003	YL2201805-004	YL2201805-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00108	<0.00118	<0.00090	<0.00090	0.00162
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000018	0.0000029	<0.0000015	<0.0000015	<0.0000019
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00018	<0.00020	<0.00015	<0.00015	<0.00019
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00185	0.00210	0.00890	0.00021	0.00255
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000229	0.0000373	0.000161	0.0000144	0.0000672
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000018	<0.0000020	<0.0000015	<0.0000015	<0.0000019
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000018	<0.0000020	<0.0000015	<0.0000015	<0.0000019
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000018	<0.000020	<0.000015	<0.000015	<0.000019
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0018	<0.0020	<0.0015	<0.0015	<0.0019
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0018	<0.0020	0.0019	<0.0015	<0.0019
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000037	<0.000040	<0.000030	<0.000030	<0.000037
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0018	<0.0020	<0.0015	<0.0015	<0.0019
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000037	<0.00000040	<0.00000030	<0.00000030	<0.00000037
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0116	0.0132	<0.0015	<0.0015	0.0125
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000111	0.0000128	0.0000181	<0.0000030	0.0000132
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000040	<0.0000030	<0.0000030	<0.0000037
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000040	<0.0000030	<0.0000030	<0.0000037
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00037	<0.00040	<0.00030	<0.00030	<0.00037
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000037	<0.000040	<0.000030	<0.000030	<0.000037
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000108	<0.000118	<0.000090	<0.000090	<0.000112
aluminum, total	7429-90-5	E447	0.0030	mg		0.0038	<0.0038	<0.0030	<0.0030	0.0134
antimony, total	7440-36-0	E447	0.000050	mg		<0.000061	<0.000064	<0.000050	<0.000050	<0.000060
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000061	<0.000064	<0.000050	<0.000050	<0.000060
barium, total	7440-39-3	E447	0.000050	mg		0.000180	0.000145	0.000070	<0.000050	0.000126
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00030	<0.00032	<0.00025	<0.00025	<0.00030
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00030	<0.00032	<0.00025	<0.00025	<0.00030
boron, total	7440-42-8	E447	0.0050	mg		<0.0061	<0.0064	<0.0050	<0.0050	<0.0060
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000024	<0.000026	<0.000020	<0.000020	<0.000024
calcium, total	7440-70-2	E447	0.010	mg		0.040	0.065	0.117	<0.010	0.098

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	CONTROLDF	TIADF1	TIADF2	TIADF3	DFA1
					Client sampling date / time	30-Sep-2022	29-Sep-2022	30-Sep-2022	30-Sep-2022	29-Sep-2022
						YL2201805-001	YL2201805-002	YL2201805-003	YL2201805-004	YL2201805-005
						Result	Result	Result	Result	Result
Total Metals										
chromium, total	7440-47-3	E447	0.00025	mg		<0.00030	<0.00032	<0.00025	<0.00025	<0.00030
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000061	<0.000064	<0.000050	<0.000050	<0.000060
copper, total	7440-50-8	E447	0.00050	mg		<0.00061	<0.00064	<0.00050	<0.00050	<0.00060
iron, total	7439-89-6	E447	0.015	mg		<0.018	<0.019	<0.015	<0.015	0.026
lead, total	7439-92-1	E447	0.000025	mg		<0.000030	0.000047	<0.000025	<0.000025	<0.000030
lithium, total	7439-93-2	E447	0.0025	mg		<0.0030	<0.0032	<0.0025	<0.0025	<0.0030
magnesium, total	7439-95-4	E447	0.0025	mg		0.0308	0.0338	0.148	0.0035	0.0410
manganese, total	7439-96-5	E447	0.00010	mg		0.00038	0.00060	0.00267	0.00024	0.00108
mercury, total	7439-97-6	E516	0.000025	mg		<0.000030 DLA	<0.000032 DLA	<0.000025	<0.000025	<0.000030 DLA
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000030	<0.000032	<0.000025	<0.000025	<0.000030
nickel, total	7440-02-0	E447	0.00025	mg		<0.00030	<0.00032	<0.00025	<0.00025	<0.00030
phosphorus, total	7723-14-0	E447	0.025	mg		<0.030	<0.032	<0.025	<0.025	<0.030
potassium, total	7440-09-7	E447	0.025	mg		<0.030	<0.032	0.032	<0.025	<0.030
selenium, total	7782-49-2	E447	0.00050	mg		<0.00061	<0.00064	<0.00050	<0.00050	<0.00060
silicon, total	7440-21-3	E447	0.025	mg		<0.030	<0.032	<0.025	<0.025	<0.030
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000061	<0.0000064	<0.0000050	<0.0000050	<0.0000060
sodium, total	7440-23-5	E447	0.025	mg		0.192	0.212	<0.025	<0.025	0.201
strontium, total	7440-24-6	E447	0.000050	mg		0.000184	0.000205	0.000301	<0.000050	0.000212
thallium, total	7440-28-0	E447	0.000050	mg		<0.000061	<0.000064	<0.000050	<0.000050	<0.000060
tin, total	7440-31-5	E447	0.000050	mg		<0.000061	<0.000064	<0.000050	<0.000050	<0.000060
titanium, total	7440-32-6	E447	0.0050	mg		<0.0061	<0.0064	<0.0050	<0.0050	<0.0060
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000061	<0.0000064	<0.0000050	<0.0000050	<0.0000060
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00061	<0.00064	<0.00050	<0.00050	<0.00060
zinc, total	7440-66-6	E447	0.0015	mg		<0.0018	<0.0019	<0.0015	<0.0015	<0.0018

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: Dustfall (Matrix: Air)					Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	29-Sep-2022	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit		YL2201805-006	--------	--------	--------	--------
						Result	----	----	----	----
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	----	----	----	----
sampling time, field	----	EF001B	1.0	days		29.0	----	----	----	----
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		<0.24	----	----	----	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.12	----	----	----	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		0.17	----	----	----	----
dustfall, total insoluble	----	E882	1.9	mg		<1.9	----	----	----	----
dustfall, total soluble	----	E881	1.9	mg		2.8	----	----	----	----
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0027	----	----	----	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.24	----	----	----	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0014	----	----	----	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.016	----	----	----	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.044	----	----	----	----
chloride	16887-00-6	E244.Cl	3.4	mg		<3.9	----	----	----	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.022	----	----	----	----
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.26	----	----	----	----
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.000846	----	----	----	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000040	----	----	----	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000040	----	----	----	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000204	----	----	----	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000020	----	----	----	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000020	----	----	----	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00040	----	----	----	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000016	----	----	----	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.0115	----	----	----	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000020	----	----	----	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000040	----	----	----	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000040	----	----	----	----

Analytical Results

Sub-Matrix: Dustfall (Matrix: Air)					Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	29-Sep-2022	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit		YL2201805-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		0.00156	----	----	----	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000020	----	----	----	----
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00020	----	----	----	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00396	----	----	----	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.000121	----	----	----	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000020	----	----	----	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000020	----	----	----	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000020	----	----	----	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0020	----	----	----	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0020	----	----	----	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000040	----	----	----	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0020	----	----	----	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000040	----	----	----	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0195	----	----	----	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000198	----	----	----	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000040	----	----	----	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000040	----	----	----	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00040	----	----	----	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	----	----	----	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000040	----	----	----	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000118	----	----	----	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.0136	----	----	----	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000064	----	----	----	----
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000064	----	----	----	----
barium, total	7440-39-3	E447	0.000050	mg		0.000328	----	----	----	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00032	----	----	----	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00032	----	----	----	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0064	----	----	----	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000026	----	----	----	----
calcium, total	7440-70-2	E447	0.010	mg		0.185	----	----	----	----

Analytical Results

Sub-Matrix: Dustfall (Matrix: Air)					Client sample ID	CDF4	----	----	----	----
					Client sampling date / time	29-Sep-2022	----	----	----	----
Analyte	CAS Number	Method	LOR	Unit		YL2201805-006	--------	--------	--------	--------
						Result	----	----	----	----
Total Metals										
chromium, total	7440-47-3	E447	0.00025	mg		<0.00032	----	----	----	----
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000064	----	----	----	----
copper, total	7440-50-8	E447	0.00050	mg		<0.00064	----	----	----	----
iron, total	7439-89-6	E447	0.015	mg		0.025	----	----	----	----
lead, total	7439-92-1	E447	0.000025	mg		<0.000032	----	----	----	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0032	----	----	----	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.0636	----	----	----	----
manganese, total	7439-96-5	E447	0.00010	mg		0.00195	----	----	----	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000032 DLA	----	----	----	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000032	----	----	----	----
nickel, total	7440-02-0	E447	0.00025	mg		<0.00032	----	----	----	----
phosphorus, total	7723-14-0	E447	0.025	mg		<0.032	----	----	----	----
potassium, total	7440-09-7	E447	0.025	mg		<0.032	----	----	----	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00064	----	----	----	----
silicon, total	7440-21-3	E447	0.025	mg		<0.032	----	----	----	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000064	----	----	----	----
sodium, total	7440-23-5	E447	0.025	mg		0.314	----	----	----	----
strontium, total	7440-24-6	E447	0.000050	mg		0.000319	----	----	----	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000064	----	----	----	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000064	----	----	----	----
titanium, total	7440-32-6	E447	0.0050	mg		<0.0064	----	----	----	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000064	----	----	----	----
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00064	----	----	----	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0019	----	----	----	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

ALS Canada Ltd.

right solutions.
right partner.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2201805**	Page	: 1 of 13
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 06-Oct-2022 14:30
PO	: OL 1108073	Issue Date	: 24-Oct-2022 16:07
C-O-C number	: ----		
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E301	29-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E301	30-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E301	29-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E301	29-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E301	30-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E301	30-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E244.Cl	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.Cl	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.Cl	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.Cl	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.Cl	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.Cl	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CDF4	E244.NO3	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.NO3	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.NO3	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.NO3	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.NO3	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.NO3	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CDF4	E244.SO4	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E244.SO4	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
DFA1	E244.SO4	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF1	E244.SO4	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF2	E244.SO4	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
TIADF3	E244.SO4	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CDF4	EF001A	29-Sep-2022	----	----	----		19-Oct-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001A	30-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
DFA1	EF001A	29-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF1	EF001A	29-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF2	EF001A	30-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
TIADF3	EF001A	30-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CDF4	EF001B	29-Sep-2022	----	----	----		14-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
CONTROLDF	EF001B	30-Sep-2022	----	----	----		14-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
DFA1	EF001B	29-Sep-2022	----	----	----		14-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF1	EF001B	29-Sep-2022	----	----	----		14-Oct-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF2	EF001B	30-Sep-2022	----	----	----		14-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
TIADF3	EF001B	30-Sep-2022	----	----	----		14-Oct-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E882	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CONTROLDF	E882	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
DFA1	E882	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF1	E882	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF2	E882	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
TIADF3	E882	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
CDF4	E881	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) CONTROLDF	E881	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) DFA1	E881	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF1	E881	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF2	E881	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) TIADF3	E881	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E516	30-Sep-2022	19-Oct-2022	180 days	20 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E516	30-Sep-2022	19-Oct-2022	180 days	20 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E516	30-Sep-2022	19-Oct-2022	180 days	20 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E516	29-Sep-2022	19-Oct-2022	180 days	21 days	✓	20-Oct-2022	180 days	0 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E516	29-Sep-2022	19-Oct-2022	180 days	21 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E516	29-Sep-2022	19-Oct-2022	180 days	21 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CONTROLDF	E447	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	21 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF2	E447	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	21 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF3	E447	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	21 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) CDF4	E447	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	22 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) DFA1	E447	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	22 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) TIADF1	E447	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	22 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	705349	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	705348	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	705351	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	705350	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	704649	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	704648	1	15	6.6	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	705349	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	705348	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	705351	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	705350	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	704370	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	704649	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	704648	1	15	6.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	704369	1	15	6.6	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	705349	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	705348	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	705351	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	705350	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	704370	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	704649	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	704648	1	15	6.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	704369	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	705349	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	705348	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	705351	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	705350	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	704649	1	15	6.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report may affect the validity of results.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

QUALITY CONTROL REPORT

Work Order	: **YL2201805**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	:	Telephone	: +1 867 873 5593
Project	: Doris Dustfall	Date Samples Received	: 06-Oct-2022 14:30
PO	: OL 1108073	Date Analysis Commenced	: 14-Oct-2022
C-O-C number	: ----	Issue Date	: 24-Oct-2022 16:07
Sampler	: WN/TL ----		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 6		
No. of samples analysed	: 6		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caitlin Macey	Team Leader - Inorganics	Vancouver Inorganics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Vancouver Metals, Burnaby, British Columbia
Kinny Wu	Lab Analyst	Vancouver Metals, Burnaby, British Columbia
Trace Chometsky	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 705348)											
YL2201804-001	Anonymous	chloride	16887-00-6	E244.Cl	3.9	mg	<3.9	<3.9	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 705349)											
YL2201804-001	Anonymous	ammonia, total (as N)	7664-41-7	E301	0.044	mg	<0.044	<0.044	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 705350)											
YL2201804-001	Anonymous	sulfate	14808-79-8	E244.SO4	0.26	mg	<0.26	<0.26	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 705351)											
YL2201804-001	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	0.022	mg	<0.022	<0.022	0	Diff <2x LOR	----
Total Metals (QC Lot: 704648)											
YL2201804-001	Anonymous	aluminum, total	7429-90-5	E447	0.0038	mg	0.0046	0.0082	0.0036	Diff <2x LOR	----
		antimony, total	7440-36-0	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000064	mg	0.000136	0.000158	0.000021	Diff <2x LOR	----
		beryllium, total	7440-41-7	E447	0.00032	mg	<0.00032	<0.00032	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00032	mg	<0.00032	<0.00032	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0064	mg	<0.0064	<0.0064	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000026	mg	<0.000026	<0.000026	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.013	mg	0.045	0.047	0.002	Diff <2x LOR	----
		chromium, total	7440-47-3	E447	0.00032	mg	<0.00032	<0.00032	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00064	mg	<0.00064	<0.00064	0	Diff <2x LOR	----
		iron, total	7439-89-6	E447	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
		lead, total	7439-92-1	E447	0.000032	mg	<0.000032	<0.000032	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0032	mg	<0.0032	<0.0032	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E447	0.0032	mg	0.0309	0.0340	9.37%	20%	----
		manganese, total	7439-96-5	E447	0.00013	mg	0.00051	0.00058	0.00007	Diff <2x LOR	----
		molybdenum, total	7439-98-7	E447	0.000032	mg	<0.000032	<0.000032	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00032	mg	<0.00032	<0.00032	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.032	mg	<0.032	<0.032	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.032	mg	<0.032	<0.032	0	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00064	mg	<0.00064	<0.00064	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 704648) - continued											
YL2201804-001	Anonymous	silicon, total	7440-21-3	E447	0.032	mg	<0.032	<0.032	0	Diff <2x LOR	----
		silver, total	7440-22-4	E447	0.0000064	mg	<0.0000064	<0.0000064	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.032	mg	0.192	0.194	0.002	Diff <2x LOR	----
		strontium, total	7440-24-6	E447	0.000064	mg	0.000192	0.000205	0.000013	Diff <2x LOR	----
		thallium, total	7440-28-0	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E447	0.0064	mg	<0.0064	<0.0064	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000064	mg	<0.0000064	<0.0000064	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00064	mg	<0.00064	<0.00064	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0019	mg	<0.0019	<0.0019	0	Diff <2x LOR	----
Total Metals (QC Lot: 704649)											
YL2201804-001	Anonymous	mercury, total	7439-97-6	E516	0.000032	mg	<0.000032	<0.000032	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 704369)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Particulates (QCLot: 704370)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 705348)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 705349)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 705350)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 705351)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 704648)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 704648) - continued						
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 704649)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000020	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 704369)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	100	85.0	115	----
Particulates (QCLot: 704370)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	107	85.0	115	----
Anions and Nutrients (QCLot: 705348)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	102	90.0	110	----
Anions and Nutrients (QCLot: 705349)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	91.3	85.0	115	----
Anions and Nutrients (QCLot: 705350)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	105	90.0	110	----
Anions and Nutrients (QCLot: 705351)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	103	90.0	110	----
Total Metals (QCLot: 704648)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	105	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	112	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	116	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	104	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	103	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	98.2	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	104	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	103	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	101	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	104	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	103	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	101	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	108	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	101	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	103	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	105	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	103	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	110	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	104	80.0	120	----

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 704648) - continued									
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	114	80.0	120	----
potassium, total	7440-09-7	E447	0.025	mg	25 mg	103	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	110	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	112	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	92.8	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	104	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	102	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	95.9	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	109	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	106	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	101	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	103	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	102	80.0	120	----
Total Metals (QCLot: 704649)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	97.0	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 705348)										
YL2201804-002	Anonymous	chloride	16887-00-6	E244.Cl	70.8 mg	68 mg	104	75.0	125	----
Anions and Nutrients (QCLot: 705349)										
YL2201804-002	Anonymous	ammonia, total (as N)	7664-41-7	E301	0.124 mg	0.136 mg	91.0	75.0	125	----
Anions and Nutrients (QCLot: 705350)										
YL2201804-002	Anonymous	sulfate	14808-79-8	E244.SO4	72.6 mg	68 mg	107	75.0	125	----
Anions and Nutrients (QCLot: 705351)										
YL2201804-002	Anonymous	nitrate (as N)	14797-55-8	E244.NO3	1.79 mg	1.7 mg	105	75.0	125	----
Total Metals (QCLot: 704649)										
YL2201804-002	Anonymous	mercury, total	7439-97-6	E516	ND mg	0.0005 mg	ND	70.0	130	----

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Report To:		Report Format / Distribution				Service Requested (Rush for routine analysis subject to availability)
Company:	Agnico Eagle Mines Ltd. - Hope Bay	☑ Standard	☐ Other			◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF	☑ Excel	☑ Digital	☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	145 King Street East	Email 1:	enviro.data@agnicoeagle.com			○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	Suite 400, Toronto, On, M5C 2Y7	Email 2:	Gregory.Crooks@stantec.com			○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-819-759-3555 Fax:	Email 3:				**Analysis Request**
Invoice To	Same as Report ? Y	Client / Project Information				Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:				P
Company:		PO / AFE:	OL 1108073			
Contact:		LSD:				
Address:		Job Ref:	Doris Dustfall			
Phone:	Fax:	Quote #:	Q80651	Task code:	Dustfalls	
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler:	WN/TL	

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date In (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	CONTROLDF	31-Aug-22	30-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		1
	TIADF1	31-Aug-22	29-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF2	31-Aug-22	30-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	TIADF3	31-Aug-22	30-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	DFA1	31-Aug-22	29-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	CDF4	31-Aug-22	29-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2201805

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Sys_loc code: Identical to sample IDs

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	6-Oct-22	9:00		6-OCT	14 30	17.4 °C				

CERTIFICATE OF ANALYSIS

Work Order	: **YL2201804**	Page	: 1 of 8
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife NT Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 06-Oct-2022 14:30
PO	: OL 1108073	Date Analysis Commenced	: 19-Oct-2022
C-O-C number	: ----	Issue Date	: 24-Oct-2022 16:08
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results

Additional information pertinent to this report will be found in the following separate attachments: Quality Control Report, QC Interpretive report to assist with Quality Review and Sample Receipt Notification (SRN).

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caitlin Macey	Team Leader - Inorganics	Inorganics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Metals, Burnaby, British Columbia
Kinny Wu	Lab Analyst	Metals, Burnaby, British Columbia
Paolo Obillo	Account Manager Assistant	Administration, Burnaby, British Columbia

General Comments

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Refer to the ALS Quality Control Interpretive report (QCI) for applicable references and methodology summaries. Reference methods may incorporate modifications to improve performance.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Please refer to Quality Control Interpretive report (QCI) for information regarding Holding Time compliance.

Key : CAS Number: Chemical Abstracts Services number is a unique identifier assigned to discrete substances

LOR: Limit of Reporting (detection limit).

Unit	*Description*
cm²	square centimetres
days	days
mg	milligram
mg/dm².day	milligrams per square decimetre per day

<: less than.

>: greater than.

Surrogate: An analyte that is similar in behavior to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED on SRN or QCI Report, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

Qualifiers

Qualifier	*Description*
DLA	*Detection Limit adjusted for required dilution.*

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	30-Sep-2022	30-Sep-2022	30-Sep-2022	30-Sep-2022	30-Sep-2022
						YL2201804-001	YL2201804-002	YL2201804-003	YL2201804-004	YL2201804-005
						Result	Result	Result	Result	Result
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	55.4
sampling time, field	----	EF001B	1.0	days		31.0	31.0	31.0	31.0	31.0
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		0.34	<0.22	<0.22	<0.22	<0.22
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		<0.11	<0.11	<0.11	<0.11	<0.11
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		0.34	0.14	0.13	0.12	0.16
dustfall, total insoluble	----	E882	1.9	mg		<1.9	<1.9	<1.9	<1.9	<1.9
dustfall, total soluble	----	E881	1.9	mg		5.9	2.4	2.3	2.1	2.7
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0026	<0.0030	<0.0027	<0.0024	<0.0028
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.23	<0.27	<0.24	<0.22	<0.26
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0013	<0.0015	<0.0013	<0.0012	<0.0014
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.015	<0.018	<0.016	<0.014	<0.017
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.044	<0.052	<0.046	<0.041	<0.049
chloride	16887-00-6	E244.Cl	3.4	mg		<3.9	<4.6	<4.1	<3.7	<4.4
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.022	<0.026	<0.023	<0.020	<0.025
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.26	<0.31	<0.27	<0.24	<0.29
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.000268	0.000221	<0.000198	0.000332	0.000244
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000032	<0.0000032	<0.0000035	<0.0000040
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000032	<0.0000032	<0.0000035	<0.0000040
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000079	0.0000058	0.0000065	0.0000085	0.0000101
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000019	<0.000016	<0.000016	<0.000017	<0.000020
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000019	<0.000016	<0.000016	<0.000017	<0.000020
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00037	<0.00032	<0.00032	<0.00035	<0.00040
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000015	<0.0000013	<0.0000013	<0.0000014	<0.0000016
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.00262	0.00239	0.00204	0.00233	0.00244
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000019	<0.000016	<0.000016	<0.000017	<0.000020
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000032	<0.0000032	<0.0000035	<0.0000040
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000037	<0.000032	<0.000032	<0.000035	<0.000040

Analytical Results

Sub-Matrix: Dustfall (Matrix: Air)					Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	30-Sep-2022	30-Sep-2022	30-Sep-2022	30-Sep-2022	30-Sep-2022
Analyte	CAS Number	Method	LOR	Unit		YL2201804-001	YL2201804-002	YL2201804-003	YL2201804-004	YL2201804-005
						Result	Result	Result	Result	Result
Total Metals										
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		<0.00110	<0.00099	<0.00099	<0.00105	<0.00116
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		<0.0000019	<0.0000016	<0.0000016	<0.0000017	<0.0000020
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00019	<0.00016	<0.00016	<0.00017	<0.00020
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00180	0.00179	0.00138	0.00118	0.00138
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.0000297	0.0000221	0.0000215	0.0000326	0.0000349
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000019	<0.00163	<0.0000016	<0.0000017	<0.0000020
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000019	<0.0000016	<0.0000016	<0.0000017	<0.0000020
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		<0.000019	<0.000016	<0.000016	<0.000017	<0.000020
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0019	<0.0016	<0.0016	<0.0017	<0.0020
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0019	<0.0016	<0.0016	<0.0017	<0.0020
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000037	<0.000032	<0.000032	<0.000035	<0.000040
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		<0.0019	<0.0016	<0.0016	<0.0017	<0.0020
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000037	<0.00000033	<0.00000033	<0.00000035	<0.00000040
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0112	0.0114	0.0090	0.0066	0.0086
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000112	0.0000106	0.0000088	0.0000079	0.0000093
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000032	<0.0000032	<0.0000035	<0.0000040
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000032	<0.0000032	<0.0000035	<0.0000040
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00037	<0.00032	<0.00032	<0.00035	<0.00040
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	<0.0000026
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000037	<0.000032	<0.000032	<0.000035	<0.000040
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000110	<0.000099	<0.000099	<0.000105	<0.000116
aluminum, total	7429-90-5	E447	0.0030	mg		0.0046	0.0038	<0.0034	0.0057	0.0042
antimony, total	7440-36-0	E447	0.000050	mg		<0.000064	<0.000056	<0.000056	<0.000060	<0.000068
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000064	<0.000056	<0.000056	<0.000060	<0.000068
barium, total	7440-39-3	E447	0.000050	mg		0.000136	0.000100	0.000112	0.000146	0.000174
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00032	<0.00028	<0.00028	<0.00030	<0.00034
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00032	<0.00028	<0.00028	<0.00030	<0.00034
boron, total	7440-42-8	E447	0.0050	mg		<0.0064	<0.0056	<0.0056	<0.0060	<0.0068
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000026	<0.000022	<0.000022	<0.000024	<0.000027
calcium, total	7440-70-2	E447	0.010	mg		0.045	0.041	0.035	0.040	0.042

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF01	M-DF02	M-DF03	M-DF04	M-DF05
					Client sampling date / time	30-Sep-2022	30-Sep-2022	30-Sep-2022	30-Sep-2022	30-Sep-2022
						YL2201804-001	YL2201804-002	YL2201804-003	YL2201804-004	YL2201804-005
						Result	Result	Result	Result	Result
Total Metals										
chromium, total	7440-47-3	E447	0.00025	mg		<0.00032	<0.00028	<0.00028	<0.00030	<0.00034
cobalt, total	7440-48-4	E447	0.000050	mg		<0.000064	<0.000056	<0.000056	<0.000060	<0.000068
copper, total	7440-50-8	E447	0.00050	mg		<0.00064	<0.00056	<0.00056	<0.00060	<0.00068
iron, total	7439-89-6	E447	0.015	mg		<0.019	<0.017	<0.017	<0.018	<0.020
lead, total	7439-92-1	E447	0.000025	mg		<0.000032	<0.000028	<0.000028	<0.000030	<0.000034
lithium, total	7439-93-2	E447	0.0025	mg		<0.0032	<0.0028	<0.0028	<0.0030	<0.0034
magnesium, total	7439-95-4	E447	0.0025	mg		0.0309	0.0307	0.0237	0.0203	0.0238
manganese, total	7439-96-5	E447	0.00010	mg		0.00051	0.00038	0.00037	0.00056	0.00060
mercury, total	7439-97-6	E516	0.000025	mg		<0.000032 DLA	<0.0280 DLA	<0.000028 DLA	<0.000030 DLA	<0.000034 DLA
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000032	<0.000028	<0.000028	<0.000030	<0.000034
nickel, total	7440-02-0	E447	0.00025	mg		<0.00032	<0.00028	<0.00028	<0.00030	<0.00034
phosphorus, total	7723-14-0	E447	0.025	mg		<0.032	<0.028	<0.028	<0.030	<0.034
potassium, total	7440-09-7	E447	0.025	mg		<0.032	<0.028	<0.028	<0.030	<0.034
selenium, total	7782-49-2	E447	0.00050	mg		<0.00064	<0.00056	<0.00056	<0.00060	<0.00068
silicon, total	7440-21-3	E447	0.025	mg		<0.032	<0.028	<0.028	<0.030	<0.034
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000064	<0.0000056	<0.0000056	<0.0000060	<0.0000068
sodium, total	7440-23-5	E447	0.025	mg		0.192	0.195	0.154	0.113	0.147
strontium, total	7440-24-6	E447	0.000050	mg		0.000192	0.000183	0.000152	0.000135	0.000160
thallium, total	7440-28-0	E447	0.000050	mg		<0.000064	<0.000056	<0.000056	<0.000060	<0.000068
tin, total	7440-31-5	E447	0.000050	mg		<0.000064	<0.000056	<0.000056	<0.000060	<0.000068
titanium, total	7440-32-6	E447	0.0050	mg		<0.0064	<0.0056	<0.0056	<0.0060	<0.0068
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000064	<0.0000056	<0.0000056	<0.0000060	<0.0000068
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00064	<0.00056	<0.00056	<0.00060	<0.00068
zinc, total	7440-66-6	E447	0.0015	mg		<0.0019	<0.0017	<0.0017	<0.0018	<0.0020

Please refer to the General Comments section for an explanation of any qualifiers detected.

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	29-Sep-2022	29-Sep-2022	29-Sep-2022	29-Sep-2022	----
						YL2201804-006	YL2201804-007	YL2201804-008	YL2201804-009	--------
						Result	Result	Result	Result	----
Field Tests										
area sampled, field	----	EF001A	0.010	cm²		55.4	55.4	55.4	55.4	----
sampling time, field	----	EF001B	1.0	days		30.0	30.0	30.0	30.0	----
Particulates										
dustfall, total	----	EC880T.A	0.10	mg/dm².day		0.43	0.72	0.49	0.23	----
dustfall, total insoluble	----	EC882.A	0.10	mg/dm².day		0.24	0.44	0.27	0.12	----
dustfall, total soluble	----	EC881.A	0.10	mg/dm².day		0.19	0.27	0.22	0.11	----
dustfall, total insoluble	----	E882	1.9	mg		4.0	7.4	4.5	2.0	----
dustfall, total soluble	----	E881	1.9	mg		3.1	4.5	3.6	1.9	----
Anions and Nutrients										
ammonia, total (as N)	7664-41-7	EC301	0.0010	mg/dm².day		<0.0025	<0.0025	<0.0026	<0.0026	----
chloride	16887-00-6	EC244.Cl	0.18	mg/dm².day		<0.22	<0.22	<0.23	<0.24	----
nitrate (as N)	14797-55-8	EC244.NO3	0.0010	mg/dm².day		<0.0013	<0.0013	<0.0013	<0.0013	----
sulfate	14808-79-8	EC244.SO4	0.013	mg/dm².day		<0.015	<0.015	<0.016	<0.016	----
ammonia, total (as N)	7664-41-7	E301	0.019	mg		<0.042	<0.042	<0.044	<0.044	----
chloride	16887-00-6	E244.Cl	3.4	mg		<3.7	<3.7	<3.9	<4.0	----
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg		<0.021	<0.021	<0.022	<0.022	----
sulfate	14808-79-8	E244.SO4	0.22	mg		<0.25	<0.25	<0.26	<0.26	----
Total Metals										
aluminum, total	7429-90-5	EC447	0.000160	mg/dm².day		0.00451	0.0115	0.00278	0.00331	----
antimony, total	7440-36-0	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000036	<0.0000037	<0.0000038	----
arsenic, total	7440-38-2	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000036	<0.0000037	<0.0000038	----
barium, total	7440-39-3	EC447	0.0000026	mg/dm².day		0.0000227	0.0000169	0.0000112	0.0000110	----
beryllium, total	7440-41-7	EC447	0.000013	mg/dm².day		<0.000019	<0.000018	<0.000019	<0.000019	----
bismuth, total	7440-69-9	EC447	0.000013	mg/dm².day		<0.000019	<0.000018	<0.000019	<0.000019	----
boron, total	7440-42-8	EC447	0.00026	mg/dm².day		<0.00037	<0.00036	<0.00037	<0.00038	----
cadmium, total	7440-43-9	EC447	0.0000013	mg/dm².day		<0.0000015	<0.0000014	<0.0000015	<0.0000015	----
calcium, total	7440-70-2	EC447	0.00052	mg/dm².day		0.0249	0.0428	0.0216	0.0127	----
chromium, total	7440-47-3	EC447	0.000013	mg/dm².day		<0.000019	0.000036	<0.000019	<0.000019	----
cobalt, total	7440-48-4	EC447	0.0000026	mg/dm².day		0.0000060	0.0000112	<0.0000037	<0.0000038	----
copper, total	7440-50-8	EC447	0.000026	mg/dm².day		<0.000037	<0.000036	<0.000037	<0.000038	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	29-Sep-2022	29-Sep-2022	29-Sep-2022	29-Sep-2022	----
						YL2201804-006	YL2201804-007	YL2201804-008	YL2201804-009	--------
						Result	Result	Result	Result	----
Total Metals										
iron, total	7439-89-6	EC447	0.00079	mg/dm².day		0.00945	0.0244	0.00590	0.00692	----
lead, total	7439-92-1	EC447	0.0000013	mg/dm².day		0.0000023	<0.0000018	<0.0000019	<0.0000019	----
lithium, total	7439-93-2	EC447	0.00013	mg/dm².day		<0.00019	<0.00018	<0.00019	<0.00019	----
magnesium, total	7439-95-4	EC447	0.00013	mg/dm².day		0.00626	0.0121	0.00513	0.00476	----
manganese, total	7439-96-5	EC447	0.0000052	mg/dm².day		0.000321	0.000698	0.000294	0.000221	----
mercury, total	7439-97-6	EC516	0.0000013	mg/dm².day		<0.0000019	<0.0000018	<0.0000019	<0.0000019	----
molybdenum, total	7439-98-7	EC447	0.0000013	mg/dm².day		<0.0000019	<0.0000018	<0.0000019	<0.0000019	----
nickel, total	7440-02-0	EC447	0.000013	mg/dm².day		0.000037	0.000020	<0.000019	<0.000019	----
phosphorus, total	7723-14-0	EC447	0.0013	mg/dm².day		<0.0019	<0.0018	<0.0019	<0.0019	----
potassium, total	7440-09-7	EC447	0.0013	mg/dm².day		<0.0019	<0.0018	<0.0019	<0.0019	----
selenium, total	7782-49-2	EC447	0.000026	mg/dm².day		<0.000037	<0.000036	<0.000037	<0.000038	----
silicon, total	7440-21-3	EC447	0.0013	mg/dm².day		0.0067	0.0142	0.0030	0.0038	----
silver, total	7440-22-4	EC447	0.00000026	mg/dm².day		<0.00000037	<0.00000036	<0.00000037	<0.00000038	----
sodium, total	7440-23-5	EC447	0.0013	mg/dm².day		0.0128	0.0121	0.0124	0.0126	----
strontium, total	7440-24-6	EC447	0.0000026	mg/dm².day		0.0000201	0.0000260	0.0000190	0.0000171	----
thallium, total	7440-28-0	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000036	<0.0000037	<0.0000038	----
tin, total	7440-31-5	EC447	0.0000026	mg/dm².day		<0.0000037	<0.0000036	<0.0000037	<0.0000038	----
titanium, total	7440-32-6	EC447	0.00026	mg/dm².day		<0.00037	0.00054	<0.00037	<0.00038	----
uranium, total	7440-61-1	EC447	0.0000026	mg/dm².day		<0.0000026	<0.0000026	<0.0000026	<0.0000026	----
vanadium, total	7440-62-2	EC447	0.000020	mg/dm².day		<0.000037	0.000064	<0.000037	<0.000038	----
zinc, total	7440-66-6	EC447	0.000070	mg/dm².day		<0.000114	<0.000108	<0.000114	<0.000114	----
aluminum, total	7429-90-5	E447	0.0030	mg		0.0750	0.191	0.0462	0.0550	----
antimony, total	7440-36-0	E447	0.000050	mg		<0.000062	<0.000060	<0.000062	<0.000063	----
arsenic, total	7440-38-2	E447	0.000050	mg		<0.000062	<0.000060	<0.000062	<0.000063	----
barium, total	7440-39-3	E447	0.000050	mg		0.000378	0.000281	0.000186	0.000182	----
beryllium, total	7440-41-7	E447	0.00025	mg		<0.00031	<0.00030	<0.00031	<0.00032	----
bismuth, total	7440-69-9	E447	0.00025	mg		<0.00031	<0.00030	<0.00031	<0.00032	----
boron, total	7440-42-8	E447	0.0050	mg		<0.0062	<0.0060	<0.0062	<0.0063	----
cadmium, total	7440-43-9	E447	0.000020	mg		<0.000025	<0.000024	<0.000025	<0.000025	----
calcium, total	7440-70-2	E447	0.010	mg		0.414	0.712	0.359	0.211	----

Analytical Results

Sub-Matrix: **Dustfall**
(Matrix: **Air**)

Analyte	CAS Number	Method	LOR	Unit	Client sample ID	M-DF06	M-DF07	M-DF08	M-DF09	----
					Client sampling date / time	29-Sep-2022	29-Sep-2022	29-Sep-2022	29-Sep-2022	----
						YL2201804-006	YL2201804-007	YL2201804-008	YL2201804-009	--------
						Result	Result	Result	Result	----
Total Metals										
chromium, total	7440-47-3	E447	0.00025	mg		<0.00031	0.00060	<0.00031	<0.00032	----
cobalt, total	7440-48-4	E447	0.000050	mg		0.000099	0.000186	<0.000062	<0.000063	----
copper, total	7440-50-8	E447	0.00050	mg		<0.00062	<0.00060	<0.00062	<0.00063	----
iron, total	7439-89-6	E447	0.015	mg		0.157	0.406	0.098	0.115	----
lead, total	7439-92-1	E447	0.000025	mg		0.000039	<0.000030	<0.000031	<0.000032	----
lithium, total	7439-93-2	E447	0.0025	mg		<0.0031	<0.0030	<0.0031	<0.0032	----
magnesium, total	7439-95-4	E447	0.0025	mg		0.104	0.201	0.0853	0.0792	----
manganese, total	7439-96-5	E447	0.00010	mg		0.00534	0.0116	0.00488	0.00368	----
mercury, total	7439-97-6	E516	0.000025	mg		<0.000031 DLA	<0.000030 DLA	<0.000031 DLA	<0.000032 DLA	----
molybdenum, total	7439-98-7	E447	0.000025	mg		<0.000031	<0.000030	<0.000031	<0.000032	----
nickel, total	7440-02-0	E447	0.00025	mg		0.00061	0.00033	<0.00031	<0.00032	----
phosphorus, total	7723-14-0	E447	0.025	mg		<0.031	<0.030	<0.031	<0.032	----
potassium, total	7440-09-7	E447	0.025	mg		<0.031	<0.030	<0.031	<0.032	----
selenium, total	7782-49-2	E447	0.00050	mg		<0.00062	<0.00060	<0.00062	<0.00063	----
silicon, total	7440-21-3	E447	0.025	mg		0.112	0.236	0.050	0.064	----
silver, total	7440-22-4	E447	0.0000050	mg		<0.0000062	<0.0000060	<0.0000062	<0.0000063	----
sodium, total	7440-23-5	E447	0.025	mg		0.212	0.201	0.206	0.209	----
strontium, total	7440-24-6	E447	0.000050	mg		0.000334	0.000433	0.000316	0.000284	----
thallium, total	7440-28-0	E447	0.000050	mg		<0.000062	<0.000060	<0.000062	<0.000063	----
tin, total	7440-31-5	E447	0.000050	mg		<0.000062	<0.000060	<0.000062	<0.000063	----
titanium, total	7440-32-6	E447	0.0050	mg		<0.0062	0.0090	<0.0062	<0.0063	----
uranium, total	7440-61-1	E447	0.0000050	mg		<0.0000062	<0.0000060	<0.0000062	<0.0000063	----
vanadium, total	7440-62-2	E447	0.00050	mg		<0.00062	0.00106	<0.00062	<0.00063	----
zinc, total	7440-66-6	E447	0.0015	mg		<0.0019	<0.0018	<0.0019	<0.0019	----

Please refer to the General Comments section for an explanation of any qualifiers detected.

ALS Canada Ltd.

right solutions.
right partner.

QUALITY CONTROL INTERPRETIVE REPORT

Work Order	: **YL2201804**	Page	: 1 of 17
Client	: **Agnico-Eagle Mines Limited**	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	: ----	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 06-Oct-2022 14:30
PO	: OL 1108073	Issue Date	: 24-Oct-2022 16:08
C-O-C number	: ----		
Sampler	: WN/TL		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report is automatically generated by the ALS LIMS (Laboratory Information Management System) through evaluation of Quality Control (QC) results and other QA parameters associated with this submission, and is intended to facilitate rapid data validation by auditors or reviewers. The report highlights any exceptions and outliers to ALS Data Quality Objectives, provides holding time details and exceptions, summarizes QC sample frequencies, and lists applicable methodology references and summaries.

Key

Anonymous: Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number: Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO: Data Quality Objective.
LOR: Limit of Reporting (detection limit).
RPD: Relative Percent Difference.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Summary of Outliers

Outliers : Quality Control Samples

- No Method Blank value outliers occur.
- No Duplicate outliers occur.
- No Laboratory Control Sample (LCS) outliers occur
- No Matrix Spike outliers occur.
- No Test sample Surrogate recovery outliers exist.

Outliers: Reference Material (RM) Samples

- No Reference Material (RM) Sample outliers occur.

Outliers : Analysis Holding Time Compliance (Breaches)

- No Analysis Holding Time Outliers exist.

Outliers : Frequency of Quality Control Samples

- No Quality Control Sample Frequency Outliers occur.

Analysis Holding Time Compliance

This report summarizes extraction / preparation and analysis times and compares each with ALS recommended holding times, which are selected to meet known provincial and /or federal requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by organizations such as CCME, US EPA, APHA Standard Methods, ASTM, or Environment Canada (where available). Dates and holding times reported below represent the first dates of extraction or analysis. If subsequent tests or dilutions exceeded holding times, qualifiers are added (refer to COA).

If samples are identified below as having been analyzed or extracted outside of recommended holding times, measurement uncertainties may be increased, and this should be taken into consideration when interpreting results.

Where actual sampling date is not provided on the chain of custody, the date of receipt with time at 00:00 is used for calculation purposes.

Where only the sample date without time is provided on the chain of custody, the sampling date at 00:00 is used for calculation purposes.

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E301	30-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E301	30-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E301	30-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E301	30-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E301	30-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E301	29-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E301	29-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E301	29-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Ammonia by Fluorescence (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E301	29-Sep-2022	20-Oct-2022	----	----		21-Oct-2022	----	1 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.Cl	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.Cl	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.Cl	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.Cl	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.Cl	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.Cl	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.Cl	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.Cl	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Chloride by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.Cl	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.NO3	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.NO3	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.NO3	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.NO3	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.NO3	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.NO3	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.NO3	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.NO3	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Nitrate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.NO3	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF01	E244.SO4	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF02	E244.SO4	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF03	E244.SO4	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF04	E244.SO4	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF05	E244.SO4	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF06	E244.SO4	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF07	E244.SO4	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF08	E244.SO4	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Anions and Nutrients : Sulfate by IC (Dustfall, mg)										
HDPE dustfall canister (algecide)										
M-DF09	E244.SO4	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF01	EF001A	30-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF02	EF001A	30-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF03	EF001A	30-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF04	EF001A	30-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF05	EF001A	30-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF06	EF001A	29-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF07	EF001A	29-Sep-2022	----	----	----		19-Oct-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF08	EF001A	29-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Area (cm2)										
HDPE dustfall canister (algecide)										
M-DF09	EF001A	29-Sep-2022	----	----	----		19-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF01	EF001B	30-Sep-2022	----	----	----		21-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF02	EF001B	30-Sep-2022	----	----	----		21-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF03	EF001B	30-Sep-2022	----	----	----		21-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF04	EF001B	30-Sep-2022	----	----	----		21-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF05	EF001B	30-Sep-2022	----	----	----		21-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF06	EF001B	29-Sep-2022	----	----	----		21-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF07	EF001B	29-Sep-2022	----	----	----		21-Oct-2022	----	----	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF08	EF001B	29-Sep-2022	----	----	----		21-Oct-2022	----	----	
Field Tests : Dustfall Canister Sampling Days										
HDPE dustfall canister (algecide)										
M-DF09	EF001B	29-Sep-2022	----	----	----		21-Oct-2022	----	----	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF01	E882	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF02	E882	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF03	E882	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF04	E882	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF05	E882	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF06	E882	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF07	E882	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF08	E882	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Insoluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF09	E882	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF01	E881	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF02	E881	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF03	E881	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF04	E881	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF05	E881	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF06	E881	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide)										
M-DF07	E881	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF08	E881	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Particulates : Total Soluble Dustfalls by Gravimetry (mg)										
HDPE dustfall canister (algecide) M-DF09	E881	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	----	0 days	
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E516	30-Sep-2022	19-Oct-2022	180 days	20 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E516	30-Sep-2022	19-Oct-2022	180 days	20 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E516	30-Sep-2022	19-Oct-2022	180 days	20 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E516	30-Sep-2022	19-Oct-2022	180 days	20 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E516	30-Sep-2022	19-Oct-2022	180 days	20 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E516	29-Sep-2022	19-Oct-2022	180 days	21 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E516	29-Sep-2022	19-Oct-2022	180 days	21 days	✓	20-Oct-2022	180 days	0 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E516	29-Sep-2022	19-Oct-2022	180 days	21 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Mercury by CVAAS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E516	29-Sep-2022	19-Oct-2022	180 days	21 days	✓	20-Oct-2022	180 days	0 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF01	E447	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	21 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF02	E447	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	21 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF03	E447	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	21 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF04	E447	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	21 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF05	E447	30-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	21 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF06	E447	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	22 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF07	E447	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	22 days	✓

Matrix: **Air**

Evaluation: × = Holding time exceedance ; ✓ = Within Holding Time

Analyte Group / Container / Client Sample ID(s)	Method	Sampling Date	Extraction / Preparation				Analysis			
			Preparation Date	Holding Times Rec	Holding Times Actual	Eval	Analysis Date	Holding Times Rec	Holding Times Actual	Eval
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF08	E447	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	22 days	✓
Total Metals : Total Metals by CRC ICPMS (Dustfall, mg)										
HDPE dustfall canister (algecide) M-DF09	E447	29-Sep-2022	20-Oct-2022	----	----		20-Oct-2022	180 days	22 days	✓

Legend & Qualifier Definitions

Rec. HT: ALS recommended hold time (see units).

Quality Control Parameter Frequency Compliance

The following report summarizes the frequency of laboratory QC samples analyzed within the analytical batches (QC lots) in which the submitted samples were processed. The actual frequency should be greater than or equal to the expected frequency.

Matrix: **Air**

Evaluation: × = *QC frequency outside specification*; ✓ = *QC frequency within specification.*

Quality Control Sample Type			Count		Frequency (%)		
Analytical Methods	*Method*	*QC Lot #*	*QC*	*Regular*	*Actual*	*Expected*	*Evaluation*
Laboratory Duplicates (DUP)							
Ammonia by Fluorescence (Dustfall, mg)	E301	705349	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	705348	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	705351	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	705350	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	704649	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	704648	1	15	6.6	5.0	✓
Laboratory Control Samples (LCS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	705349	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	705348	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	705351	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	705350	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	704370	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	704649	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	704648	1	15	6.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	704369	1	15	6.6	5.0	✓
Method Blanks (MB)							
Ammonia by Fluorescence (Dustfall, mg)	E301	705349	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	705348	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	705351	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	705350	1	15	6.6	5.0	✓
Total Insoluble Dustfalls by Gravimetry (mg)	E882	704370	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	704649	1	15	6.6	5.0	✓
Total Metals by CRC ICPMS (Dustfall, mg)	E447	704648	1	15	6.6	5.0	✓
Total Soluble Dustfalls by Gravimetry (mg)	E881	704369	1	15	6.6	5.0	✓
Matrix Spikes (MS)							
Ammonia by Fluorescence (Dustfall, mg)	E301	705349	1	15	6.6	5.0	✓
Chloride by IC (Dustfall, mg)	E244.Cl	705348	1	15	6.6	5.0	✓
Nitrate by IC (Dustfall, mg)	E244.NO3	705351	1	15	6.6	5.0	✓
Sulfate by IC (Dustfall, mg)	E244.SO4	705350	1	15	6.6	5.0	✓
Total Mercury by CVAAS (Dustfall, mg)	E516	704649	1	15	6.6	5.0	✓

Methodology References and Summaries

The analytical methods used by ALS are developed using internationally recognized reference methods (where available), such as those published by US EPA, APHA Standard Methods, ASTM, ISO, Environment Canada, BC MOE, and Ontario MOE. Reference methods may incorporate modifications to improve performance (indicated by "mod").

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall, mg)	E244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall, mg)	E244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall, mg)	E244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall, mg)	E301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by CRC ICPMS (Dustfall, mg)	E447 Vancouver - Environmental	Air	EPA 6020B (mod)	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by Collision/Reaction Cell ICPMS.
Total Mercury by CVAAS (Dustfall, mg)	E516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Total Soluble Dustfalls by Gravimetry (mg)	E881 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically.
Total Insoluble Dustfalls by Gravimetry (mg)	E882 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Chloride by IC (Dustfall) (mg/dm2.day)	EC244.Cl Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Nitrate by IC (Dustfall) (mg/dm2.day)	EC244.NO3 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Sulfate by IC (Dustfall) (mg/dm2.day)	EC244.SO4 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/EPA 300.1 (mod)	Inorganic anions in dustfall samples are analyzed by Ion Chromatography with conductivity and/or UV detection.
Ammonia by Fluorescence (Dustfall) (mg/dm2.day)	EC301 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Ammonia in dustfall samples is analyzed by flow-injection analysis with fluorescence detection after reaction with orthophthaldialdehyde (OPA).
Total Metals by ICPMS (Dustfall, mg/dm2.day)	EC447 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day by field information.
Total Mercury by CVAAS (Dustfall, mg/dm2.day)	EC516 Vancouver - Environmental	Air	unit conversion	Convert mg/sample to mg/dm2.day based on field information.
Total Dustfalls by Calculation (mg/dm2.day)	EC880T.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Total Dustfall is sum of Total Soluble Dustall and Total Insoluble Dustall. The result is then calculated based on canister area and sampling time.
Total Soluble Dustfalls by Gravimetry (mg/dm2.day)	EC881.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtrate is evaporated at 104□ to dryness. The residue, Total Soluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Total Insoluble Dustfalls by Gravimetry (mg/dm2.day)	EC882.A Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	A sample is filtered through a 0.45 um membrane filter and its filtered is evaporated at 104□ to dryness. The residue, Total Insoluble Dustfall, is measured gravimetrically. The result is then calculated based on canister area and sampling time.
Dustfall Canister Area (cm2)	EF001A Vancouver - Environmental	Air	Field data	Measurement of sampling area (cm²) of the opening of the dustfall canister is recorded.

Analytical Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Dustfall Canister Sampling Days	EF001B Vancouver - Environmental	Air	N/A	Field dustfall information recorded on ALS report may affect the validity of results.

Preparation Methods	Method / Lab	Matrix	Method Reference	Method Descriptions
Anions and Ammonia Dustfall Preparation	EP244 Vancouver - Environmental	Air	BC MOE Lab Manual (Particulate, Total and Particulate, Soluble)/J. Environ. Monit., 2005, 7, 37-42 (mod)	Preparation of anions in canister media for anions and ammonia analysis.
Total Metals Dustfall Screening and Digestion	EP447 Vancouver - Environmental	Air	EPA 6020A	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA).
Mercury Dustfall Preparation	EP516 Vancouver - Environmental	Air	EPA 245.7	This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). Instrumental analysis is by cold vapour atomic fluorescence spectrophotometry or atomic absorption spectrophotometry (EPA Method 245.7).
Solids Dustfall Preparaton	EP880 Vancouver - Environmental	Air	BC LAB MANUAL - PARTICULATE	Dustfall sample preparation.

QUALITY CONTROL REPORT

Work Order	: **YL2201804**	Page	: 1 of 9
Client	: Agnico-Eagle Mines Limited	Laboratory	: Yellowknife - Environmental
Contact	: Enviro Data	Account Manager	: Amber Springer
Address	: Hope Bay Division 280-B ave Lariviere Rouyn-Noranda QC Canada J9X 4H4	Address	: 314 Old Airport Road, Unit 116 Yellowknife, Northwest Territories Canada X1A 3T3
Telephone	:	Telephone	: +1 867 873 5593
Project	: Madrid Dustfall	Date Samples Received	: 06-Oct-2022 14:30
PO	: OL 1108073	Date Analysis Commenced	: 19-Oct-2022
C-O-C number	: ----	Issue Date	: 24-Oct-2022 16:08
Sampler	: WN/TL ----		
Site	: ----		
Quote number	: Q80651 (TMAC Standard)		
No. of samples received	: 9		
No. of samples analysed	: 9		

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. This document shall not be reproduced, except in full.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percent Difference (RPD) and Data Quality Objectives
- Matrix Spike (MS) Report; Recovery and Data Quality Objectives
- Method Blank (MB) Report; Recovery and Data Quality Objectives
- Laboratory Control Sample (LCS) Report; Recovery and Data Quality Objectives

Signatories

This document has been electronically signed by the authorized signatories below. Electronic signing is conducted in accordance with US FDA 21 CFR Part 11.

Signatories	*Position*	*Laboratory Department*
Caitlin Macey	Team Leader - Inorganics	Vancouver Inorganics, Burnaby, British Columbia
Kim Jensen	Department Manager - Metals	Vancouver Metals, Burnaby, British Columbia
Kinny Wu	Lab Analyst	Vancouver Metals, Burnaby, British Columbia
Paolo Obillo	Account Manager Assistant	Vancouver Administration, Burnaby, British Columbia

General Comments

The ALS Quality Control (QC) report is optionally provided to ALS clients upon request. ALS test methods include comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against predetermined Data Quality Objectives (DQOs) to provide confidence in the accuracy of associated test results. This report contains detailed results for all QC results applicable to this sample submission. Please refer to the ALS Quality Control Interpretation report (QCI) for applicable method references and methodology summaries.

Key :

Anonymous = Refers to samples which are not part of this work order, but which formed part of the QC process lot.
CAS Number = Chemical Abstracts Service number is a unique identifier assigned to discrete substances.
DQO = Data Quality Objective.
LOR = Limit of Reporting (detection limit).
RPD = Relative Percent Difference
# = Indicates a QC result that did not meet the ALS DQO.

Workorder Comments

Holding times are displayed as "---" if no guidance exists from CCME, Canadian provinces, or broadly recognized international references.

Laboratory Duplicate (DUP) Report

A Laboratory Duplicate (DUP) is a randomly selected intralaboratory replicate sample. Laboratory Duplicates provide information regarding method precision and sample heterogeneity. ALS DQOs for Laboratory Duplicates are expressed as test-specific limits for Relative Percent Difference (RPD), or as an absolute difference limit of 2 times the LOR for low concentration duplicates within ~ 4-10 times the LOR (cut-off is test-specific).

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Anions and Nutrients (QC Lot: 705348)											
YL2201804-001	M-DF01	chloride	16887-00-6	E244.Cl	3.9	mg	<3.9	<3.9	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 705349)											
YL2201804-001	M-DF01	ammonia, total (as N)	7664-41-7	E301	0.044	mg	<0.044	<0.044	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 705350)											
YL2201804-001	M-DF01	sulfate	14808-79-8	E244.SO4	0.26	mg	<0.26	<0.26	0	Diff <2x LOR	----
Anions and Nutrients (QC Lot: 705351)											
YL2201804-001	M-DF01	nitrate (as N)	14797-55-8	E244.NO3	0.022	mg	<0.022	<0.022	0	Diff <2x LOR	----
Total Metals (QC Lot: 704648)											
YL2201804-001	M-DF01	aluminum, total	7429-90-5	E447	0.0038	mg	0.0046	0.0082	0.0036	Diff <2x LOR	----
		antimony, total	7440-36-0	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		arsenic, total	7440-38-2	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		barium, total	7440-39-3	E447	0.000064	mg	0.000136	0.000158	0.000021	Diff <2x LOR	----
		beryllium, total	7440-41-7	E447	0.00032	mg	<0.00032	<0.00032	0	Diff <2x LOR	----
		bismuth, total	7440-69-9	E447	0.00032	mg	<0.00032	<0.00032	0	Diff <2x LOR	----
		boron, total	7440-42-8	E447	0.0064	mg	<0.0064	<0.0064	0	Diff <2x LOR	----
		cadmium, total	7440-43-9	E447	0.000026	mg	<0.000026	<0.000026	0	Diff <2x LOR	----
		calcium, total	7440-70-2	E447	0.013	mg	0.045	0.047	0.002	Diff <2x LOR	----
		chromium, total	7440-47-3	E447	0.00032	mg	<0.00032	<0.00032	0	Diff <2x LOR	----
		cobalt, total	7440-48-4	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		copper, total	7440-50-8	E447	0.00064	mg	<0.00064	<0.00064	0	Diff <2x LOR	----
		iron, total	7439-89-6	E447	0.019	mg	<0.019	<0.019	0	Diff <2x LOR	----
		lead, total	7439-92-1	E447	0.000032	mg	<0.000032	<0.000032	0	Diff <2x LOR	----
		lithium, total	7439-93-2	E447	0.0032	mg	<0.0032	<0.0032	0	Diff <2x LOR	----
		magnesium, total	7439-95-4	E447	0.0032	mg	0.0309	0.0340	9.37%	20%	----
		manganese, total	7439-96-5	E447	0.00013	mg	0.00051	0.00058	0.00007	Diff <2x LOR	----
		molybdenum, total	7439-98-7	E447	0.000032	mg	<0.000032	<0.000032	0	Diff <2x LOR	----
		nickel, total	7440-02-0	E447	0.00032	mg	<0.00032	<0.00032	0	Diff <2x LOR	----
		phosphorus, total	7723-14-0	E447	0.032	mg	<0.032	<0.032	0	Diff <2x LOR	----
		potassium, total	7440-09-7	E447	0.032	mg	<0.032	<0.032	0	Diff <2x LOR	----
		selenium, total	7782-49-2	E447	0.00064	mg	<0.00064	<0.00064	0	Diff <2x LOR	----

Sub-Matrix: **Air**

					Laboratory Duplicate (DUP) Report						
Laboratory sample ID	*Client sample ID*	*Analyte*	*CAS Number*	*Method*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD(%) or Difference*	*Duplicate Limits*	*Qualifier*
Total Metals (QC Lot: 704648) - continued											
YL2201804-001	M-DF01	silicon, total	7440-21-3	E447	0.032	mg	<0.032	<0.032	0	Diff <2x LOR	----
		silver, total	7440-22-4	E447	0.0000064	mg	<0.0000064	<0.0000064	0	Diff <2x LOR	----
		sodium, total	7440-23-5	E447	0.032	mg	0.192	0.194	0.002	Diff <2x LOR	----
		strontium, total	7440-24-6	E447	0.000064	mg	0.000192	0.000205	0.000013	Diff <2x LOR	----
		thallium, total	7440-28-0	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		tin, total	7440-31-5	E447	0.000064	mg	<0.000064	<0.000064	0	Diff <2x LOR	----
		titanium, total	7440-32-6	E447	0.0064	mg	<0.0064	<0.0064	0	Diff <2x LOR	----
		uranium, total	7440-61-1	E447	0.0000064	mg	<0.0000064	<0.0000064	0	Diff <2x LOR	----
		vanadium, total	7440-62-2	E447	0.00064	mg	<0.00064	<0.00064	0	Diff <2x LOR	----
		zinc, total	7440-66-6	E447	0.0019	mg	<0.0019	<0.0019	0	Diff <2x LOR	----
Total Metals (QC Lot: 704649)											
YL2201804-001	M-DF01	mercury, total	7439-97-6	E516	0.000032	mg	<0.000032	<0.000032	0	Diff <2x LOR	----

Method Blank (MB) Report

A Method Blank is an analyte-free matrix that undergoes sample processing identical to that carried out for test samples. Method Blank results are used to monitor and control for potential contamination from the laboratory environment and reagents. For most tests, the DQO for Method Blanks is for the result to be < LOR.

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Particulates (QCLot: 704369)						
dustfall, total soluble	----	E881	1.9	mg	<1.9	----
Particulates (QCLot: 704370)						
dustfall, total insoluble	----	E882	1.9	mg	<1.9	----
Anions and Nutrients (QCLot: 705348)						
chloride	16887-00-6	E244.Cl	3.4	mg	<3.4	----
Anions and Nutrients (QCLot: 705349)						
ammonia, total (as N)	7664-41-7	E301	0.019	mg	<0.038	----
Anions and Nutrients (QCLot: 705350)						
sulfate	14808-79-8	E244.SO4	0.225	mg	<0.22	----
Anions and Nutrients (QCLot: 705351)						
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	<0.019	----
Total Metals (QCLot: 704648)						
aluminum, total	7429-90-5	E447	0.003	mg	<0.0030	----
antimony, total	7440-36-0	E447	0.00005	mg	<0.000050	----
arsenic, total	7440-38-2	E447	0.00005	mg	<0.000050	----
barium, total	7440-39-3	E447	0.00005	mg	<0.000050	----
beryllium, total	7440-41-7	E447	0.00025	mg	<0.00025	----
bismuth, total	7440-69-9	E447	0.00025	mg	<0.00025	----
boron, total	7440-42-8	E447	0.005	mg	<0.0050	----
cadmium, total	7440-43-9	E447	0.00002	mg	<0.000020	----
calcium, total	7440-70-2	E447	0.01	mg	<0.010	----
chromium, total	7440-47-3	E447	0.00025	mg	<0.00025	----
cobalt, total	7440-48-4	E447	0.00005	mg	<0.000050	----
copper, total	7440-50-8	E447	0.0005	mg	<0.00050	----
iron, total	7439-89-6	E447	0.015	mg	<0.015	----
lead, total	7439-92-1	E447	0.000025	mg	<0.000025	----
lithium, total	7439-93-2	E447	0.0025	mg	<0.0025	----
magnesium, total	7439-95-4	E447	0.0025	mg	<0.0025	----
manganese, total	7439-96-5	E447	0.0001	mg	<0.00010	----
molybdenum, total	7439-98-7	E447	0.000025	mg	<0.000025	----
nickel, total	7440-02-0	E447	0.00025	mg	<0.00025	----
phosphorus, total	7723-14-0	E447	0.025	mg	<0.025	----

Sub-Matrix: **Air**

Analyte	CAS Number	Method	LOR	Unit	Result	Qualifier
Total Metals (QCLot: 704648) - continued						
potassium, total	7440-09-7	E447	0.025	mg	<0.025	----
selenium, total	7782-49-2	E447	0.0005	mg	<0.00050	----
silicon, total	7440-21-3	E447	0.025	mg	<0.025	----
silver, total	7440-22-4	E447	0.000005	mg	<0.0000050	----
sodium, total	7440-23-5	E447	0.025	mg	<0.025	----
strontium, total	7440-24-6	E447	0.00005	mg	<0.000050	----
thallium, total	7440-28-0	E447	0.00005	mg	<0.000050	----
tin, total	7440-31-5	E447	0.00005	mg	<0.000050	----
titanium, total	7440-32-6	E447	0.005	mg	<0.0050	----
uranium, total	7440-61-1	E447	0.000005	mg	<0.0000050	----
vanadium, total	7440-62-2	E447	0.0005	mg	<0.00050	----
zinc, total	7440-66-6	E447	0.0015	mg	<0.0015	----
Total Metals (QCLot: 704649)						
mercury, total	7439-97-6	E516	0.000025	mg	<0.000020	----

Laboratory Control Sample (LCS) Report

A Laboratory Control Sample (LCS) is an analyte-free matrix that has been fortified (spiked) with test analytes at known concentration and processed in an identical manner to test samples. LCS results are expressed as percent recovery, and are used to monitor and control test method accuracy and precision, independent of test sample matrix.

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Particulates (QCLot: 704369)									
dustfall, total soluble	----	E881	1.9	mg	200 mg	100	85.0	115	----
Particulates (QCLot: 704370)									
dustfall, total insoluble	----	E882	1.9	mg	30 mg	107	85.0	115	----
Anions and Nutrients (QCLot: 705348)									
chloride	16887-00-6	E244.Cl	3.4	mg	50 mg	102	90.0	110	----
Anions and Nutrients (QCLot: 705349)									
ammonia, total (as N)	7664-41-7	E301	0.019	mg	0.1 mg	91.3	85.0	115	----
Anions and Nutrients (QCLot: 705350)									
sulfate	14808-79-8	E244.SO4	0.225	mg	50 mg	105	90.0	110	----
Anions and Nutrients (QCLot: 705351)									
nitrate (as N)	14797-55-8	E244.NO3	0.019	mg	1.25 mg	103	90.0	110	----
Total Metals (QCLot: 704648)									
aluminum, total	7429-90-5	E447	0.003	mg	1 mg	105	80.0	120	----
antimony, total	7440-36-0	E447	0.00005	mg	0.5 mg	112	80.0	120	----
arsenic, total	7440-38-2	E447	0.00005	mg	0.5 mg	116	80.0	120	----
barium, total	7440-39-3	E447	0.00005	mg	0.125 mg	104	80.0	120	----
beryllium, total	7440-41-7	E447	0.00025	mg	0.05 mg	103	80.0	120	----
bismuth, total	7440-69-9	E447	0.00025	mg	0.5 mg	98.2	80.0	120	----
boron, total	7440-42-8	E447	0.005	mg	0.5 mg	104	80.0	120	----
cadmium, total	7440-43-9	E447	0.00002	mg	0.05 mg	103	80.0	120	----
calcium, total	7440-70-2	E447	0.01	mg	25 mg	101	80.0	120	----
chromium, total	7440-47-3	E447	0.00025	mg	0.125 mg	104	80.0	120	----
cobalt, total	7440-48-4	E447	0.00005	mg	0.125 mg	103	80.0	120	----
copper, total	7440-50-8	E447	0.0005	mg	0.125 mg	101	80.0	120	----
iron, total	7439-89-6	E447	0.015	mg	0.5 mg	108	80.0	120	----
lead, total	7439-92-1	E447	0.000025	mg	0.25 mg	101	80.0	120	----
lithium, total	7439-93-2	E447	0.0025	mg	0.125 mg	103	80.0	120	----
magnesium, total	7439-95-4	E447	0.0025	mg	25 mg	105	80.0	120	----
manganese, total	7439-96-5	E447	0.0001	mg	0.125 mg	103	80.0	120	----
molybdenum, total	7439-98-7	E447	0.000025	mg	0.125 mg	110	80.0	120	----
nickel, total	7440-02-0	E447	0.00025	mg	0.25 mg	104	80.0	120	----

Sub-Matrix: **Air**

					Laboratory Control Sample (LCS) Report				
					Spike	Recovery (%)	Recovery Limits (%)		
Analyte	CAS Number	Method	LOR	Unit	Concentration	LCS	Low	High	Qualifier
Total Metals (QCLot: 704648) - continued									
phosphorus, total	7723-14-0	E447	0.025	mg	5 mg	114	80.0	120	----
potassium, total	7440-09-7	E447	0.025	mg	25 mg	103	80.0	120	----
selenium, total	7782-49-2	E447	0.0005	mg	0.5 mg	110	80.0	120	----
silicon, total	7440-21-3	E447	0.025	mg	5 mg	112	80.0	120	----
silver, total	7440-22-4	E447	0.000005	mg	0.05 mg	92.8	80.0	120	----
sodium, total	7440-23-5	E447	0.025	mg	25 mg	104	80.0	120	----
strontium, total	7440-24-6	E447	0.00005	mg	0.125 mg	102	80.0	120	----
thallium, total	7440-28-0	E447	0.00005	mg	0.5 mg	95.9	80.0	120	----
tin, total	7440-31-5	E447	0.00005	mg	0.25 mg	109	80.0	120	----
titanium, total	7440-32-6	E447	0.005	mg	0.125 mg	106	80.0	120	----
uranium, total	7440-61-1	E447	0.000005	mg	0.0025 mg	101	80.0	120	----
vanadium, total	7440-62-2	E447	0.0005	mg	0.25 mg	103	80.0	120	----
zinc, total	7440-66-6	E447	0.0015	mg	0.25 mg	102	80.0	120	----
Total Metals (QCLot: 704649)									
mercury, total	7439-97-6	E516	0.000025	mg	0.00062 mg	97.0	70.0	130	----

Matrix Spike (MS) Report

A Matrix Spike (MS) is a randomly selected intra-laboratory replicate sample that has been fortified (spiked) with test analytes at known concentration, and processed in an identical manner to test samples. Matrix Spikes provide information regarding analyte recovery and potential matrix effects. MS DQO exceedances due to sample matrix may sometimes be unavoidable; in such cases, test results for the associated sample (or similar samples) may be subject to bias. ND – Recovery not determined, background level >= 1x spike level.

Sub-Matrix: **Air**

					Matrix Spike (MS) Report					
					Spike		Recovery (%)	Recovery Limits (%)		
Laboratory sample ID	Client sample ID	Analyte	CAS Number	Method	Concentration	Target	MS	Low	High	Qualifier
Anions and Nutrients (QCLot: 705348)										
YL2201804-002	M-DF02	chloride	16887-00-6	E244.Cl	70.8 mg	68 mg	104	75.0	125	----
Anions and Nutrients (QCLot: 705349)										
YL2201804-002	M-DF02	ammonia, total (as N)	7664-41-7	E301	0.124 mg	0.136 mg	91.0	75.0	125	----
Anions and Nutrients (QCLot: 705350)										
YL2201804-002	M-DF02	sulfate	14808-79-8	E244.SO4	72.6 mg	68 mg	107	75.0	125	----
Anions and Nutrients (QCLot: 705351)										
YL2201804-002	M-DF02	nitrate (as N)	14797-55-8	E244.NO3	1.79 mg	1.7 mg	105	75.0	125	----
Total Metals (QCLot: 704649)										
YL2201804-002	M-DF02	mercury, total	7439-97-6	E516	ND mg	0.0005 mg	ND	70.0	130	----

ALS Environmental

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Report To:		Report Format / Distribution				Service Requested (Rush for routine analysis subject to availability)
Company:	Agnico Eagle Mines Ltd. - Hope Bay	☑ Standard	☐ Other			◉ Regular (Standard Turnaround Times - Business Days)
Contact:	Environmental Site Manager	☑ PDF	☑ Excel	☑ Digital	☐ Fax	○ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	145 King Street East	Email 1:	enviro.data@agnicoeagle.com			○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	Suite 400, Toronto, On, M5C 2Y7	Email 2:	Gregory.Crooks@stantec.com			○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	1-819-759-3555 Fax:	Email 3:				Analysis Request
Invoice To	Same as Report ? Y	Client / Project Information				Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report?		Job #:				P
Company:		PO / AFE:	OL 1108073			
Contact:		LSD:				
Address:		Job Ref:	Madrid Dustfall			
Phone:	Fax:	Quote #:	Q80651	Task code:	Dustfalls	
Lab Work Order # (lab use only)		ALS Contact:	Amber Springer	Sampler:	WN/TL	

Sample #	Sample Identification (This description will appear on the report)	Date In (dd-mmm-yy)	Date Out (dd-mmm-yy)	Sample Type	Total Particulate	Soluble particulate	Insoluble particulate	Sulphate	Nitrate	NH3, NH4	Cl	Total Metals	Mg+	Ca+	K+		Number of Containers
	M-DF01	31-Aug-22	30-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF02	31-Aug-22	30-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF03	31-Aug-22	30-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF04	31-Aug-22	30-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF05	31-Aug-22	30-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF06	31-Aug-22	29-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF07	31-Aug-22	29-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF08	31-Aug-22	29-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2
	M-DF09	31-Aug-22	29-Sep-22	Water	X	X	X	X	X	X	X	X	X	X	X		2

Environmental Division
Yellowknife
Work Order Reference
YL2201804

Telephone : +1 867 873 5593

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Sys_loc_code identical to sample IDs

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.

Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Will Nalley	6-Oct-22	9:00		6-OCT	1430	17.4 °C				

Appendix C Continuous Particulate Monitors Calibration Records

CD Nova Thermo 5014i Calibration Inspection

Work Order Number N220902
Customer Name Agnico Eagle Hope Bay
Instrument Part Number 5014i
Instrument Serial Number CM19221003
Date Oct 22 2022

Description	As found	Standard	As found variance	Allowable variance	Adjusted to	Final variance		
Ambient Air Temperature	26	24.7	-1.30	+/- 0.2°C	24.7	0.00		
Ambient Relative Humidity	14.4	12.4	2.00	+/- 3%	12.4	0.00		
Flow Temperature	28	24.7	3.30	+/- 0.2°C	24.7	0.00		
Barometer Pressure	756.6	758.5	1.90	+/- 5 mmHg	758.5	0.00		
Vacuum Pressure Span	49.5	49.1	-0.40	50-70 mmHg	49.1	Fail	Acceptable for cold weather operations	
Flow Pressure Span	19	19	0.00	20-30 mmHg	19	Fail	Acceptable for cold weather operations	
Flow calibration	16.91	16.86	-0.30%	+/- 2%	16.86	0.00%		
Mass Calibration								

Auto Detector Calibration

Initial High Voltage	N/A	**Final High Voltage**	1400	
Initial Beta Count	N/A	**Final Beta Count**	10439	

Leak Test

Start Value VAC	47.7	mmHg		
Start Value FLOW	16.68	LPM		
Leak Check Adapter VAC	96.7	mmHg		
Leak Check Adapter FLOW	16.58	LPM		
Flow Variance	0.60%	LPM	+/-2.5%	Pass

Standards Used	Description	S/N	Calibration Date
Flow	Streamline Pro	C220-102	31-Jan-22
Temperature	Streamline Pro	C220-102	31-Jan-22
Pressure	Streamline Pro	C220-102	31-Jan-22
Relative Humidity	Vaisala HM40	U0340443	Jan 16 2022
Manometer	Omega 8205	9900599	21 April 2022
Technical Data	Thermo Manual Waver number W1903 dated October 1, 2018		
	Thermo Fisher Procedure Number 106430-00 revision A		

Firmware updated to:
Calibration Complete By Dan Molloy, Service Manager, Western Region

Signature: 

CD Nova Thermo 5014i Calibration Inspection

Work Order Number N220902

Customer Name Agnico Eagle Hope Bay

Instrument Part Number 5014i

Instrument Serial Number CM19221002

Date Oct 23 2022

Description	As found	Standard	As found variance	Allowable variance	Adjusted to	Final variance
Ambient Air Temperature	-8	-7.8	0.20	+/- 0.2°C	-8	0.20
Ambient Relative Humidity	85.5	80	5.50	+/- 3%	82.5	2.50
Flow Temperature	15.8	18.7	-2.90	+/- 0.2°C	18.7	0.00
Barometer Pressure	750.7	756.2	5.50	+/- 5 mmHg	756.2	0.00
Vacuum Pressure Span	61.8	62.5	0.70	50-70 mmHg	61.8	Pass
Flow Pressure Span	25.7	25	-0.70	20-30 mmHg	25.7	Pass
Flow calibration	16.65	18.06	8.47%	+/- 2%	18.06	0.00%
Mass Calibration	7166	7079	-1.21%	+/-5%	7166	-1.21%

Auto Detector Calibration

Initial High Voltage	N/A	**Final High Voltage**	1380	
Initial Beta Count	N/A	**Final Beta Count**	300	

Leak Test

Start Value VAC	124	mmHg		
Start Value FLOW	16.67	LPM		
Leak Check Adapter VAC	170	mmHg		
Leak Check Adapter FLOW	16.64	LPM		
Flow Variance	0.18%	LPM	+/-2.5%	Pass

Standards Used	Description	S/N	Calibration Date
Flow	Streamline Pro	C220-102	31-Jan-22
Temperature	Streamline Pro	C220-102	31-Jan-22
Pressure	Streamline Pro	C220-102	31-Jan-22
Relative Humidity	Vaisala HM40	U0340443	Jan 16 2022
Manometer	Omega 8205	9900599	21 April 2022
Technical Data	Thermo Manual Waver number W1903 dated October 1, 2018		
	Thermo Fisher Procedure Number 106430-00 revision A		

Firmware updated to:

Calibration Complete By Dan Molloy, Service Manager, Western Region

Signature: 

AND ASSOCIATED COMPANIES

Dates: Onsite October 20 – October 26, 2022.
C.D. Nova work order: N220902
Agnico Eagle PO: OL-1204220
Purpose of the visit:
C.D. Nova was contacted by Agnico Eagle to assist with the annual maintenance, troubleshooting and calibration of Hope Bay's air quality monitoring station. Training on the operation, calibration and maintenance of the instruments is to be completed as well. If time permits, pre-planning and preparation of the second air quality monitoring station will take place.
Background
In the summer of 2021 Agnico Eagle along with the assistance from C.D. Nova assembled a new air quality monitoring station at their Hope Bay mine site. This station consisted of two 5014i particulate monitors, 42iQ NO/NO2/NOX monitor, 111iQ zero air generator and a 146iQ multi-gas calibrator. The equipment was left in operating condition at the completion of the trip however, the 42iQ was not fully calibrated due to a lack of certified test gas onsite at the time.

Onsite Actions

- 5014i – PM2.5 serial number CM19221003
    - The instrument was found to be non functioning upon arrival at the station.
    - The instrument was removed and brought back to the environmental lab for troubleshooting.
    - Troubleshooting lead to the discovery that the instrument fuses were blown. The fuses were robbed from CM19221004.
    - Once the power issue was resolved the instrument was set up in the environmental office with parts accessories borrowed from the undeployed instruments.
    - The fan filter was replaced.
    - The inlet o-ring was replaced.
    - An attempt was made to rebuild the pump. Unfortunately, the wrong pump rebuild kits had been shipped with the instruments. The pump was disassembled and inspected. The internals are in good condition. The pump was flagged.
        - C.D. Nova will exchange the pump rebuild kits for the correct ones.
    - The instrument was allowed to warm up.
    - The firmware was updated.
    - A flow calibration and leak test were attempted.
    - During the flow test and leak test it was noted that the instrument would not return to it's set flow of 16.67 lpm.
    - Troubleshooting lead to the replacement of the pressure board and the proportional valve. Both parts were robbed from CM19221004.
    - The instrument was then used for training purposes in the environmental lab.
    - The instruments were then transported to the Air Quality Shack for installation and installed.
    - A verification of the instruments was completed. The audit sheet will be supplied to Agnico Eagle.

    - All parts installed in this instrument for repair or trouble shooting were removed from 5014i serial number CM19221004. I note was left on the lid of the instrument stating this.
- 5014i – TSP serial number CM19221002
    - This instrument was found to be functioning upon arrival at the station.
    - The inlet was cleaned.
    - The fan filter was replaced.
    - The firmware was updated.
    - The pump was switched out for a new pump from Agnico Eagle's stock of undeployed pumps.
    - A verification of the instrument was completed. The audit sheet will be supplied to Agnico Eagle.
- Gas instrument – 42iQ serial number 1191222768
    - The 42iQ was found to have a flickering screen upon arrival at the station.
    - The instrument was removed and brought back to the environmental lab for troubleshooting.
    - The SD card was removed and reseated several times. The first couple times the SD card did not eject smoothly. After several cycles of removing the SD card and reinstalling it the action was much smoother.
    - The instrument was then powered back up and booted up correctly.
    - The diagnostic data was then downloaded from the instrument.
    - A configuration backup was created
    - The firmware was then updated.
    - Maintenance was completed on the instrument
        - The flows were measured
        - The fan filters were replaced.
        - The capillaries were removed, inspected and reinstalled with new o-rings
        - The perm dry inlet filter was replaced
        - The perm dryer was replumed to the exit side of the ozone destroyer
    - During initial running of the instrument there was a strong odour of ozone coming from the exhaust of the instrument. The ozone destroyer was replaced as its function is suspect.
    - The instrument was reinstalled in the station.
    - The instrument was powered up and allowed to warm up.
    - The instrument was then calibrated.
- Zero air generator – 111iQ serial number CM19200217
    - The compressor tank was drained of moisture
    - The scrubbers were inspected and appear to be in good condition.
    - The scrubber material was not changed at this time.
- Calibrator - 146iQ serial number 119122270
    - The fan filter was replaced.
    - The firmware was updated.
    - The calibrator was function checked.
- Station
    - The zero/span scrubber material was replaced with new.
    - The gas cylinder wall mount was installed
    - The gas cylinder was installed and plumbed to the 146iQ calibrator

- The UPS system was unboxed and inspected for install. The UPS system is equipped with a power input plug that is a twist lock connector. The station does not have a twist lock receptacle. In order to install the UPS system a site electrician will need to modify the electrical system in the station to power the UPS system.

Parts:

- The following is a list of items that were used during this site visit and should be replaced.
  - 5014i fuses 109612-00 (qty 2)
  - Pressure board 106946-00
  - Proportional valve 106470-00
  - Inlet o-ring SM149509134
  - 5014i pump rebuild kits 115369-00 (qty 5). (To be supplied by C.D. Nova in exchange for the incorrect kits)
  - 42iQ pump rebuild kit 117877-00
  - Instrument fan filter 8630
  - Scrubber materials
    - Charcoal 4157
    - Desicant 6998
    - Purafil 7075

Decisions

- The daily zero and span checks for the 42iQ can be performed using either test gases or a permeation tube. If the decision is made to use permeation tubes they will need to be procured. At this time, the 146iQ has been programed to run nightly zero and span tests.

Recommendations

- Calibration Tools
  - In order to calibrate the 5014i, a manometer is required. The existing Streamline FTS kit has a manometer in it that will cover the required range for the 5014i calibration. It is recommended to certify the existing manometer and cannibalize the rest of the Streamline FTS kit.
  - A field kit should be developed that includes the required tools for routine maintenance and calibration. Examples of items to be included are screwdrivers, wrenches, rags, tape, 5014i leak test adaptor certified flow standard, certified temperature standard, certified barometric standard, certified manometer and a certified relative humidity standard.
- Log Book
  - A Station log book should be created to log all relevant maintenance, repairs, outages and events that happen to the station. Section 10 of the NAPS Monitoring and Quality Assurance/ Quality Control Guidelines documents contains details of how to create station logs.
- Company Standards
  - A company guideline/Standard operation procedure should be developed to cover the operation, maintenance and calibrations of the instruments in the new Air Quality Monitoring Station. An email was sent to the environmental team at Agnico Eagle's Meadow Bank mine asking if they can to share their standards for the operation of their 42iQ, 146iQ and 111iQ instruments.
- Spare temperature and relative humidity sensor cable

    - As the mine site can experience extreme winter weather, it is recommended that the ambient temperature and relative humidity sensor be brought into the shack to perform calibrations in winter weather conditions. In order to perform this in an efficient and safe manor it is recommended that a spare cable for the sensor be purchased. This will save the difficult task of removing and feeding the cable back through the roof of the shack. As there are currently two instruments that have yet to be deployed, one of the cables from them can be used until they are installed.
- The Air Quality Shack
    - The heat inside the station has proven to be difficult to regulate. The preferred temperature range is 18C-23C.
- Field laptop
    - The field laptop used by the Environmental team should be equipped with the correct software to interface with the equipment installed in the new Air Quality Station. This includes the following software:
        - Thermo Scientific ePort
        - Thermo Scientific iPort
        - Campbell Scientific PC200W
    - Administrative access privileges are required for the field laptop in order to interface with the Thermo Scientific instruments. It has been confirmed with onsite I.T. that the current field laptop has this enabled.
- 5014i heater settings
    - The normal setting for the heater in the 5014i is for the heater to be controlled by the ambient relative humidity (ARH) with a set point of 35%.
    - In winter conditions it is rare to see an ARH above 35% due to the dry conditions at this location.
    - With the ARH staying below the threshold of 35%, the instrument heater will not turn on.
    - With the heater off, the beta detector will be subjected to cold temperatures which well affect its performance.
    - It is recommended in arctic climates with low winter ARH to switch the 5014i's heater to temperature control during winter months with a setting of 10C.
    - This will keep the beta detector heated at all times.
    - Once winter condition are over, switching the heater back to relative humidity control is recommended.

Training

- Training was provided for one members of Agnico Eagle's Environmental staff. Topic's covered included auditing of the instruments and routine maintenance for both the station and instruments.

Summary

Over the course of a seven-day period Agnico Eagle's Hope Bay Mine site C.D. Nova's staff assisted Agnico Eagle's staff with the repair, annual maintenance calibration of their existing air quality monitoring station. Upon arrival the 42iQ and the 5014i measuring PM2.5 were found too not be operational. The 5014i measuring TSP was found to be operational. The two non functional instruments were repaired and calibrated. The functional instrument was calibrated as well. All instruments were functioning correctly by the end of the site visit.

A quote will be provided by C.D. Nova for all of the recommended items.

Prepared by:
Dan Molloy
Service Manager, Western Region
C.D. Nova Ltd.

AND ASSOCIATED COMPANIES

NO-NO2-NOX

Calibration form

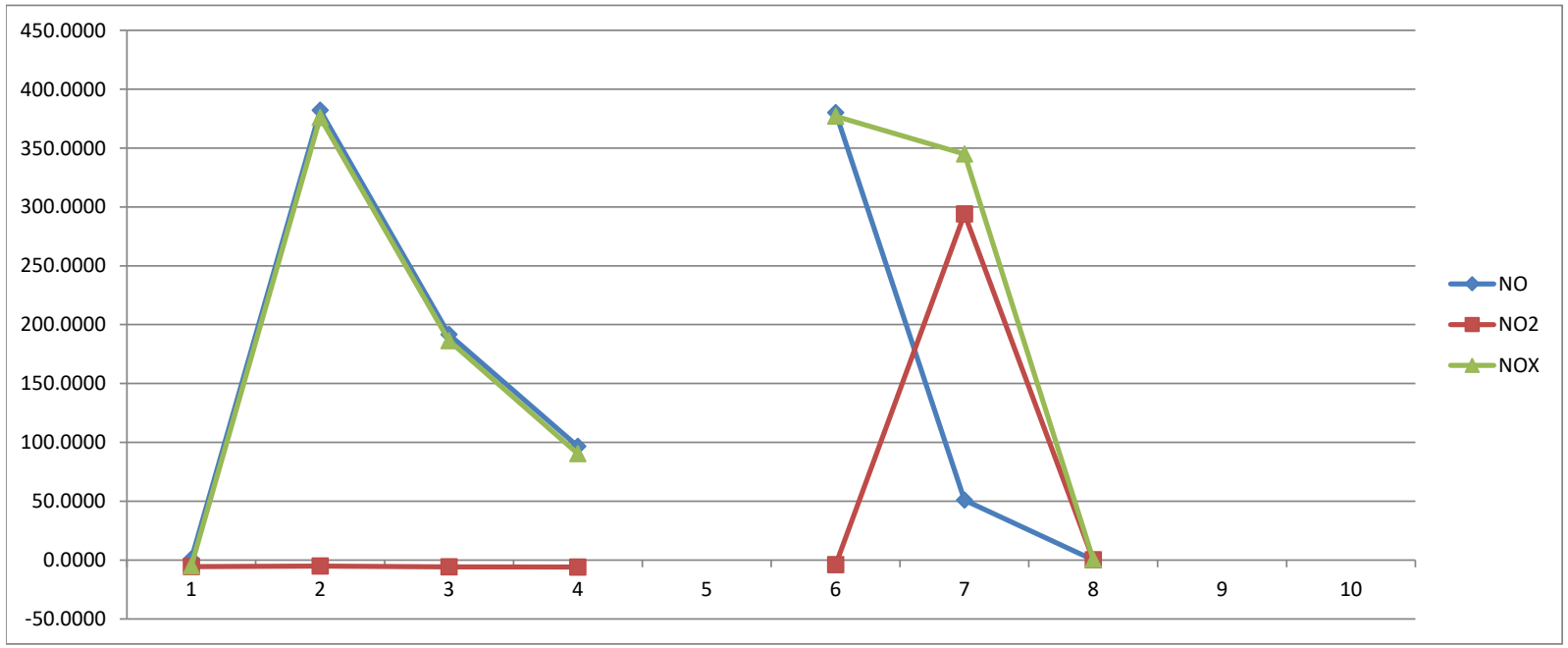
Instrument	42iQ
Serial number	1191222768
Customer	Agnico Eagle Hope Bay
Work order	N220902
Date	Oct 24 2022

Calibrator	Thermo 146iQ
Calibrator S/N	1191222770
Test gas conc.	14.95
Test gas cert.	1505294

Test Point	NO	NO2	NOX	ppb
1	0.8000	-5.6000	-4.8000	ppb
2	382.0000	-5.0000	376.0000	ppb
3	191.7000	-5.7000	186.4000	ppb
4	96.6000	-5.9000	90.4000	ppb
GPT 1	380.0000	-4.0000	377.0000	ppb
GPT 2	51.0000	294.0000	345.0000	ppb
GPT 3	0.1410	0.2940	0.4340	ppb

Instrument Information	
Version	
Firmware	1.6.14.34444
PMT voltage	-825.9
NO background	3.9
NOX background	9.8
NO coef	1.000
NO2 coef	1.000
NOX coef	1.000

Convertor efficency 90.3%



Completed by: Dan Molloy

AND ASSOCIATED COMPANIES

NO-NO2-NOX

Calibration form

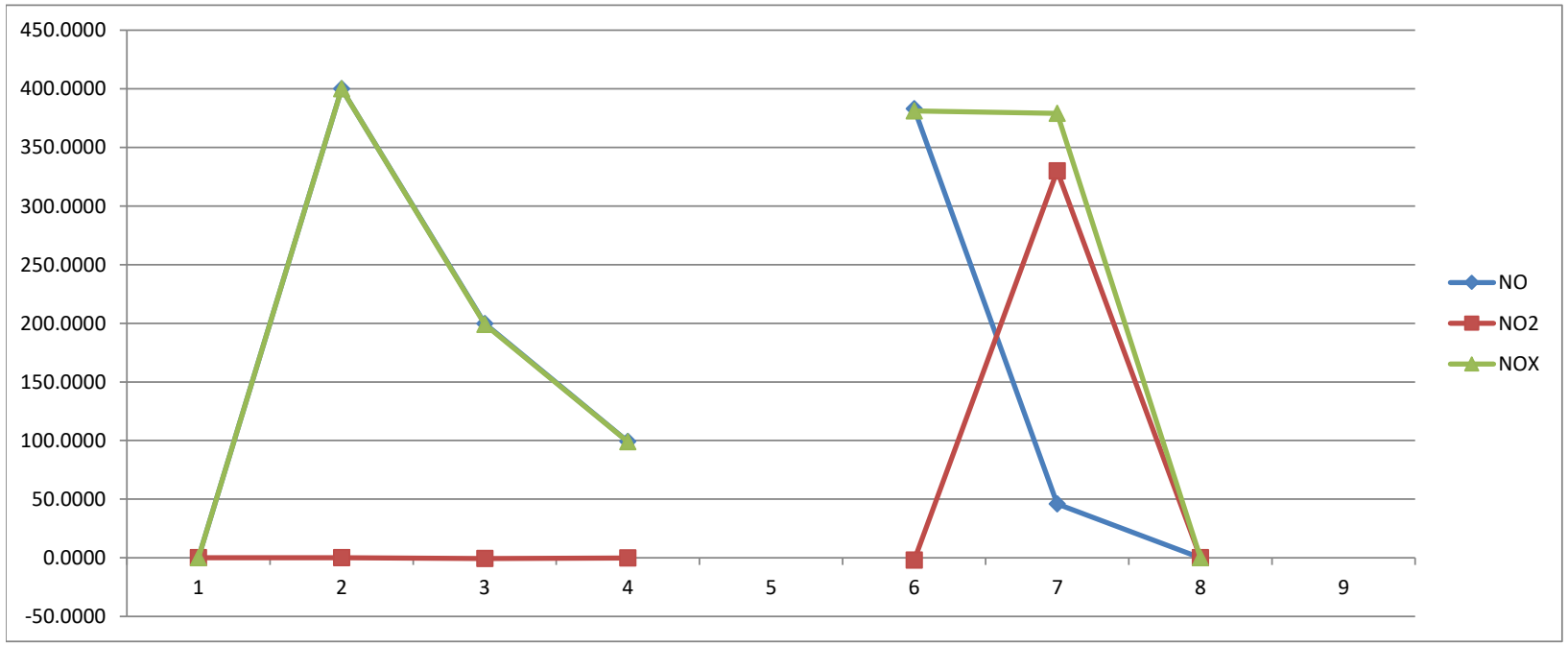
Instrument	42iQ
Serial number	1191222768
Customer	Agnico Eagle Hope Bay
Work order	N220902
Date	Oct 25 2022

Calibrator	Thermo 146iQ
Calibrator S/N	1191222770
Test gas conc.	14.95
Test gas cert.	1505294

Test Point	NO	NO2	NOX	ppb
1	0.0000	0.0000	0.0000	ppb
2	400.0000	0.0000	400.0000	ppb
3	199.6000	-0.6000	199.0000	ppb
4	99.1000	-0.1000	99.0000	ppb
GPT 1	383.0000	-2.0000	381.0000	ppb
GPT 2	46.0000	330.0000	379.0000	ppb
GPT 3	0.0000	0.0000	0.0000	ppb

Instrument Information	
Version	N/A
Firmware	1.6.14.34444
PMT voltage	-825.9
NO background	2.8
NOX background	3.0
NO coef	1.480
NO2 coef	0.940
NOX coef	0.989

Convertor efficency 99.4%



Completed by: Dan Molloy

Appendix D Meteorological Data Summary

Date	Average Wind Speed	Average Wind Direction	Average Air Temperature	Average Relative Humidity	Average Solar Radiation	Bright Sunshine Hours	Precip (TBRG)	Station Pressure
mm/dd/yyyy hh:hh	(m/s)	(deg)	(°C)	(%)	(W/m^2)	(hours)	(mm)	(kPa)
1/1/2022 0:00	11.8	279.7	-26.7	79.2	0.0	0.0	M	101.0
1/1/2022 1:00	11.8	279.9	-26.9	79.0	0.0	0.0	M	101.1
1/1/2022 2:00	10.8	281.6	-27.1	78.9	0.0	0.0	M	101.1
1/1/2022 3:00	9.2	281.3	-26.9	79.0	0.0	0.0	M	101.1
1/1/2022 4:00	8.4	277.3	-27.0	78.8	0.0	0.0	M	101.1
1/1/2022 5:00	9.8	276.1	-27.3	78.6	0.0	0.0	M	101.0
1/1/2022 6:00	10.2	276.2	-27.5	78.4	0.0	0.0	M	101.0
1/1/2022 7:00	11.5	277.3	-28.0	78.0	0.0	0.0	M	101.0
1/1/2022 8:00	9.1	278.8	-28.3	77.7	0.0	0.0	M	101.0
1/1/2022 9:00	11.1	278.1	-28.4	77.7	0.0	0.0	M	101.0
1/1/2022 10:00	9.3	280.3	-28.4	77.6	0.0	0.0	M	101.0
1/1/2022 11:00	10.3	280.8	-28.5	77.5	1.0	0.0	M	101.1
1/1/2022 12:00	9.4	274.2	-28.3	77.6	3.1	0.0	M	101.1
1/1/2022 13:00	8.1	275.8	-28.8	77.0	3.9	0.0	M	101.2
1/1/2022 14:00	7.4	274.3	-29.5	76.6	2.4	0.0	M	101.1
1/1/2022 15:00	7.3	276.5	-29.7	76.3	0.2	0.0	M	101.2
1/1/2022 16:00	7.9	271.6	-29.7	76.4	0.0	0.0	M	101.3
1/1/2022 17:00	6.8	278.5	-29.8	76.2	0.0	0.0	M	101.3
1/1/2022 18:00	7.5	271.1	-29.8	76.3	0.0	0.0	M	101.3
1/1/2022 19:00	7.7	275.3	-29.9	76.1	0.0	0.0	M	101.3
1/1/2022 20:00	7.1	283.0	-30.0	76.0	0.0	0.0	M	101.4
1/1/2022 21:00	8.4	276.3	-29.9	76.1	0.0	0.0	M	101.4
1/1/2022 22:00	10.4	267.9	-29.7	76.2	0.0	0.0	M	101.4
1/1/2022 23:00	9.5	271.8	-29.8	76.1	0.0	0.0	M	101.4
1/2/2022 0:00	9.0	275.3	-29.8	76.2	0.0	0.0	M	101.4
1/2/2022 1:00	10.5	274.4	-29.9	76.1	0.0	0.0	M	101.5
1/2/2022 2:00	11.5	275.2	-29.9	76.0	0.0	0.0	M	101.5
1/2/2022 3:00	10.1	277.4	-30.1	75.9	0.0	0.0	M	101.6
1/2/2022 4:00	9.7	280.4	-30.2	75.7	0.0	0.0	M	101.7
1/2/2022 5:00	8.8	277.7	-29.9	76.2	0.0	0.0	M	101.7
1/2/2022 6:00	8.2	278.5	-28.7	77.3	0.0	0.0	M	101.7
1/2/2022 7:00	10.2	276.2	-27.9	77.9	0.0	0.0	M	101.8
1/2/2022 8:00	8.9	280.2	-27.2	78.7	0.0	0.0	M	101.8
1/2/2022 9:00	9.5	280.8	-26.4	79.2	0.0	0.0	M	101.8
1/2/2022 10:00	10.0	275.1	-26.2	79.5	0.0	0.0	M	101.9
1/2/2022 11:00	8.7	278.5	-26.0	79.8	0.7	0.0	M	101.9
1/2/2022 12:00	8.9	297.0	-26.3	79.2	2.6	0.0	M	101.9
1/2/2022 13:00	8.3	301.4	-27.0	78.5	3.2	0.0	M	102.0
1/2/2022 14:00	8.8	305.3	-27.7	77.7	1.8	0.0	M	102.0
1/2/2022 15:00	9.5	298.6	-28.1	77.3	0.2	0.0	M	102.1
1/2/2022 16:00	7.2	296.7	-27.9	77.6	0.0	0.0	M	102.1
1/2/2022 17:00	7.3	292.8	-27.4	78.1	0.0	0.0	M	102.1
1/2/2022 18:00	7.4	296.6	-26.9	78.5	0.0	0.0	M	102.1
1/2/2022 19:00	6.8	304.0	-26.6	78.4	0.0	0.0	M	102.2
1/2/2022 20:00	6.3	307.5	-28.3	76.7	0.0	0.0	M	102.2
1/2/2022 21:00	7.2	294.2	-29.4	76.0	0.0	0.0	M	102.3
1/2/2022 22:00	9.6	301.3	-29.6	75.8	0.0	0.0	M	102.2
1/2/2022 23:00	9.8	294.7	-29.7	75.8	0.0	0.0	M	102.3
1/3/2022 0:00	8.5	301.9	-29.6	76.0	0.0	0.0	M	102.3
1/3/2022 1:00	9.7	309.8	-29.5	75.9	0.0	0.0	M	102.3
1/3/2022 2:00	11.1	321.4	-29.1	76.3	0.0	0.0	M	102.4
1/3/2022 3:00	10.5	323.0	-28.7	76.4	0.0	0.0	M	102.5
1/3/2022 4:00	7.7	318.3	-28.4	76.9	0.0	0.0	M	102.6
1/3/2022 5:00	6.1	305.8	-28.0	77.6	0.0	0.0	M	102.6
1/3/2022 6:00	5.5	293.2	-27.9	77.7	0.0	0.0	M	102.6
1/3/2022 7:00	7.6	301.5	-27.4	78.0	0.0	0.0	M	102.6
1/3/2022 8:00	7.2	293.7	-27.0	78.5	0.0	0.0	M	102.6
1/3/2022 9:00	7.0	305.2	-26.0	79.2	0.0	0.0	M	102.7
1/3/2022 10:00	8.8	312.9	-25.8	78.9	0.0	0.0	M	102.6
1/3/2022 11:00	8.7	309.4	-26.4	78.2	2.0	0.0	M	102.7
1/3/2022 12:00	9.5	301.5	-27.2	77.4	6.3	0.0	M	102.8
1/3/2022 13:00	9.8	312.0	-27.3	77.2	6.9	0.0	M	102.8
1/3/2022 14:00	8.9	319.1	-27.0	77.4	5.2	0.0	M	102.8
1/3/2022 15:00	8.3	305.2	-26.9	77.4	0.4	0.0	M	102.9
1/3/2022 16:00	6.8	299.1	-26.5	77.7	0.0	0.0	M	102.9
1/3/2022 17:00	8.5	289.5	-25.9	78.5	0.0	0.0	M	102.9
1/3/2022 18:00	9.4	288.9	-26.5	78.8	0.0	0.0	M	102.8
1/3/2022 19:00	10.1	279.3	-26.8	78.8	0.0	0.0	M	102.8
1/3/2022 20:00	13.1	280.5	-27.0	78.4	0.0	0.0	M	102.7
1/3/2022 21:00	12.9	279.7	-27.4	78.1	0.0	0.0	M	102.8
1/3/2022 22:00	12.9	277.3	-27.6	78.1	0.0	0.0	M	102.7
1/3/2022 23:00	13.2	275.2	-27.5	78.2	0.0	0.0	M	102.7

1/4/2022 0:00	12.2	275.0	-27.5	78.2	0.0	0.0	M	102.7
1/4/2022 1:00	10.5	269.8	-27.8	77.9	0.0	0.0	M	102.7
1/4/2022 2:00	11.2	268.1	-27.7	77.7	0.0	0.0	M	102.6
1/4/2022 3:00	12.4	270.8	-27.8	77.5	0.0	0.0	M	102.7
1/4/2022 4:00	12.7	270.8	-28.1	77.3	0.0	0.0	M	102.6
1/4/2022 5:00	11.1	276.5	-28.7	76.9	0.0	0.0	M	102.7
1/4/2022 6:00	10.8	274.9	-29.3	76.3	0.0	0.0	M	102.6
1/4/2022 7:00	10.2	274.2	-29.7	75.9	0.0	0.0	M	102.7
1/4/2022 8:00	11.6	271.1	-29.6	75.6	0.0	0.0	M	102.6
1/4/2022 9:00	10.8	264.4	-29.7	75.4	0.0	0.0	M	102.5
1/4/2022 10:00	10.9	267.3	-29.8	75.2	0.0	0.0	M	102.5
1/4/2022 11:00	10.0	266.5	-29.9	75.1	0.7	0.0	M	102.5
1/4/2022 12:00	10.1	267.5	-30.1	75.1	3.2	0.0	M	102.5
1/4/2022 13:00	9.9	278.4	-30.3	75.1	4.2	0.0	M	102.4
1/4/2022 14:00	9.3	274.3	-30.9	74.3	2.4	0.0	M	102.4
1/4/2022 15:00	9.2	278.2	-31.7	73.2	0.2	0.0	M	102.3
1/4/2022 16:00	9.0	278.5	-32.1	72.7	0.0	0.0	M	102.4
1/4/2022 17:00	9.7	282.2	-32.2	72.4	0.0	0.0	M	102.4
1/4/2022 18:00	9.2	279.9	-32.4	72.3	0.0	0.0	M	102.3
1/4/2022 19:00	7.8	275.6	-32.3	73.1	0.0	0.0	M	102.2
1/4/2022 20:00	8.2	276.7	-32.3	73.2	0.0	0.0	M	102.2
1/4/2022 21:00	8.7	277.7	-31.9	73.5	0.0	0.0	M	102.2
1/4/2022 22:00	9.1	272.1	-31.3	74.1	0.0	0.0	M	102.1
1/4/2022 23:00	9.5	270.0	-30.5	74.7	0.0	0.0	M	102.0
1/5/2022 0:00	10.4	273.3	-29.5	75.7	0.0	0.0	M	101.9
1/5/2022 1:00	10.2	278.9	-29.5	75.7	0.0	0.0	M	101.9
1/5/2022 2:00	10.6	276.8	-29.3	76.0	0.0	0.0	M	101.8
1/5/2022 3:00	11.2	283.1	-28.8	76.6	0.0	0.0	M	101.8
1/5/2022 4:00	11.1	280.3	-29.0	76.2	0.0	0.0	M	101.8
1/5/2022 5:00	11.1	275.9	-28.5	76.9	0.0	0.0	M	101.6
1/5/2022 6:00	12.1	277.1	-28.3	77.0	0.0	0.0	M	101.6
1/5/2022 7:00	11.2	276.9	-28.0	77.5	0.0	0.0	M	101.6
1/5/2022 8:00	12.9	272.2	-27.6	77.7	0.0	0.0	M	101.4
1/5/2022 9:00	13.4	267.8	-27.0	77.7	0.0	0.0	M	101.4
1/5/2022 10:00	13.1	267.2	-26.8	77.5	0.0	0.0	M	101.3
1/5/2022 11:00	11.2	268.1	-26.3	78.4	2.4	0.0	M	101.3
1/5/2022 12:00	13.0	268.3	-25.7	78.7	6.6	0.0	M	101.1
1/5/2022 13:00	14.8	264.3	-25.2	79.5	6.1	0.0	M	100.9
1/5/2022 14:00	14.4	263.0	-24.1	80.4	2.8	0.0	M	100.9
1/5/2022 15:00	14.0	262.4	-23.4	81.2	0.1	0.0	M	100.7
1/5/2022 16:00	13.3	261.3	-22.6	82.1	0.0	0.0	M	100.7
1/5/2022 17:00	13.7	260.5	-22.3	82.5	0.0	0.0	M	100.4
1/5/2022 18:00	12.9	255.6	-21.5	83.4	0.0	0.0	M	100.3
1/5/2022 19:00	12.0	251.7	-21.0	84.2	0.0	0.0	M	100.2
1/5/2022 20:00	13.5	250.6	-20.7	84.7	0.0	0.0	M	100.0
1/5/2022 21:00	13.2	251.8	-20.3	85.2	0.0	0.0	M	99.8
1/5/2022 22:00	13.3	255.5	-20.0	85.4	0.0	0.0	M	99.7
1/5/2022 23:00	13.6	255.5	-19.9	85.5	0.0	0.0	M	99.5
1/6/2022 0:00	13.6	252.2	-19.7	85.6	0.0	0.0	M	99.4
1/6/2022 1:00	12.9	253.8	-19.5	85.7	0.0	0.0	M	99.2
1/6/2022 2:00	13.5	253.2	-19.5	85.8	0.0	0.0	M	99.1
1/6/2022 3:00	12.8	254.9	-19.6	85.7	0.0	0.0	M	99.1
1/6/2022 4:00	11.9	250.1	-19.5	85.6	0.0	0.0	M	99.0
1/6/2022 5:00	10.6	250.1	-19.3	85.7	0.0	0.0	M	98.9
1/6/2022 6:00	11.9	252.2	-19.2	85.7	0.0	0.0	M	98.7
1/6/2022 7:00	11.1	254.3	-18.7	86.3	0.0	0.0	M	98.7
1/6/2022 8:00	10.8	258.2	-17.8	87.3	0.0	0.0	M	98.6
1/6/2022 9:00	10.5	259.9	-17.1	88.1	0.0	0.0	M	98.5
1/6/2022 10:00	10.3	271.4	-16.9	88.0	0.0	0.0	M	98.5
1/6/2022 11:00	9.8	266.7	-18.0	86.5	1.2	0.0	M	98.5
1/6/2022 12:00	8.9	263.9	-19.8	85.6	4.3	0.0	M	98.5
1/6/2022 13:00	6.1	284.2	-19.3	86.3	3.3	0.0	M	98.5
1/6/2022 14:00	8.5	284.1	-19.6	85.5	1.8	0.0	M	98.6
1/6/2022 15:00	9.7	268.2	-20.9	84.5	0.1	0.0	M	98.6
1/6/2022 16:00	10.9	265.4	-22.2	83.1	0.0	0.0	M	98.6
1/6/2022 17:00	9.6	266.4	-24.1	81.8	0.0	0.0	M	98.6
1/6/2022 18:00	9.5	262.8	-25.0	80.9	0.0	0.0	M	98.7
1/6/2022 19:00	9.5	260.0	-25.9	80.3	0.0	0.0	M	98.7
1/6/2022 20:00	9.5	265.3	-25.7	80.4	0.0	0.0	M	98.7
1/6/2022 21:00	9.1	265.0	-26.0	80.0	0.0	0.0	M	98.7
1/6/2022 22:00	8.2	262.7	-25.8	80.2	0.0	0.0	M	98.7
1/6/2022 23:00	9.3	272.1	-25.3	80.4	0.0	0.0	M	98.7
1/7/2022 0:00	8.2	279.3	-25.1	80.6	0.0	0.0	M	98.7
1/7/2022 1:00	7.3	277.8	-25.6	80.3	0.0	0.0	M	98.8
1/7/2022 2:00	6.4	274.5	-26.6	79.7	0.0	0.0	M	98.7
1/7/2022 3:00	6.3	270.2	-27.2	79.1	0.0	0.0	M	98.8
1/7/2022 4:00	4.0	275.4	-28.0	78.5	0.0	0.0	M	98.8
1/7/2022 5:00	4.0	278.0	-28.1	78.2	0.0	0.0	M	98.8
1/7/2022 6:00	4.2	267.9	-28.4	78.0	0.0	0.0	M	98.8
1/7/2022 7:00	4.4	266.1	-28.0	78.4	0.0	0.0	M	98.8

1/7/2022 8:00	5.7	262.8	-27.9	78.4	0.0	0.0	M	98.8
1/7/2022 9:00	3.7	285.1	-27.8	78.6	0.0	0.0	M	98.9
1/7/2022 10:00	4.6	252.6	-28.2	77.9	0.0	0.0	M	98.9
1/7/2022 11:00	4.8	257.3	-29.1	77.2	1.3	0.0	M	98.9
1/7/2022 12:00	5.5	257.4	-29.4	76.9	3.9	0.0	M	98.9
1/7/2022 13:00	4.6	281.9	-29.1	77.1	4.3	0.0	M	99.0
1/7/2022 14:00	4.0	281.5	-29.7	76.6	2.5	0.0	M	99.0
1/7/2022 15:00	4.2	274.9	-29.9	76.3	0.2	0.0	M	99.1
1/7/2022 16:00	3.8	267.9	-30.5	75.7	0.0	0.0	M	99.1
1/7/2022 17:00	4.0	271.8	-31.1	75.2	0.0	0.0	M	99.1
1/7/2022 18:00	4.1	283.8	-30.8	75.5	0.0	0.0	M	99.2
1/7/2022 19:00	4.8	274.5	-31.0	75.2	0.0	0.0	M	99.2
1/7/2022 20:00	6.0	288.5	-30.7	75.6	0.0	0.0	M	99.2
1/7/2022 21:00	4.7	293.0	-30.0	76.2	0.0	0.0	M	99.3
1/7/2022 22:00	4.4	286.2	-29.7	76.4	0.0	0.0	M	99.3
1/7/2022 23:00	4.4	302.9	-29.6	76.4	0.0	0.0	M	99.4
1/8/2022 0:00	3.6	310.6	-29.3	76.8	0.0	0.0	M	99.4
1/8/2022 1:00	4.6	299.5	-28.9	77.1	0.0	0.0	M	99.4
1/8/2022 2:00	5.8	291.3	-28.8	77.1	0.0	0.0	M	99.5
1/8/2022 3:00	5.4	291.8	-29.3	76.8	0.0	0.0	M	99.6
1/8/2022 4:00	6.3	290.7	-29.4	76.6	0.0	0.0	M	99.6
1/8/2022 5:00	5.7	288.6	-29.7	76.4	0.0	0.0	M	99.7
1/8/2022 6:00	7.0	295.2	-30.1	75.9	0.0	0.0	M	99.7
1/8/2022 7:00	6.1	297.6	-30.4	75.7	0.0	0.0	M	99.8
1/8/2022 8:00	5.7	300.2	-30.2	75.9	0.0	0.0	M	99.8
1/8/2022 9:00	6.1	293.2	-30.4	75.6	0.0	0.0	M	99.9
1/8/2022 10:00	6.3	285.6	-30.5	75.6	0.0	0.0	M	99.9
1/8/2022 11:00	5.3	293.3	-30.6	75.3	1.4	0.0	M	100.0
1/8/2022 12:00	5.3	295.5	-30.9	75.2	4.7	0.0	M	100.1
1/8/2022 13:00	5.3	299.4	-30.8	75.1	4.6	0.0	M	100.1
1/8/2022 14:00	6.9	296.7	-31.1	74.9	2.7	0.0	M	100.2
1/8/2022 15:00	5.2	292.5	-31.4	74.6	0.4	0.0	M	100.3
1/8/2022 16:00	4.3	277.3	-31.6	74.4	0.0	0.0	M	100.4
1/8/2022 17:00	6.1	288.4	-31.4	74.7	0.0	0.0	M	100.4
1/8/2022 18:00	7.5	286.1	-31.1	74.9	0.0	0.0	M	100.4
1/8/2022 19:00	8.7	289.1	-30.8	75.1	0.0	0.0	M	100.5
1/8/2022 20:00	7.4	290.5	-30.8	75.1	0.0	0.0	M	100.5
1/8/2022 21:00	7.5	290.5	-30.5	75.3	0.0	0.0	M	100.6
1/8/2022 22:00	5.4	291.7	-30.8	75.0	0.0	0.0	M	100.7
1/8/2022 23:00	5.1	286.1	-31.5	74.4	0.0	0.0	M	100.7
1/9/2022 0:00	5.7	286.1	-31.7	74.2	0.0	0.0	M	100.7
1/9/2022 1:00	5.0	287.9	-32.0	74.0	0.0	0.0	M	100.8
1/9/2022 2:00	5.9	281.5	-31.8	74.2	0.0	0.0	M	100.8
1/9/2022 3:00	6.6	277.9	-31.7	74.3	0.0	0.0	M	100.9
1/9/2022 4:00	6.4	281.4	-32.0	74.0	0.0	0.0	M	100.9
1/9/2022 5:00	7.2	290.1	-31.4	74.6	0.0	0.0	M	100.9
1/9/2022 6:00	9.3	286.3	-30.9	75.1	0.0	0.0	M	100.9
1/9/2022 7:00	10.5	275.7	-29.8	76.2	0.0	0.0	M	100.9
1/9/2022 8:00	10.0	273.0	-29.1	76.6	0.0	0.0	M	100.9
1/9/2022 9:00	10.3	267.9	-29.3	76.3	0.0	0.0	M	100.9
1/9/2022 10:00	9.8	270.6	-30.0	75.6	0.0	0.0	M	101.0
1/9/2022 11:00	9.3	270.3	-30.2	75.4	1.7	0.0	M	101.0
1/9/2022 12:00	8.6	271.4	-30.0	75.4	7.2	0.0	M	101.1
1/9/2022 13:00	9.7	267.5	-30.3	74.9	11.2	0.0	M	101.1
1/9/2022 14:00	9.2	265.2	-30.0	75.2	3.3	0.0	M	101.1
1/9/2022 15:00	10.2	262.8	-29.1	75.8	0.6	0.0	M	101.1
1/9/2022 16:00	11.0	263.1	-28.0	76.9	0.0	0.0	M	101.0
1/9/2022 17:00	12.6	266.0	-27.5	76.9	0.0	0.0	M	101.0
1/9/2022 18:00	12.2	267.8	-27.9	76.8	0.0	0.0	M	101.0
1/9/2022 19:00	12.4	268.9	-29.1	75.8	0.0	0.0	M	101.0
1/9/2022 20:00	11.0	269.9	-30.0	75.3	0.0	0.0	M	101.0
1/9/2022 21:00	12.9	265.7	-30.2	74.9	0.0	0.0	M	100.9
1/9/2022 22:00	12.8	265.2	-30.2	74.7	0.0	0.0	M	101.0
1/9/2022 23:00	12.2	267.6	-30.3	74.5	0.0	0.0	M	100.9
1/10/2022 0:00	13.4	267.9	-30.2	74.3	0.0	0.0	M	100.9
1/10/2022 1:00	13.9	269.2	-30.3	74.1	0.0	0.0	M	100.8
1/10/2022 2:00	12.9	269.1	-30.5	73.9	0.0	0.0	M	100.9
1/10/2022 3:00	12.6	267.9	-30.6	73.9	0.0	0.0	M	100.8
1/10/2022 4:00	13.7	272.1	-30.7	74.0	0.0	0.0	M	100.7
1/10/2022 5:00	14.4	268.9	-30.3	73.7	0.0	0.0	M	100.8
1/10/2022 6:00	14.1	268.1	-29.7	74.0	0.0	0.0	M	100.7
1/10/2022 7:00	15.2	268.7	-29.2	74.9	0.0	0.0	M	100.6
1/10/2022 8:00	13.6	268.3	-28.9	75.4	0.0	0.0	M	100.5
1/10/2022 9:00	13.7	268.3	-28.7	75.6	0.0	0.0	M	100.5
1/10/2022 10:00	12.2	270.2	-28.5	75.6	0.0	0.0	M	100.3
1/10/2022 11:00	12.9	272.0	-28.2	75.7	1.6	0.0	M	100.3
1/10/2022 12:00	14.0	264.8	-27.8	76.8	3.4	0.0	M	100.3
1/10/2022 13:00	12.4	272.1	-27.4	77.3	4.3	0.0	M	100.2
1/10/2022 14:00	11.0	273.7	-27.6	77.2	3.3	0.0	M	100.2
1/10/2022 15:00	10.9	278.5	-28.3	76.6	0.8	0.0	M	100.3

1/10/2022 16:00	8.9	277.1	-28.9	76.1	0.0	0.0	M	100.2
1/10/2022 17:00	9.9	273.5	-29.5	75.6	0.0	0.0	M	100.2
1/10/2022 18:00	9.8	272.0	-29.9	75.3	0.0	0.0	M	100.1
1/10/2022 19:00	11.3	272.6	-30.5	74.7	0.0	0.0	M	100.1
1/10/2022 20:00	10.7	275.5	-31.0	74.5	0.0	0.0	M	100.0
1/10/2022 21:00	10.3	278.1	-31.2	74.4	0.0	0.0	M	100.1
1/10/2022 22:00	10.5	281.0	-31.5	74.1	0.0	0.0	M	100.0
1/10/2022 23:00	9.8	280.9	-31.7	74.0	0.0	0.0	M	100.1
1/11/2022 0:00	9.2	285.4	-31.4	74.3	0.0	0.0	M	100.1
1/11/2022 1:00	10.5	283.7	-31.1	74.3	0.0	0.0	M	100.1
1/11/2022 2:00	9.7	286.2	-31.2	74.0	0.0	0.0	M	100.1
1/11/2022 3:00	9.2	287.1	-31.6	73.4	0.0	0.0	M	100.1
1/11/2022 4:00	9.4	282.0	-31.9	72.9	0.0	0.0	M	100.1
1/11/2022 5:00	9.2	284.2	-32.2	72.4	0.0	0.0	M	100.1
1/11/2022 6:00	9.8	285.8	-32.1	72.6	0.0	0.0	M	100.2
1/11/2022 7:00	9.6	286.5	-32.1	72.2	0.0	0.0	M	100.2
1/11/2022 8:00	9.6	282.1	-32.1	72.3	0.0	0.0	M	100.1
1/11/2022 9:00	10.4	279.9	-31.8	72.7	0.0	0.0	M	100.1
1/11/2022 10:00	10.5	274.4	-31.6	72.8	0.1	0.0	M	100.1
1/11/2022 11:00	10.8	276.1	-31.8	73.2	2.9	0.0	M	100.0
1/11/2022 12:00	11.8	280.8	-31.5	73.2	6.6	0.0	M	100.0
1/11/2022 13:00	12.7	276.7	-31.4	73.7	7.8	0.0	M	100.0
1/11/2022 14:00	14.2	280.1	-31.4	73.9	5.1	0.0	M	99.9
1/11/2022 15:00	13.9	280.1	-31.2	74.0	1.4	0.0	M	99.9
1/11/2022 16:00	14.2	278.6	-31.0	74.3	0.0	0.0	M	100.0
1/11/2022 17:00	13.4	277.7	-30.6	74.5	0.0	0.0	M	100.0
1/11/2022 18:00	12.3	276.8	-30.2	74.6	0.0	0.0	M	100.1
1/11/2022 19:00	12.0	275.0	-30.1	74.9	0.0	0.0	M	100.0
1/11/2022 20:00	12.1	272.6	-30.2	74.7	0.0	0.0	M	100.0
1/11/2022 21:00	13.2	269.3	-30.0	74.7	0.0	0.0	M	99.9
1/11/2022 22:00	13.1	273.2	-30.1	74.9	0.0	0.0	M	100.0
1/11/2022 23:00	13.0	267.0	-29.8	75.0	0.0	0.0	M	100.0
1/12/2022 0:00	10.9	271.2	-29.6	74.9	0.0	0.0	M	100.1
1/12/2022 1:00	9.8	273.6	-29.7	75.1	0.0	0.0	M	100.1
1/12/2022 2:00	10.0	275.8	-29.9	75.2	0.0	0.0	M	100.2
1/12/2022 3:00	9.1	276.1	-29.8	75.1	0.0	0.0	M	100.2
1/12/2022 4:00	8.9	276.9	-29.8	74.8	0.0	0.0	M	100.3
1/12/2022 5:00	7.6	282.2	-30.0	74.6	0.0	0.0	M	100.4
1/12/2022 6:00	7.5	279.4	-30.4	74.7	0.0	0.0	M	100.4
1/12/2022 7:00	7.6	281.9	-30.3	74.4	0.0	0.0	M	100.5
1/12/2022 8:00	4.2	294.2	-30.3	74.4	0.0	0.0	M	100.6
1/12/2022 9:00	4.5	293.2	-30.1	73.7	0.0	0.0	M	100.6
1/12/2022 10:00	3.7	280.7	-31.1	74.0	0.2	0.0	M	100.7
1/12/2022 11:00	3.7	292.8	-30.9	74.0	3.2	0.0	M	100.8
1/12/2022 12:00	3.3	290.4	-31.0	73.8	8.7	0.0	M	100.9
1/12/2022 13:00	2.4	260.5	-31.1	74.0	9.8	0.0	M	101.0
1/12/2022 14:00	1.1	275.7	-30.7	74.1	6.6	0.0	M	101.0
1/12/2022 15:00	1.3	299.5	-30.6	73.7	1.3	0.0	M	101.1
1/12/2022 16:00	1.4	278.8	-30.3	73.5	0.0	0.0	M	101.2
1/12/2022 17:00	1.5	170.2	-31.9	73.6	0.0	0.0	M	101.2
1/12/2022 18:00	1.3	137.7	-32.3	73.8	0.0	0.0	M	101.3
1/12/2022 19:00	1.5	133.4	-32.5	73.4	0.0	0.0	M	101.2
1/12/2022 20:00	1.4	116.7	-32.3	73.8	0.0	0.0	M	101.2
1/12/2022 21:00	1.2	138.1	-31.7	74.1	0.0	0.0	M	101.2
1/12/2022 22:00	2.5	135.0	-30.5	75.4	0.0	0.0	M	101.2
1/12/2022 23:00	2.1	131.9	-29.6	76.2	0.0	0.0	M	101.2
1/13/2022 0:00	2.3	130.8	-27.9	77.7	0.0	0.0	M	101.1
1/13/2022 1:00	3.0	139.9	-27.4	78.1	0.0	0.0	M	101.1
1/13/2022 2:00	2.0	137.6	-26.2	79.3	0.0	0.0	M	101.1
1/13/2022 3:00	0.6	86.8	-25.3	80.0	0.0	0.0	M	101.1
1/13/2022 4:00	0.3	35.0	-24.3	80.9	0.0	0.0	M	101.1
1/13/2022 5:00	0.4	32.1	-23.6	81.6	0.0	0.0	M	101.1
1/13/2022 6:00	0.6	19.2	-22.6	82.5	0.0	0.0	M	101.1
1/13/2022 7:00	0.7	342.8	-22.2	83.1	0.0	0.0	M	101.1
1/13/2022 8:00	5.9	261.5	-19.8	85.0	0.0	0.0	M	101.1
1/13/2022 9:00	7.7	266.7	-20.1	83.0	0.0	0.0	M	101.1
1/13/2022 10:00	7.9	256.3	-20.7	82.8	0.0	0.0	M	101.1
1/13/2022 11:00	8.2	255.3	-21.8	82.3	1.8	0.0	M	101.1
1/13/2022 12:00	9.3	259.7	-22.4	81.5	5.4	0.0	M	101.2
1/13/2022 13:00	10.8	261.8	-23.4	81.2	6.7	0.0	M	101.2
1/13/2022 14:00	9.9	267.1	-24.8	80.4	5.1	0.0	M	101.3
1/13/2022 15:00	9.9	270.2	-25.7	78.5	1.8	0.0	M	101.3
1/13/2022 16:00	11.5	273.3	-26.5	76.6	0.0	0.0	M	101.4
1/13/2022 17:00	10.4	282.5	-25.9	77.3	0.0	0.0	M	101.5
1/13/2022 18:00	9.5	281.2	-25.3	77.6	0.0	0.0	M	101.5
1/13/2022 19:00	10.0	277.4	-25.3	77.7	0.0	0.0	M	101.5
1/13/2022 20:00	11.6	266.3	-25.8	77.2	0.0	0.0	M	101.5
1/13/2022 21:00	10.8	264.6	-26.0	75.7	0.0	0.0	M	101.5
1/13/2022 22:00	10.2	264.1	-26.3	76.5	0.0	0.0	M	101.4
1/13/2022 23:00	10.1	263.6	-26.5	74.9	0.0	0.0	M	101.5

1/14/2022 0:00	10.4	265.6	-26.6	73.3	0.0	0.0	M	101.5
1/14/2022 1:00	9.3	269.4	-26.6	74.1	0.0	0.0	M	101.5
1/14/2022 2:00	8.7	267.9	-27.0	76.1	0.0	0.0	M	101.5
1/14/2022 3:00	5.9	269.2	-27.6	77.6	0.0	0.0	M	101.6
1/14/2022 4:00	7.9	263.7	-27.9	77.3	0.0	0.0	M	101.5
1/14/2022 5:00	7.5	263.7	-28.5	77.0	0.0	0.0	M	101.5
1/14/2022 6:00	7.6	266.6	-28.9	76.4	0.0	0.0	M	101.4
1/14/2022 7:00	6.2	269.4	-29.1	76.3	0.0	0.0	M	101.4
1/14/2022 8:00	4.3	268.3	-29.5	76.9	0.0	0.0	M	101.4
1/14/2022 9:00	3.5	254.3	-29.7	76.8	0.0	0.0	M	101.3
1/14/2022 10:00	2.0	286.7	-30.3	75.8	0.0	0.0	M	101.3
1/14/2022 11:00	1.7	259.9	-30.8	75.3	1.9	0.0	M	101.2
1/14/2022 12:00	1.0	155.2	-31.6	74.4	4.5	0.0	M	101.1
1/14/2022 13:00	0.8	61.7	-32.2	73.7	5.3	0.0	M	101.1
1/14/2022 14:00	0.6	312.3	-32.9	73.1	3.7	0.0	M	101.0
1/14/2022 15:00	0.8	278.2	-32.3	73.8	1.0	0.0	M	101.0
1/14/2022 16:00	1.4	58.2	-32.1	73.9	0.0	0.0	M	101.0
1/14/2022 17:00	0.9	287.3	-32.5	73.6	0.0	0.0	M	101.0
1/14/2022 18:00	2.9	293.4	-32.9	72.9	0.0	0.0	M	101.0
1/14/2022 19:00	2.0	289.6	-33.4	72.8	0.0	0.0	M	101.0
1/14/2022 20:00	3.2	289.1	-33.3	72.9	0.0	0.0	M	101.0
1/14/2022 21:00	3.9	294.6	-33.0	73.1	0.0	0.0	M	101.1
1/14/2022 22:00	4.0	286.5	-33.6	72.4	0.0	0.0	M	101.1
1/14/2022 23:00	4.6	288.1	-34.0	72.0	0.0	0.0	M	101.1
1/15/2022 0:00	5.2	287.8	-34.0	72.0	0.0	0.0	M	101.1
1/15/2022 1:00	6.0	286.3	-34.2	71.9	0.0	0.0	M	101.2
1/15/2022 2:00	4.9	287.8	-34.1	71.8	0.0	0.0	M	101.2
1/15/2022 3:00	5.7	284.6	-34.2	71.8	0.0	0.0	M	101.2
1/15/2022 4:00	6.3	276.4	-34.1	71.9	0.0	0.0	M	101.2
1/15/2022 5:00	7.5	284.0	-34.2	71.7	0.0	0.0	M	101.2
1/15/2022 6:00	6.1	282.3	-34.2	71.7	0.0	0.0	M	101.2
1/15/2022 7:00	7.1	278.5	-34.2	71.8	0.0	0.0	M	101.2
1/15/2022 8:00	6.2	282.1	-34.2	71.8	0.0	0.0	M	101.2
1/15/2022 9:00	8.3	274.0	-33.9	72.0	0.0	0.0	M	101.2
1/15/2022 10:00	8.7	275.6	-33.6	72.3	0.3	0.0	M	101.2
1/15/2022 11:00	9.6	276.0	-33.4	72.5	3.4	0.0	M	101.2
1/15/2022 12:00	10.8	278.7	-33.2	72.7	6.8	0.0	M	101.2
1/15/2022 13:00	10.2	281.1	-33.3	72.4	9.8	0.0	M	101.2
1/15/2022 14:00	10.2	281.4	-33.5	72.4	7.3	0.0	M	101.2
1/15/2022 15:00	11.1	278.1	-33.3	72.6	1.8	0.0	M	101.3
1/15/2022 16:00	9.2	279.5	-33.0	72.9	0.0	0.0	M	101.3
1/15/2022 17:00	7.6	281.5	-32.6	73.1	0.0	0.0	M	101.4
1/15/2022 18:00	6.1	284.1	-32.4	73.3	0.0	0.0	M	101.4
1/15/2022 19:00	5.3	286.6	-31.9	73.8	0.0	0.0	M	101.5
1/15/2022 20:00	6.5	292.1	-31.6	74.1	0.0	0.0	M	101.5
1/15/2022 21:00	5.2	294.8	-31.9	73.8	0.0	0.0	M	101.5
1/15/2022 22:00	6.3	295.5	-32.4	73.2	0.0	0.0	M	101.5
1/15/2022 23:00	8.3	289.4	-32.6	73.1	0.0	0.0	M	101.6
1/16/2022 0:00	8.6	285.6	-33.1	72.6	0.0	0.0	M	101.5
1/16/2022 1:00	8.7	289.3	-33.3	72.4	0.0	0.0	M	101.6
1/16/2022 2:00	8.6	288.3	-33.6	72.2	0.0	0.0	M	101.7
1/16/2022 3:00	8.0	282.4	-33.8	71.9	0.0	0.0	M	101.7
1/16/2022 4:00	7.4	280.0	-33.9	71.9	0.0	0.0	M	101.7
1/16/2022 5:00	7.0	280.4	-34.0	71.8	0.0	0.0	M	101.7
1/16/2022 6:00	7.2	279.3	-33.7	72.2	0.0	0.0	M	101.8
1/16/2022 7:00	6.0	270.6	-33.2	72.6	0.0	0.0	M	101.8
1/16/2022 8:00	5.6	284.9	-32.7	73.1	0.0	0.0	M	101.7
1/16/2022 9:00	6.0	300.6	-32.4	73.2	0.0	0.0	M	101.7
1/16/2022 10:00	5.9	279.0	-32.8	72.9	0.4	0.0	M	101.7
1/16/2022 11:00	7.2	284.4	-32.4	73.3	4.4	0.0	M	101.7
1/16/2022 12:00	7.7	284.9	-32.3	73.3	10.6	0.0	M	101.6
1/16/2022 13:00	8.3	285.4	-32.1	73.6	14.2	0.0	M	101.6
1/16/2022 14:00	8.0	277.6	-31.6	74.1	6.6	0.0	M	101.6
1/16/2022 15:00	6.2	283.1	-31.5	74.1	2.4	0.0	M	101.6
1/16/2022 16:00	5.3	289.1	-32.1	73.6	0.0	0.0	M	101.6
1/16/2022 17:00	5.7	292.2	-32.2	73.4	0.0	0.0	M	101.6
1/16/2022 18:00	6.6	289.1	-32.4	73.2	0.0	0.0	M	101.6
1/16/2022 19:00	7.0	292.4	-32.5	73.2	0.0	0.0	M	101.5
1/16/2022 20:00	7.5	289.4	-32.4	73.2	0.0	0.0	M	101.6
1/16/2022 21:00	7.4	288.8	-31.8	73.8	0.0	0.0	M	101.5
1/16/2022 22:00	8.7	288.9	-31.0	74.3	0.0	0.0	M	101.5
1/16/2022 23:00	8.7	284.3	-30.7	74.5	0.0	0.0	M	101.5
1/17/2022 0:00	7.7	285.3	-30.9	74.6	0.0	0.0	M	101.5
1/17/2022 1:00	6.9	285.6	-30.5	75.1	0.0	0.0	M	101.5
1/17/2022 2:00	8.1	291.7	-30.7	74.6	0.0	0.0	M	101.6
1/17/2022 3:00	3.3	277.4	-31.5	74.1	0.0	0.0	M	101.6
1/17/2022 4:00	6.1	287.1	-31.5	74.3	0.0	0.0	M	101.6
1/17/2022 5:00	7.2	277.1	-31.3	74.5	0.0	0.0	M	101.5
1/17/2022 6:00	7.5	277.3	-31.8	73.9	0.0	0.0	M	101.6
1/17/2022 7:00	7.4	281.8	-32.1	73.6	0.0	0.0	M	101.6

1/17/2022 8:00	9.1	281.1	-32.1	73.7	0.0	0.0	M	101.6
1/17/2022 9:00	9.4	283.9	-31.7	74.0	0.0	0.0	M	101.6
1/17/2022 10:00	8.6	279.6	-31.7	73.9	0.4	0.0	M	101.6
1/17/2022 11:00	8.2	275.3	-31.7	74.0	4.1	0.0	M	101.6
1/17/2022 12:00	10.1	285.9	-30.7	74.9	16.3	0.0	M	101.6
1/17/2022 13:00	10.1	279.9	-29.3	76.1	15.1	0.0	M	101.6
1/17/2022 14:00	11.4	271.9	-28.7	76.7	6.0	0.0	M	101.6
1/17/2022 15:00	11.3	270.8	-27.8	77.5	2.7	0.0	M	101.6
1/17/2022 16:00	12.5	275.8	-27.5	77.7	0.0	0.0	M	101.6
1/17/2022 17:00	11.8	277.4	-27.7	77.8	0.0	0.0	M	101.7
1/17/2022 18:00	11.3	269.7	-27.2	77.9	0.0	0.0	M	101.7
1/17/2022 19:00	9.9	273.4	-26.7	78.6	0.0	0.0	M	101.7
1/17/2022 20:00	7.8	286.8	-25.7	79.7	0.0	0.0	M	101.8
1/17/2022 21:00	9.0	285.6	-26.3	78.9	0.0	0.0	M	101.8
1/17/2022 22:00	10.5	278.4	-26.8	78.6	0.0	0.0	M	101.8
1/17/2022 23:00	10.2	272.5	-27.0	78.1	0.0	0.0	M	101.8
1/18/2022 0:00	11.5	274.3	-27.8	77.7	0.0	0.0	M	101.9
1/18/2022 1:00	12.7	279.0	-27.8	77.8	0.0	0.0	M	101.9
1/18/2022 2:00	12.4	272.3	-27.7	77.8	0.0	0.0	M	101.9
1/18/2022 3:00	12.3	274.7	-27.6	77.7	0.0	0.0	M	102.0
1/18/2022 4:00	12.5	281.9	-27.9	77.7	0.0	0.0	M	102.1
1/18/2022 5:00	11.9	280.2	-28.1	77.5	0.0	0.0	M	102.0
1/18/2022 6:00	12.4	278.8	-28.1	77.5	0.0	0.0	M	102.1
1/18/2022 7:00	11.2	279.6	-28.4	77.2	0.0	0.0	M	102.2
1/18/2022 8:00	10.4	282.4	-28.4	77.4	0.0	0.0	M	102.2
1/18/2022 9:00	12.3	281.9	-28.9	77.0	0.0	0.0	M	102.2
1/18/2022 10:00	11.8	281.0	-28.7	77.2	0.7	0.0	M	102.3
1/18/2022 11:00	10.6	277.1	-29.0	76.7	5.5	0.0	M	102.3
1/18/2022 12:00	11.1	277.6	-29.2	76.2	18.0	0.0	M	102.3
1/18/2022 13:00	11.5	281.5	-29.4	76.3	14.7	0.0	M	102.3
1/18/2022 14:00	11.5	283.3	-29.5	76.3	9.2	0.0	M	102.4
1/18/2022 15:00	11.3	282.0	-29.4	76.6	3.4	0.0	M	102.4
1/18/2022 16:00	12.6	268.1	-28.2	77.6	0.2	0.0	M	102.2
1/18/2022 17:00	11.6	266.8	-27.4	77.4	0.0	0.0	M	102.3
1/18/2022 18:00	10.4	271.5	-28.4	76.7	0.0	0.0	M	102.4
1/18/2022 19:00	10.5	279.7	-29.3	76.7	0.0	0.0	M	102.3
1/18/2022 20:00	9.6	277.9	-29.7	76.4	0.0	0.0	M	102.3
1/18/2022 21:00	10.5	285.8	-29.6	76.4	0.0	0.0	M	102.2
1/18/2022 22:00	10.3	281.1	-29.4	76.7	0.0	0.0	M	102.2
1/18/2022 23:00	8.5	283.6	-28.9	77.1	0.0	0.0	M	102.1
1/19/2022 0:00	7.2	280.2	-28.2	77.7	0.0	0.0	M	102.2
1/19/2022 1:00	8.1	286.2	-27.7	78.2	0.0	0.0	M	102.1
1/19/2022 2:00	7.0	287.2	-27.5	78.4	0.0	0.0	M	102.1
1/19/2022 3:00	6.2	285.1	-26.9	78.9	0.0	0.0	M	102.1
1/19/2022 4:00	4.3	264.9	-27.6	77.9	0.0	0.0	M	102.0
1/19/2022 5:00	1.4	151.8	-29.9	75.8	0.0	0.0	M	102.0
1/19/2022 6:00	0.6	124.8	-31.3	74.4	0.0	0.0	M	101.9
1/19/2022 7:00	0.2	90.6	-32.1	73.9	0.0	0.0	M	101.9
1/19/2022 8:00	0.5	78.5	-32.4	73.5	0.0	0.0	M	101.8
1/19/2022 9:00	0.4	57.5	-32.5	73.4	0.0	0.0	M	101.7
1/19/2022 10:00	0.4	71.5	-32.3	73.6	0.8	0.0	M	101.6
1/19/2022 11:00	0.9	95.2	-32.2	73.6	8.1	0.0	M	101.5
1/19/2022 12:00	0.5	76.4	-31.9	73.7	16.3	0.0	M	101.4
1/19/2022 13:00	0.1	79.0	-31.7	73.8	6.4	0.0	M	101.4
1/19/2022 14:00	0.6	56.0	-31.7	74.0	5.1	0.0	M	101.3
1/19/2022 15:00	0.4	82.4	-31.2	74.6	1.9	0.0	M	101.2
1/19/2022 16:00	0.4	74.4	-30.8	74.7	0.0	0.0	M	101.1
1/19/2022 17:00	0.9	68.5	-30.3	75.4	0.0	0.0	M	101.0
1/19/2022 18:00	0.6	76.2	-29.8	75.9	0.0	0.0	M	100.8
1/19/2022 19:00	0.4	58.7	-29.2	76.4	0.0	0.0	M	100.7
1/19/2022 20:00	0.3	65.1	-28.5	77.0	0.0	0.0	M	100.6
1/19/2022 21:00	0.4	72.3	-27.7	77.9	0.0	0.0	M	100.5
1/19/2022 22:00	0.1	65.6	-26.9	78.5	0.0	0.0	M	100.4
1/19/2022 23:00	0.3	102.7	-26.3	79.2	0.0	0.0	M	100.3
1/20/2022 0:00	3.3	261.2	-24.1	81.5	0.0	0.0	M	100.2
1/20/2022 1:00	5.3	259.7	-23.9	81.3	0.0	0.0	M	100.1
1/20/2022 2:00	7.5	257.5	-23.3	81.6	0.0	0.0	M	100.0
1/20/2022 3:00	9.4	261.0	-23.2	81.6	0.0	0.0	M	99.9
1/20/2022 4:00	9.9	259.1	-23.5	81.0	0.0	0.0	M	99.8
1/20/2022 5:00	9.7	265.2	-23.7	80.5	0.0	0.0	M	99.8
1/20/2022 6:00	7.7	276.5	-23.7	80.8	0.0	0.0	M	99.8
1/20/2022 7:00	8.5	283.4	-23.8	81.0	0.0	0.0	M	99.7
1/20/2022 8:00	9.6	286.6	-23.9	81.1	0.0	0.0	M	99.7
1/20/2022 9:00	9.6	288.3	-24.1	80.4	0.0	0.0	M	99.7
1/20/2022 10:00	8.4	295.8	-26.5	77.3	0.4	0.0	M	99.7
1/20/2022 11:00	6.3	297.7	-27.8	76.5	3.8	0.0	M	99.6
1/20/2022 12:00	6.5	289.9	-28.8	75.9	10.3	0.0	M	99.7
1/20/2022 13:00	6.3	284.4	-30.1	75.0	10.3	0.0	M	99.8
1/20/2022 14:00	7.5	281.8	-30.9	74.6	6.3	0.0	M	99.8
1/20/2022 15:00	7.9	293.3	-31.5	74.3	3.0	0.0	M	99.9

1/20/2022 16:00	7.0	288.5	-31.8	74.0	0.1	0.0	M	99.9
1/20/2022 17:00	8.9	279.8	-31.8	73.9	0.0	0.0	M	99.9
1/20/2022 18:00	10.1	279.4	-31.9	73.9	0.0	0.0	M	99.9
1/20/2022 19:00	10.9	284.7	-31.9	73.8	0.0	0.0	M	99.9
1/20/2022 20:00	11.9	279.5	-32.2	73.5	0.0	0.0	M	100.0
1/20/2022 21:00	12.0	272.2	-32.4	73.2	0.0	0.0	M	100.0
1/20/2022 22:00	11.8	275.6	-32.6	73.0	0.0	0.0	M	100.0
1/20/2022 23:00	10.7	280.3	-32.8	73.0	0.0	0.0	M	100.1
1/21/2022 0:00	11.1	276.8	-32.6	73.3	0.0	0.0	M	100.2
1/21/2022 1:00	11.1	272.9	-32.0	73.7	0.0	0.0	M	100.3
1/21/2022 2:00	10.9	271.2	-31.8	73.9	0.0	0.0	M	100.4
1/21/2022 3:00	11.8	270.2	-31.6	73.8	0.0	0.0	M	100.4
1/21/2022 4:00	11.7	272.3	-31.4	74.1	0.0	0.0	M	100.5
1/21/2022 5:00	10.4	274.5	-31.5	74.0	0.0	0.0	M	100.6
1/21/2022 6:00	12.0	270.1	-31.8	73.4	0.0	0.0	M	100.6
1/21/2022 7:00	11.7	271.0	-31.9	73.1	0.0	0.0	M	100.5
1/21/2022 8:00	12.3	268.6	-31.5	73.1	0.0	0.0	M	100.6
1/21/2022 9:00	12.3	271.1	-31.3	73.6	0.0	0.0	M	100.6
1/21/2022 10:00	11.1	267.4	-30.9	73.6	1.1	0.0	M	100.6
1/21/2022 11:00	13.6	268.5	-30.6	73.8	7.1	0.0	M	100.6
1/21/2022 12:00	13.8	272.3	-30.7	73.9	16.9	0.0	M	100.6
1/21/2022 13:00	13.3	280.2	-31.1	74.1	16.7	0.0	M	100.7
1/21/2022 14:00	12.9	281.8	-31.3	74.0	12.6	0.0	M	100.8
1/21/2022 15:00	12.2	286.1	-31.4	74.0	4.5	0.0	M	100.8
1/21/2022 16:00	11.5	282.1	-31.1	74.4	0.4	0.0	M	100.8
1/21/2022 17:00	11.3	289.4	-31.0	74.2	0.0	0.0	M	100.9
1/21/2022 18:00	11.5	279.7	-31.1	73.9	0.0	0.0	M	101.0
1/21/2022 19:00	10.6	283.5	-31.4	73.5	0.0	0.0	M	101.0
1/21/2022 20:00	10.4	285.1	-31.9	72.6	0.0	0.0	M	101.1
1/21/2022 21:00	9.6	276.5	-32.2	72.5	0.0	0.0	M	101.1
1/21/2022 22:00	9.1	280.8	-32.2	72.9	0.0	0.0	M	101.1
1/21/2022 23:00	11.1	280.4	-31.8	73.4	0.0	0.0	M	101.2
1/22/2022 0:00	10.8	282.4	-31.7	73.4	0.0	0.0	M	101.1
1/22/2022 1:00	11.0	277.5	-31.8	73.4	0.0	0.0	M	101.3
1/22/2022 2:00	11.8	271.4	-31.4	73.3	0.0	0.0	M	101.3
1/22/2022 3:00	11.5	270.7	-31.3	73.0	0.0	0.0	M	101.3
1/22/2022 4:00	12.7	276.7	-31.3	73.4	0.0	0.0	M	101.3
1/22/2022 5:00	12.1	276.1	-31.5	73.6	0.0	0.0	M	101.2
1/22/2022 6:00	11.6	277.9	-31.7	73.7	0.0	0.0	M	101.3
1/22/2022 7:00	11.9	278.6	-31.7	73.8	0.0	0.0	M	101.4
1/22/2022 8:00	11.1	285.2	-31.5	73.7	0.0	0.0	M	101.3
1/22/2022 9:00	10.9	282.3	-31.8	73.6	0.0	0.0	M	101.3
1/22/2022 10:00	10.2	280.8	-31.8	73.5	1.5	0.0	M	101.4
1/22/2022 11:00	10.4	287.1	-31.8	73.4	8.8	0.0	M	101.3
1/22/2022 12:00	9.5	284.8	-31.6	72.9	26.3	0.0	M	101.3
1/22/2022 13:00	12.2	280.5	-31.7	73.0	25.8	0.0	M	101.3
1/22/2022 14:00	11.2	282.3	-31.8	73.1	16.0	0.0	M	101.4
1/22/2022 15:00	8.1	290.9	-31.8	73.3	5.9	0.0	M	101.5
1/22/2022 16:00	8.7	284.1	-32.0	73.2	0.4	0.0	M	101.5
1/22/2022 17:00	7.3	283.7	-32.0	73.3	0.0	0.0	M	101.5
1/22/2022 18:00	6.3	293.4	-32.1	73.4	0.0	0.0	M	101.5
1/22/2022 19:00	8.5	287.4	-31.7	73.9	0.0	0.0	M	101.4
1/22/2022 20:00	6.9	286.4	-32.1	73.6	0.0	0.0	M	101.4
1/22/2022 21:00	8.2	281.0	-32.2	73.4	0.0	0.0	M	101.4
1/22/2022 22:00	9.7	282.2	-32.4	73.2	0.0	0.0	M	101.4
1/22/2022 23:00	9.0	290.0	-32.6	73.2	0.0	0.0	M	101.4
1/23/2022 0:00	8.5	288.3	-32.0	73.4	0.0	0.0	M	101.5
1/23/2022 1:00	9.2	287.1	-31.9	73.7	0.0	0.0	M	101.5
1/23/2022 2:00	10.5	280.3	-31.3	74.1	0.0	0.0	M	101.5
1/23/2022 3:00	9.3	274.0	-31.3	74.1	0.0	0.0	M	101.5
1/23/2022 4:00	8.5	283.6	-31.5	74.3	0.0	0.0	M	101.5
1/23/2022 5:00	9.9	278.3	-31.0	74.9	0.0	0.0	M	101.6
1/23/2022 6:00	9.8	280.4	-30.1	75.6	0.0	0.0	M	101.6
1/23/2022 7:00	9.4	281.7	-30.1	75.5	0.0	0.0	M	101.6
1/23/2022 8:00	9.5	276.7	-30.1	75.5	0.0	0.0	M	101.6
1/23/2022 9:00	9.4	289.5	-29.9	75.8	0.0	0.0	M	101.6
1/23/2022 10:00	9.9	281.6	-29.9	75.7	1.5	0.0	M	101.6
1/23/2022 11:00	7.8	284.5	-29.9	75.5	7.6	0.0	M	101.7
1/23/2022 12:00	8.7	296.0	-30.1	74.8	21.0	0.0	M	101.8
1/23/2022 13:00	7.3	286.3	-30.4	74.8	21.8	0.0	M	101.8
1/23/2022 14:00	6.1	283.6	-30.5	74.6	17.3	0.0	M	101.9
1/23/2022 15:00	4.9	285.0	-30.8	74.6	5.9	0.0	M	101.9
1/23/2022 16:00	6.8	297.0	-30.6	75.0	0.6	0.0	M	101.9
1/23/2022 17:00	8.1	292.9	-30.6	74.8	0.0	0.0	M	102.0
1/23/2022 18:00	5.8	308.8	-30.4	75.0	0.0	0.0	M	102.0
1/23/2022 19:00	10.9	312.3	-29.9	73.5	0.0	0.0	M	102.0
1/23/2022 20:00	10.1	303.5	-30.5	73.1	0.0	0.0	M	102.1
1/23/2022 21:00	9.4	294.1	-30.8	73.3	0.0	0.0	M	102.2
1/23/2022 22:00	8.5	286.5	-31.5	74.4	0.0	0.0	M	102.2
1/23/2022 23:00	9.1	283.5	-31.3	74.6	0.0	0.0	M	102.3

1/24/2022 0:00	9.4	289.2	-31.3	74.7	0.0	0.0	M	102.3
1/24/2022 1:00	8.0	287.9	-31.2	74.7	0.0	0.0	M	102.4
1/24/2022 2:00	7.8	288.6	-31.2	74.7	0.0	0.0	M	102.4
1/24/2022 3:00	7.6	281.7	-31.6	74.2	0.0	0.0	M	102.4
1/24/2022 4:00	8.4	283.5	-31.6	74.4	0.0	0.0	M	102.4
1/24/2022 5:00	7.2	284.7	-31.4	74.6	0.0	0.0	M	102.4
1/24/2022 6:00	6.3	285.9	-31.2	74.6	0.0	0.0	M	102.4
1/24/2022 7:00	6.2	286.9	-30.7	75.3	0.0	0.0	M	102.4
1/24/2022 8:00	4.5	290.9	-30.3	75.5	0.0	0.0	M	102.4
1/24/2022 9:00	3.9	285.9	-30.5	75.1	0.0	0.0	M	102.3
1/24/2022 10:00	4.1	291.5	-30.4	75.4	1.7	0.0	M	102.3
1/24/2022 11:00	1.9	295.9	-30.1	75.2	12.8	0.0	M	102.3
1/24/2022 12:00	1.8	271.8	-29.6	75.0	37.7	0.0	M	102.2
1/24/2022 13:00	1.0	211.6	-30.0	74.8	38.1	0.0	M	102.1
1/24/2022 14:00	0.8	160.7	-31.7	73.6	16.6	0.0	M	102.1
1/24/2022 15:00	0.8	162.0	-32.5	73.0	5.2	0.0	M	102.0
1/24/2022 16:00	0.2	112.5	-33.0	72.5	0.9	0.0	M	101.9
1/24/2022 17:00	0.5	72.6	-33.0	72.6	0.0	0.0	M	101.8
1/24/2022 18:00	0.8	54.7	-32.2	73.7	0.0	0.0	M	101.6
1/24/2022 19:00	1.7	89.2	-30.0	76.2	0.0	0.0	M	101.5
1/24/2022 20:00	2.0	142.6	-27.6	78.0	0.0	0.0	M	101.3
1/24/2022 21:00	1.0	107.4	-26.1	79.3	0.0	0.0	M	101.2
1/24/2022 22:00	1.2	96.7	-24.7	80.8	0.0	0.0	M	101.0
1/24/2022 23:00	1.8	112.9	-23.0	82.2	0.0	0.0	M	100.8
1/25/2022 0:00	1.3	120.7	-22.7	82.5	0.0	0.0	M	100.6
1/25/2022 1:00	2.3	131.0	-22.5	81.9	0.0	0.0	M	100.5
1/25/2022 2:00	1.1	93.7	-22.6	80.7	0.0	0.0	M	100.3
1/25/2022 3:00	2.4	45.1	-23.7	78.5	0.0	0.0	M	100.3
1/25/2022 4:00	3.2	43.0	-24.8	78.3	0.0	0.0	M	100.1
1/25/2022 5:00	2.5	46.7	-25.3	78.5	0.0	0.0	M	100.0
1/25/2022 6:00	1.8	50.4	-25.4	78.4	0.0	0.0	M	99.9
1/25/2022 7:00	3.6	46.2	-26.1	78.0	0.0	0.0	M	99.8
1/25/2022 8:00	2.2	62.1	-27.1	78.1	0.0	0.0	M	99.8
1/25/2022 9:00	2.8	82.2	-27.6	78.7	0.0	0.0	M	99.8
1/25/2022 10:00	4.5	59.5	-28.9	77.0	1.6	0.0	M	99.7
1/25/2022 11:00	4.2	67.3	-29.6	76.3	10.7	0.0	M	99.7
1/25/2022 12:00	6.2	69.6	-30.0	75.6	20.0	0.0	M	99.8
1/25/2022 13:00	5.4	78.2	-29.3	76.5	26.3	0.0	M	99.8
1/25/2022 14:00	5.4	77.4	-28.3	77.6	14.4	0.0	M	99.8
1/25/2022 15:00	5.3	68.4	-27.8	77.6	4.3	0.0	M	99.8
1/25/2022 16:00	6.7	71.0	-27.6	77.3	0.4	0.0	M	99.9
1/25/2022 17:00	5.0	77.2	-27.5	78.0	0.0	0.0	M	99.9
1/25/2022 18:00	5.7	52.1	-28.0	76.8	0.0	0.0	M	100.0
1/25/2022 19:00	5.1	45.2	-28.5	76.2	0.0	0.0	M	100.1
1/25/2022 20:00	3.1	74.7	-29.8	76.2	0.0	0.0	M	100.2
1/25/2022 21:00	0.9	80.9	-30.5	75.6	0.0	0.0	M	100.2
1/25/2022 22:00	2.5	33.8	-30.9	75.4	0.0	0.0	M	100.3
1/25/2022 23:00	2.2	356.2	-32.2	73.7	0.0	0.0	M	100.4
1/26/2022 0:00	1.6	349.1	-32.8	73.4	0.0	0.0	M	100.6
1/26/2022 1:00	0.9	39.8	-33.4	72.5	0.0	0.0	M	100.7
1/26/2022 2:00	0.6	15.2	-34.3	71.7	0.0	0.0	M	100.8
1/26/2022 3:00	0.6	8.1	-34.2	71.9	0.0	0.0	M	100.9
1/26/2022 4:00	0.9	10.8	-34.5	71.4	0.0	0.0	M	101.0
1/26/2022 5:00	1.5	7.8	-35.1	71.1	0.0	0.0	M	101.2
1/26/2022 6:00	0.7	48.2	-35.4	70.5	0.0	0.0	M	100.6
1/26/2022 7:00	0.2	28.9	-35.8	70.2	0.0	0.0	M	99.7
1/26/2022 8:00	0.8	246.6	-35.8	70.1	0.0	0.0	M	99.8
1/26/2022 9:00	1.1	123.5	-36.4	69.4	0.0	0.0	M	99.3
1/26/2022 10:00	0.2	92.6	-37.0	68.9	2.2	0.0	M	97.5
1/26/2022 11:00	0.5	111.2	-36.5	69.3	24.1	0.0	M	100.2
1/26/2022 12:00	0.6	102.6	-35.6	69.8	58.4	0.0	M	101.6
1/26/2022 13:00	0.6	101.5	-35.6	69.0	70.2	0.0	M	101.6
1/26/2022 14:00	0.7	98.7	-36.2	68.9	39.9	0.0	M	101.6
1/26/2022 15:00	0.8	90.4	-36.3	69.4	9.1	0.0	M	101.4
1/26/2022 16:00	0.6	99.7	-36.8	68.9	0.7	0.0	M	99.0
1/26/2022 17:00	0.1	55.4	-37.0	68.7	0.0	0.0	M	97.0
1/26/2022 18:00	0.6	52.9	-36.8	68.9	0.0	0.0	M	97.1
1/26/2022 19:00	0.3	0.4	-36.0	69.9	0.0	0.0	M	98.8
1/26/2022 20:00	C	C	-35.8	69.8	0.0	0.0	M	99.8
1/26/2022 21:00	C	C	-36.1	69.6	0.0	0.0	M	99.3
1/26/2022 22:00	C	C	-35.9	69.8	0.0	0.0	M	99.4
1/26/2022 23:00	C	C	-35.5	70.0	0.0	0.0	M	99.6
1/27/2022 0:00	0.2	340.0	-35.5	70.0	0.0	0.0	M	100.0
1/27/2022 1:00	4.5	281.9	-31.9	74.6	0.0	0.0	M	101.1
1/27/2022 2:00	11.2	277.6	-29.5	75.9	0.0	0.0	M	101.1
1/27/2022 3:00	7.8	286.1	-29.4	76.2	0.0	0.0	M	101.2
1/27/2022 4:00	9.7	282.6	-28.0	77.6	0.0	0.0	M	101.2
1/27/2022 5:00	10.9	284.8	-26.6	78.5	0.0	0.0	M	101.2
1/27/2022 6:00	9.6	286.4	-26.2	79.4	0.0	0.0	M	101.2
1/27/2022 7:00	8.5	277.8	-24.9	80.5	0.0	0.0	M	101.2

1/27/2022 8:00	7.9	284.5	-23.9	81.8	0.0	0.0	M	101.1
1/27/2022 9:00	10.2	286.7	-23.2	82.0	0.0	0.0	M	101.2
1/27/2022 10:00	10.0	284.1	-23.9	81.4	1.6	0.0	M	101.2
1/27/2022 11:00	10.0	280.6	-24.5	81.0	8.2	0.0	M	101.2
1/27/2022 12:00	10.0	280.3	-24.6	80.8	19.2	0.0	M	101.2
1/27/2022 13:00	10.1	279.6	-25.3	80.2	23.7	0.0	M	101.2
1/27/2022 14:00	9.5	282.4	-24.9	80.7	24.1	0.0	M	101.2
1/27/2022 15:00	10.1	281.3	-24.6	80.9	12.2	0.0	M	101.3
1/27/2022 16:00	10.1	283.8	-24.2	81.4	1.2	0.0	M	101.3
1/27/2022 17:00	10.3	283.4	-23.8	81.6	0.0	0.0	M	101.4
1/27/2022 18:00	8.7	287.1	-23.9	81.4	0.0	0.0	M	101.4
1/27/2022 19:00	9.9	282.3	-25.2	79.6	0.0	0.0	M	101.4
1/27/2022 20:00	10.8	282.3	-25.7	79.7	0.0	0.0	M	101.4
1/27/2022 21:00	11.6	281.4	-26.3	78.7	0.0	0.0	M	101.4
1/27/2022 22:00	11.9	281.2	-27.6	78.1	0.0	0.0	M	101.4
1/27/2022 23:00	11.0	281.3	-27.9	77.7	0.0	0.0	M	101.5
1/28/2022 0:00	10.3	278.9	-27.4	78.1	0.0	0.0	M	101.5
1/28/2022 1:00	10.2	279.1	-26.6	78.3	0.0	0.0	M	101.5
1/28/2022 2:00	8.5	274.0	-26.6	77.9	0.0	0.0	M	101.5
1/28/2022 3:00	8.3	275.2	-27.4	77.7	0.0	0.0	M	101.5
1/28/2022 4:00	8.1	273.4	-27.9	77.8	0.0	0.0	M	101.5
1/28/2022 5:00	8.8	273.4	-28.0	78.1	0.0	0.0	M	101.4
1/28/2022 6:00	9.2	268.7	-27.8	77.8	0.0	0.0	M	101.5
1/28/2022 7:00	8.7	264.4	-28.6	76.9	0.0	0.0	M	101.4
1/28/2022 8:00	10.3	263.7	-29.0	76.5	0.0	0.0	M	101.4
1/28/2022 9:00	10.8	270.1	-29.2	76.3	0.0	0.0	M	101.3
1/28/2022 10:00	11.4	271.8	-29.3	76.1	3.3	0.0	M	101.3
1/28/2022 11:00	12.5	271.1	-29.2	75.5	22.4	0.0	M	101.2
1/28/2022 12:00	12.1	276.8	-29.3	75.1	48.0	0.0	M	101.2
1/28/2022 13:00	12.5	274.1	-29.0	75.0	59.4	0.0	M	101.3
1/28/2022 14:00	10.8	271.7	-29.0	74.8	58.2	0.0	M	101.3
1/28/2022 15:00	10.1	267.6	-29.0	75.3	12.7	0.0	M	101.3
1/28/2022 16:00	11.0	263.9	-29.3	75.2	2.2	0.0	M	101.2
1/28/2022 17:00	12.3	264.6	-29.2	75.2	0.0	0.0	M	101.2
1/28/2022 18:00	12.6	261.8	-29.2	75.2	0.0	0.0	M	101.1
1/28/2022 19:00	12.7	258.9	-29.2	75.4	0.0	0.0	M	101.1
1/28/2022 20:00	11.6	258.1	-29.1	75.8	0.0	0.0	M	101.1
1/28/2022 21:00	11.4	263.5	-27.9	76.7	0.0	0.0	M	101.1
1/28/2022 22:00	13.6	267.1	-26.6	77.1	0.0	0.0	M	100.9
1/28/2022 23:00	13.7	265.8	-26.7	77.1	0.0	0.0	M	100.9
1/29/2022 0:00	14.5	263.4	-26.0	76.6	0.0	0.0	M	100.8
1/29/2022 1:00	14.5	261.1	-25.6	77.9	0.0	0.0	M	100.8
1/29/2022 2:00	14.0	261.2	-25.2	79.1	0.0	0.0	M	100.7
1/29/2022 3:00	13.6	262.4	-24.8	79.6	0.0	0.0	M	100.7
1/29/2022 4:00	13.3	259.7	-24.8	79.9	0.0	0.0	M	100.7
1/29/2022 5:00	14.3	259.6	-25.0	79.4	0.0	0.0	M	100.6
1/29/2022 6:00	12.8	260.7	-25.4	78.9	0.0	0.0	M	100.6
1/29/2022 7:00	13.2	263.1	-26.3	78.0	0.0	0.0	M	100.6
1/29/2022 8:00	12.5	268.3	-27.2	76.7	0.0	0.0	M	100.6
1/29/2022 9:00	11.8	271.2	-27.7	76.5	0.0	0.0	M	100.6
1/29/2022 10:00	13.0	267.4	-28.1	76.0	3.8	0.0	M	100.6
1/29/2022 11:00	11.2	267.1	-28.2	76.0	14.7	0.0	M	100.7
1/29/2022 12:00	11.0	265.9	-28.3	75.4	37.1	0.0	M	100.6
1/29/2022 13:00	13.5	268.1	-28.5	75.1	41.2	0.0	M	100.6
1/29/2022 14:00	13.1	267.3	-28.1	75.3	36.0	0.0	M	100.6
1/29/2022 15:00	14.5	268.4	-27.7	75.3	12.9	0.0	M	100.5
1/29/2022 16:00	12.4	275.9	-27.4	76.6	2.4	0.0	M	100.7
1/29/2022 17:00	11.4	274.8	-27.5	77.5	0.0	0.0	M	100.6
1/29/2022 18:00	12.3	268.0	-26.6	77.0	0.0	0.0	M	100.6
1/29/2022 19:00	12.2	266.8	-26.4	77.2	0.0	0.0	M	100.6
1/29/2022 20:00	11.5	267.2	-26.1	77.9	0.0	0.0	M	100.6
1/29/2022 21:00	10.8	259.8	-25.7	77.6	0.0	0.0	M	100.6
1/29/2022 22:00	10.2	261.6	-25.6	77.1	0.0	0.0	M	100.4
1/29/2022 23:00	13.6	262.0	-24.9	78.6	0.0	0.0	M	100.4
1/30/2022 0:00	13.0	263.0	-24.2	79.2	0.0	0.0	M	100.5
1/30/2022 1:00	12.6	258.1	-23.9	80.3	0.0	0.0	M	100.5
1/30/2022 2:00	12.6	260.2	-23.6	81.1	0.0	0.0	M	100.4
1/30/2022 3:00	12.5	254.7	-23.3	81.8	0.0	0.0	M	100.6
1/30/2022 4:00	12.4	262.1	-23.4	81.5	0.0	0.0	M	100.5
1/30/2022 5:00	10.4	260.3	-23.1	81.9	0.0	0.0	M	100.5
1/30/2022 6:00	9.2	251.9	-23.3	81.0	0.0	0.0	M	100.5
1/30/2022 7:00	11.5	255.3	-23.9	81.3	0.0	0.0	M	100.4
1/30/2022 8:00	12.0	259.4	-24.2	81.3	0.0	0.0	M	100.4
1/30/2022 9:00	10.8	260.7	-24.4	80.9	0.1	0.0	M	100.4
1/30/2022 10:00	9.9	262.1	-24.5	80.2	4.4	0.0	M	100.5
1/30/2022 11:00	9.8	256.4	-24.9	79.9	20.2	0.0	M	100.3
1/30/2022 12:00	11.5	259.3	-25.3	79.6	39.9	0.0	M	100.3
1/30/2022 13:00	10.7	258.5	-25.3	79.7	49.8	0.0	M	100.4
1/30/2022 14:00	9.1	261.4	-25.3	79.6	44.3	0.0	M	100.3
1/30/2022 15:00	9.3	259.6	-25.0	79.7	12.3	0.0	M	100.3

1/30/2022 16:00	10.1	258.6	-25.0	80.2	2.7	0.0	M	100.3
1/30/2022 17:00	12.0	263.4	-24.8	80.1	0.0	0.0	M	100.2
1/30/2022 18:00	11.2	258.4	-25.1	80.2	0.0	0.0	M	100.3
1/30/2022 19:00	9.7	256.0	-25.3	80.4	0.0	0.0	M	100.2
1/30/2022 20:00	9.5	254.2	-25.1	80.5	0.0	0.0	M	100.2
1/30/2022 21:00	10.7	260.9	-24.6	80.9	0.0	0.0	M	100.1
1/30/2022 22:00	11.3	258.6	-24.1	81.2	0.0	0.0	M	100.0
1/30/2022 23:00	11.0	261.9	-24.3	81.1	0.0	0.0	M	100.0
1/31/2022 0:00	11.5	267.7	-24.5	80.5	0.0	0.0	M	99.9
1/31/2022 1:00	10.2	266.9	-25.2	79.9	0.0	0.0	M	99.9
1/31/2022 2:00	7.3	275.2	-26.3	79.3	0.0	0.0	M	100.0
1/31/2022 3:00	7.1	284.6	-27.4	78.4	0.0	0.0	M	99.9
1/31/2022 4:00	6.4	287.3	-28.5	77.3	0.0	0.0	M	99.9
1/31/2022 5:00	7.0	287.4	-29.4	75.9	0.0	0.0	M	99.9
1/31/2022 6:00	8.8	291.5	-31.1	73.9	0.0	0.0	M	99.9
1/31/2022 7:00	8.7	292.3	-32.7	72.2	0.0	0.0	M	100.0
1/31/2022 8:00	4.8	294.0	-34.8	70.5	0.0	0.0	M	100.1
1/31/2022 9:00	6.3	315.1	-34.1	71.1	0.1	0.0	M	100.3
1/31/2022 10:00	7.1	308.3	-34.7	70.1	6.1	0.0	M	100.4
1/31/2022 11:00	8.6	292.7	-35.3	69.7	20.4	0.0	M	100.4
1/31/2022 12:00	12.0	284.3	-36.1	69.3	34.1	0.0	M	100.4
1/31/2022 13:00	12.7	279.6	-36.2	69.2	39.3	0.0	M	100.4
1/31/2022 14:00	11.5	279.5	-36.1	69.3	33.8	0.0	M	100.6
1/31/2022 15:00	10.4	281.0	-35.8	69.6	17.5	0.0	M	100.6
1/31/2022 16:00	8.7	284.5	-35.4	70.3	3.2	0.0	M	100.8
1/31/2022 17:00	8.1	296.4	-34.4	71.4	0.0	0.0	M	100.9
1/31/2022 18:00	7.0	309.6	-33.7	71.2	0.0	0.0	M	101.0
1/31/2022 19:00	7.8	301.3	-33.7	71.0	0.0	0.0	M	101.1
1/31/2022 20:00	7.7	301.5	-33.7	70.9	0.0	0.0	M	101.2
1/31/2022 21:00	9.1	315.6	-33.0	71.5	0.0	0.0	M	101.3
1/31/2022 22:00	8.8	318.7	-32.5	71.5	0.0	0.0	M	101.4
1/31/2022 23:00	10.8	319.2	-32.2	71.8	0.0	0.0	M	101.5
2/1/2022 0:00	7.2	307.4	-30.7	73.3	0.0	0.0	M	101.6
2/1/2022 1:00	6.9	315.5	-29.9	74.2	0.0	0.0	M	101.8
2/1/2022 2:00	7.4	322.3	-30.0	74.1	0.0	0.0	M	101.8
2/1/2022 3:00	7.1	309.5	-30.4	73.6	0.0	0.0	M	101.9
2/1/2022 4:00	8.0	306.5	-29.9	74.0	0.0	0.0	M	102.0
2/1/2022 5:00	9.1	298.0	-29.5	74.3	0.0	0.0	M	102.0
2/1/2022 6:00	8.9	302.2	-29.2	74.4	0.0	0.0	M	102.2
2/1/2022 7:00	7.6	278.6	-29.7	74.7	0.0	0.0	M	102.2
2/1/2022 8:00	9.1	274.0	-29.6	74.9	0.0	0.0	M	102.2
2/1/2022 9:00	9.9	280.1	-29.8	75.2	0.1	0.0	M	102.2
2/1/2022 10:00	11.5	274.0	-30.7	74.5	5.7	0.0	M	102.1
2/1/2022 11:00	13.4	272.0	-31.0	74.0	25.3	0.0	M	102.2
2/1/2022 12:00	13.6	275.3	-31.3	73.5	66.9	0.0	M	102.2
2/1/2022 13:00	12.6	276.0	-31.2	73.8	70.5	0.0	M	102.2
2/1/2022 14:00	12.4	277.8	-31.1	74.1	59.5	0.0	M	102.2
2/1/2022 15:00	13.3	281.2	-30.8	74.7	17.4	0.0	M	102.2
2/1/2022 16:00	10.2	277.6	-30.2	75.4	2.6	0.0	M	102.2
2/1/2022 17:00	10.6	278.0	-30.6	74.9	0.0	0.0	M	102.2
2/1/2022 18:00	10.0	274.3	-31.2	74.2	0.0	0.0	M	102.2
2/1/2022 19:00	9.5	271.6	-31.9	73.7	0.0	0.0	M	102.1
2/1/2022 20:00	7.6	278.6	-32.2	73.5	0.0	0.0	M	102.2
2/1/2022 21:00	7.4	280.7	-32.4	73.3	0.0	0.0	M	102.1
2/1/2022 22:00	8.2	286.2	-32.7	73.0	0.0	0.0	M	102.0
2/1/2022 23:00	7.1	279.8	-33.1	72.5	0.0	0.0	M	102.0
2/2/2022 0:00	8.1	285.8	-33.3	72.3	0.0	0.0	M	102.0
2/2/2022 1:00	9.3	280.6	-33.0	72.2	0.0	0.0	M	102.0
2/2/2022 2:00	8.9	275.6	-32.9	72.7	0.0	0.0	M	101.9
2/2/2022 3:00	10.3	276.1	-32.7	73.0	0.0	0.0	M	101.8
2/2/2022 4:00	12.8	268.8	-32.3	72.9	0.0	0.0	M	101.7
2/2/2022 5:00	12.5	267.6	-32.7	72.2	0.0	0.0	M	101.6
2/2/2022 6:00	12.5	272.3	-33.1	72.0	0.0	0.0	M	101.6
2/2/2022 7:00	12.0	271.7	-33.2	71.8	0.0	0.0	M	101.5
2/2/2022 8:00	12.8	265.5	-33.4	71.6	0.0	0.0	M	101.4
2/2/2022 9:00	13.3	263.0	-33.5	71.5	0.3	0.0	M	101.3
2/2/2022 10:00	13.0	264.7	-33.1	71.9	6.6	0.0	M	101.3
2/2/2022 11:00	13.3	264.6	-32.7	72.2	28.5	0.0	M	101.2
2/2/2022 12:00	12.5	263.5	-32.4	72.7	36.5	0.0	M	101.2
2/2/2022 13:00	13.6	267.9	-31.9	72.7	49.4	0.0	M	101.1
2/2/2022 14:00	12.0	268.8	-31.4	73.4	40.3	0.0	M	101.1
2/2/2022 15:00	13.1	267.9	-31.2	73.9	13.4	0.0	M	101.0
2/2/2022 16:00	10.7	269.7	-30.9	74.3	3.1	0.0	M	101.0
2/2/2022 17:00	11.4	273.0	-30.8	74.5	0.0	0.0	M	101.0
2/2/2022 18:00	9.7	280.0	-30.5	74.9	0.0	0.0	M	101.0
2/2/2022 19:00	8.5	293.4	-30.9	74.4	0.0	0.0	M	101.0
2/2/2022 20:00	7.6	295.3	-31.5	73.9	0.0	0.0	M	101.0
2/2/2022 21:00	4.8	296.7	-32.5	72.9	0.0	0.0	M	101.0
2/2/2022 22:00	6.2	300.3	-33.2	72.3	0.0	0.0	M	101.0
2/2/2022 23:00	6.2	291.1	-33.8	71.9	0.0	0.0	M	101.1

2/3/2022 0:00	5.2	289.0	-34.4	71.3	0.0	0.0	M	101.0
2/3/2022 1:00	7.6	278.6	-34.1	71.7	0.0	0.0	M	101.1
2/3/2022 2:00	7.7	288.6	-33.4	72.0	0.0	0.0	M	101.1
2/3/2022 3:00	8.4	300.1	-33.2	71.6	0.0	0.0	M	101.1
2/3/2022 4:00	6.8	296.4	-32.9	71.1	0.0	0.0	M	101.1
2/3/2022 5:00	9.2	281.7	-33.2	72.0	0.0	0.0	M	101.1
2/3/2022 6:00	8.6	294.0	-32.9	72.5	0.0	0.0	M	101.1
2/3/2022 7:00	7.1	287.2	-32.9	72.5	0.0	0.0	M	101.1
2/3/2022 8:00	7.8	295.7	-33.4	71.6	0.0	0.0	M	101.2
2/3/2022 9:00	8.1	298.9	-34.0	69.5	0.7	0.0	M	101.2
2/3/2022 10:00	7.7	292.9	-33.6	68.2	17.9	0.0	M	101.2
2/3/2022 11:00	7.4	286.9	-32.5	69.5	26.1	0.0	M	101.1
2/3/2022 12:00	7.8	280.4	-30.8	72.4	40.5	0.0	M	101.1
2/3/2022 13:00	5.1	282.2	-29.1	75.4	43.7	0.0	M	101.0
2/3/2022 14:00	10.8	268.8	-27.4	76.9	32.8	0.0	M	100.8
2/3/2022 15:00	10.8	269.3	-27.3	76.6	18.0	0.0	M	100.8
2/3/2022 16:00	9.9	275.5	-27.3	77.2	3.5	0.0	M	100.8
2/3/2022 17:00	9.8	274.0	-26.8	78.2	0.1	0.0	M	100.8
2/3/2022 18:00	8.6	288.7	-27.6	77.5	0.0	0.0	M	100.8
2/3/2022 19:00	8.0	292.0	-29.2	75.7	0.0	0.0	M	100.9
2/3/2022 20:00	6.0	310.0	-31.2	73.7	0.0	0.0	M	101.0
2/3/2022 21:00	5.4	315.8	-32.4	70.5	0.0	0.0	M	101.1
2/3/2022 22:00	5.5	299.2	-33.9	70.9	0.0	0.0	M	101.2
2/3/2022 23:00	5.9	311.1	-34.1	70.2	0.0	0.0	M	101.3
2/4/2022 0:00	6.9	298.1	-35.3	69.9	0.0	0.0	M	101.2
2/4/2022 1:00	9.0	283.0	-35.6	69.0	0.0	0.0	M	101.3
2/4/2022 2:00	8.1	276.1	-35.5	68.9	0.0	0.0	M	101.4
2/4/2022 3:00	7.6	270.4	-35.5	68.6	0.0	0.0	M	101.3
2/4/2022 4:00	7.4	276.0	-34.7	68.8	0.0	0.0	M	101.2
2/4/2022 5:00	8.9	273.8	-34.0	68.4	0.0	0.0	M	101.3
2/4/2022 6:00	7.9	271.9	-32.8	70.0	0.0	0.0	M	101.2
2/4/2022 7:00	5.6	279.5	-31.6	73.2	0.0	0.0	M	101.1
2/4/2022 8:00	6.0	266.6	-29.9	75.3	0.0	0.0	M	101.0
2/4/2022 9:00	8.3	255.9	-27.9	76.8	0.5	0.0	M	100.9
2/4/2022 10:00	9.9	265.8	-27.0	76.9	6.3	0.0	M	100.9
2/4/2022 11:00	10.7	267.4	-26.9	76.6	27.7	0.0	M	100.9
2/4/2022 12:00	9.7	271.5	-27.1	76.8	46.9	0.0	M	100.9
2/4/2022 13:00	7.4	275.7	-27.4	77.1	50.3	0.0	M	100.9
2/4/2022 14:00	6.8	275.0	-28.4	76.5	45.6	0.0	M	101.0
2/4/2022 15:00	7.6	281.4	-29.4	75.7	29.5	0.0	M	101.0
2/4/2022 16:00	7.3	276.1	-30.7	75.2	6.3	0.0	M	101.0
2/4/2022 17:00	6.8	273.9	-31.4	74.5	0.2	0.0	M	101.0
2/4/2022 18:00	7.6	270.6	-31.7	74.1	0.0	0.0	M	101.1
2/4/2022 19:00	7.0	272.3	-32.2	73.8	0.0	0.0	M	101.0
2/4/2022 20:00	5.4	281.6	-32.5	73.3	0.0	0.0	M	101.1
2/4/2022 21:00	4.8	275.5	-32.9	73.0	0.0	0.0	M	101.1
2/4/2022 22:00	4.9	277.8	-33.0	72.9	0.0	0.0	M	101.1
2/4/2022 23:00	2.3	288.5	-33.1	72.8	0.0	0.0	M	101.2
2/5/2022 0:00	5.2	271.8	-32.1	74.0	0.0	0.0	M	101.1
2/5/2022 1:00	5.0	264.2	-31.5	74.3	0.0	0.0	M	101.1
2/5/2022 2:00	6.3	267.2	-30.6	75.2	0.0	0.0	M	101.1
2/5/2022 3:00	5.4	257.9	-31.0	74.7	0.0	0.0	M	101.2
2/5/2022 4:00	5.7	256.0	-30.9	75.0	0.0	0.0	M	101.1
2/5/2022 5:00	6.9	266.6	-30.1	75.6	0.0	0.0	M	101.1
2/5/2022 6:00	5.7	260.7	-30.0	75.7	0.0	0.0	M	101.2
2/5/2022 7:00	6.3	260.4	-29.3	76.4	0.0	0.0	M	101.2
2/5/2022 8:00	6.3	261.8	-28.8	76.4	0.0	0.0	M	101.2
2/5/2022 9:00	4.8	260.4	-28.5	75.5	1.0	0.0	M	101.2
2/5/2022 10:00	2.6	251.5	-28.8	74.9	10.8	0.0	M	101.2
2/5/2022 11:00	1.5	135.3	-30.3	75.3	32.7	0.0	M	101.2
2/5/2022 12:00	0.8	147.0	-29.4	75.3	46.9	0.0	M	101.2
2/5/2022 13:00	1.3	157.3	-28.4	75.4	48.6	0.0	M	101.2
2/5/2022 14:00	3.3	201.1	-27.7	75.6	28.7	0.0	M	101.2
2/5/2022 15:00	3.8	198.9	-27.0	75.8	18.2	0.0	M	101.1
2/5/2022 16:00	4.0	166.5	-27.0	76.7	4.3	0.0	M	101.1
2/5/2022 17:00	2.3	117.8	-26.1	79.4	0.2	0.0	M	101.1
2/5/2022 18:00	2.9	136.0	-26.9	78.6	0.0	0.0	M	101.0
2/5/2022 19:00	3.1	162.1	-27.5	77.8	0.0	0.0	M	101.0
2/5/2022 20:00	2.9	148.0	-27.8	77.4	0.0	0.0	M	100.9
2/5/2022 21:00	2.4	132.9	-27.3	78.4	0.0	0.0	M	100.9
2/5/2022 22:00	1.9	102.3	-27.1	78.4	0.0	0.0	M	100.8
2/5/2022 23:00	2.3	141.9	-26.7	78.0	0.0	0.0	M	100.7
2/6/2022 0:00	3.3	169.8	-26.6	76.9	0.0	0.0	M	100.6
2/6/2022 1:00	3.5	132.5	-26.0	76.7	0.0	0.0	M	100.5
2/6/2022 2:00	5.8	188.4	-24.4	74.2	0.0	0.0	M	100.3
2/6/2022 3:00	5.4	172.5	-24.5	71.4	0.0	0.0	M	100.2
2/6/2022 4:00	5.2	113.7	-24.7	76.2	0.0	0.0	M	100.1
2/6/2022 5:00	4.0	113.7	-25.7	78.7	0.0	0.0	M	100.0
2/6/2022 6:00	1.8	103.3	-27.0	78.1	0.0	0.0	M	99.8
2/6/2022 7:00	4.4	165.7	-26.8	76.6	0.0	0.0	M	99.7

2/6/2022 8:00	0.9	81.7	-27.3	77.5	0.0	0.0	M	99.7
2/6/2022 9:00	0.7	22.6	-27.6	77.4	1.3	0.0	M	99.6
2/6/2022 10:00	1.5	161.4	-27.1	78.2	7.8	0.0	M	99.5
2/6/2022 11:00	5.0	256.1	-25.7	73.0	37.6	0.0	M	99.4
2/6/2022 12:00	4.4	264.7	-25.6	71.7	57.9	0.0	M	99.4
2/6/2022 13:00	4.6	253.1	-26.2	71.1	92.6	0.0	M	99.4
2/6/2022 14:00	4.0	244.4	-26.5	69.3	106.0	0.0	M	99.3
2/6/2022 15:00	4.7	244.6	-26.8	70.1	53.4	0.0	M	99.3
2/6/2022 16:00	4.0	254.7	-26.7	71.7	6.7	0.0	M	99.3
2/6/2022 17:00	4.9	272.9	-27.0	72.6	0.3	0.0	M	99.2
2/6/2022 18:00	3.6	274.5	-28.1	74.2	0.0	0.0	M	99.2
2/6/2022 19:00	6.0	260.0	-28.3	74.6	0.0	0.0	M	99.3
2/6/2022 20:00	6.8	252.7	-29.8	75.9	0.0	0.0	M	99.2
2/6/2022 21:00	10.8	270.7	-29.5	76.0	0.0	0.0	M	99.2
2/6/2022 22:00	8.7	265.4	-29.8	74.7	0.0	0.0	M	99.2
2/6/2022 23:00	7.0	275.2	-30.1	75.2	0.0	0.0	M	99.2
2/7/2022 0:00	8.9	277.7	-29.8	76.0	0.0	0.0	M	99.2
2/7/2022 1:00	6.2	287.2	-29.5	76.0	0.0	0.0	M	99.3
2/7/2022 2:00	7.4	279.1	-29.1	75.8	0.0	0.0	M	99.3
2/7/2022 3:00	5.9	283.1	-28.7	76.0	0.0	0.0	M	99.3
2/7/2022 4:00	6.1	294.9	-28.8	75.8	0.0	0.0	M	99.3
2/7/2022 5:00	5.1	295.6	-28.9	75.5	0.0	0.0	M	99.4
2/7/2022 6:00	3.9	307.8	-29.0	74.8	0.0	0.0	M	99.4
2/7/2022 7:00	3.1	333.1	-29.3	74.2	0.0	0.0	M	99.4
2/7/2022 8:00	3.3	2.2	-29.4	74.0	0.0	0.0	M	99.4
2/7/2022 9:00	3.7	4.6	-29.6	73.7	0.7	0.0	M	99.4
2/7/2022 10:00	2.9	356.0	-29.7	72.8	8.6	0.0	M	99.4
2/7/2022 11:00	3.3	356.6	-29.4	72.6	29.7	0.0	M	99.6
2/7/2022 12:00	3.2	354.2	-29.4	71.8	48.4	0.0	M	99.7
2/7/2022 13:00	4.2	359.8	-29.8	71.7	53.3	0.0	M	99.7
2/7/2022 14:00	4.2	357.8	-30.4	71.3	40.2	0.0	M	99.8
2/7/2022 15:00	4.0	346.6	-31.2	70.8	33.0	0.0	M	99.9
2/7/2022 16:00	3.8	336.2	-31.6	70.8	9.0	0.0	M	100.1
2/7/2022 17:00	3.0	324.3	-31.4	71.5	0.4	0.0	M	100.2
2/7/2022 18:00	5.1	341.6	-32.0	71.6	0.0	0.0	M	100.3
2/7/2022 19:00	5.3	349.6	-32.5	70.3	0.0	0.0	M	100.4
2/7/2022 20:00	4.5	332.5	-33.0	68.7	0.0	0.0	M	100.5
2/7/2022 21:00	3.3	279.1	-34.3	69.7	0.0	0.0	M	100.6
2/7/2022 22:00	6.2	281.8	-35.2	70.7	0.0	0.0	M	100.7
2/7/2022 23:00	9.1	286.6	-35.5	70.0	0.0	0.0	M	100.8
2/8/2022 0:00	7.7	279.6	-35.7	69.5	0.0	0.0	M	100.9
2/8/2022 1:00	8.3	276.0	-36.1	69.5	0.0	0.0	M	101.0
2/8/2022 2:00	10.1	279.7	-36.7	69.1	0.0	0.0	M	100.4
2/8/2022 3:00	7.8	278.8	-36.3	69.1	0.0	0.0	M	101.1
2/8/2022 4:00	9.0	276.5	-35.8	69.7	0.0	0.0	M	101.1
2/8/2022 5:00	9.8	279.2	-36.1	69.5	0.0	0.0	M	101.2
2/8/2022 6:00	7.8	269.7	-35.6	69.5	0.0	0.0	M	101.2
2/8/2022 7:00	10.0	268.9	-35.1	69.6	0.0	0.0	M	101.2
2/8/2022 8:00	12.0	273.0	-35.3	69.7	0.0	0.0	M	101.2
2/8/2022 9:00	11.5	270.4	-35.4	69.1	1.9	0.0	M	101.3
2/8/2022 10:00	11.5	268.2	-35.4	68.9	15.6	0.0	M	101.3
2/8/2022 11:00	12.3	268.3	-35.5	68.7	48.2	0.0	M	101.2
2/8/2022 12:00	12.9	264.7	-35.4	68.7	96.8	0.0	M	101.3
2/8/2022 13:00	12.9	259.5	-35.3	68.7	101.2	0.0	M	101.3
2/8/2022 14:00	14.4	264.0	-35.3	68.8	48.0	0.0	M	101.2
2/8/2022 15:00	14.8	265.5	-35.2	68.7	32.1	0.0	M	101.2
2/8/2022 16:00	13.2	267.5	-35.2	68.8	10.6	0.0	M	101.2
2/8/2022 17:00	13.7	266.3	-35.3	68.7	0.8	0.0	M	101.2
2/8/2022 18:00	14.9	264.4	-35.2	68.8	0.0	0.0	M	101.1
2/8/2022 19:00	14.8	264.0	-35.3	68.9	0.0	0.0	M	101.1
2/8/2022 20:00	14.6	265.9	-35.3	68.7	0.0	0.0	M	101.2
2/8/2022 21:00	15.2	267.3	-35.3	68.9	0.0	0.0	M	101.1
2/8/2022 22:00	16.2	266.4	-35.3	68.7	0.0	0.0	M	101.1
2/8/2022 23:00	17.8	268.1	-35.2	68.6	0.0	0.0	M	101.0
2/9/2022 0:00	16.0	269.2	-35.4	68.8	0.0	0.0	M	101.1
2/9/2022 1:00	14.5	271.1	-35.5	69.0	0.0	0.0	M	101.2
2/9/2022 2:00	13.0	269.0	-35.5	69.0	0.0	0.0	M	101.3
2/9/2022 3:00	10.2	273.3	-35.5	69.2	0.0	0.0	M	101.5
2/9/2022 4:00	8.3	281.3	-35.7	69.3	0.0	0.0	M	101.5
2/9/2022 5:00	7.0	278.4	-36.0	69.2	0.0	0.0	M	101.5
2/9/2022 6:00	8.0	271.7	-36.2	69.0	0.0	0.0	M	101.6
2/9/2022 7:00	8.8	272.2	-36.3	68.9	0.0	0.0	M	101.6
2/9/2022 8:00	8.3	275.5	-36.3	68.9	0.0	0.0	M	101.8
2/9/2022 9:00	6.4	281.7	-36.6	68.7	2.5	0.0	M	100.8
2/9/2022 10:00	5.0	278.0	-36.8	68.0	33.1	0.0	M	100.8
2/9/2022 11:00	4.1	289.2	-36.5	66.8	88.0	0.0	M	101.8
2/9/2022 12:00	5.9	276.2	-36.2	66.8	122.0	1.0	M	101.8
2/9/2022 13:00	4.1	285.1	-35.5	66.6	134.4	1.0	M	101.8
2/9/2022 14:00	6.6	287.9	-35.9	66.7	119.4	0.0	M	101.8
2/9/2022 15:00	5.9	287.5	-36.3	67.6	80.2	0.0	M	101.8

2/9/2022 16:00	3.9	291.9	-37.1	67.9	18.4	0.0	M	100.2
2/9/2022 17:00	2.7	283.9	-37.6	67.6	1.1	0.0	M	97.5
2/9/2022 18:00	3.6	288.7	-37.1	68.5	0.0	0.0	M	98.8
2/9/2022 19:00	1.6	330.7	-37.3	67.9	0.0	0.0	M	97.1
2/9/2022 20:00	0.4	44.2	-37.7	67.7	0.0	0.0	M	95.4
2/9/2022 21:00	0.8	0.7	-38.5	66.8	0.0	0.0	M	93.9
2/9/2022 22:00	0.2	85.5	-39.3	66.0	0.0	0.0	M	92.0
2/9/2022 23:00	0.3	85.5	-39.6	65.8	0.0	0.0	M	91.3
2/10/2022 0:00	0.3	85.5	-39.8	65.6	0.0	0.0	M	90.7
2/10/2022 1:00	0.1	85.5	-40.1	65.1	0.0	0.0	M	90.0
2/10/2022 2:00	0.3	85.5	-40.1	65.3	0.0	0.0	M	90.4
2/10/2022 3:00	0.3	85.5	-41.1	64.1	0.0	0.0	M	88.9
2/10/2022 4:00	C	C	-40.8	64.6	0.0	0.0	M	88.6
2/10/2022 5:00	0.5	91.7	-40.9	64.5	0.0	0.0	M	89.1
2/10/2022 6:00	C	C	-41.3	64.0	0.0	0.0	M	87.8
2/10/2022 7:00	0.1	94.4	-41.2	64.0	0.0	0.0	M	87.4
2/10/2022 8:00	0.1	94.4	-41.3	63.9	0.0	0.0	M	88.0
2/10/2022 9:00	0.1	94.4	-41.3	63.9	2.5	0.0	M	87.8
2/10/2022 10:00	0.1	94.4	-40.8	64.1	22.6	0.0	M	89.7
2/10/2022 11:00	0.1	94.4	-38.4	66.3	89.5	0.0	M	98.4
2/10/2022 12:00	0.1	94.3	-37.4	65.9	116.6	0.0	M	102.4
2/10/2022 13:00	0.2	94.3	-36.7	66.0	138.3	1.0	M	102.4
2/10/2022 14:00	0.3	94.2	-36.3	66.6	130.0	1.0	M	102.4
2/10/2022 15:00	0.3	94.3	-36.5	67.2	92.0	0.0	M	102.5
2/10/2022 16:00	0.2	94.3	-38.1	66.5	31.2	0.0	M	102.3
2/10/2022 17:00	0.1	94.3	-38.6	66.3	1.3	0.0	M	96.6
2/10/2022 18:00	0.3	94.3	-39.0	66.1	0.0	0.0	M	94.4
2/10/2022 19:00	C	C	-38.9	66.4	0.0	0.0	M	93.5
2/10/2022 20:00	0.2	94.3	-38.7	66.4	0.0	0.0	M	93.4
2/10/2022 21:00	0.1	94.3	-38.8	66.4	0.0	0.0	M	93.4
2/10/2022 22:00	0.2	94.3	-38.8	66.4	0.0	0.0	M	93.3
2/10/2022 23:00	0.3	94.3	-38.7	66.5	0.0	0.0	M	93.9
2/11/2022 0:00	0.6	94.3	-38.0	67.3	0.0	0.0	M	95.2
2/11/2022 1:00	1.0	94.4	-37.1	68.2	0.0	0.0	M	98.1
2/11/2022 2:00	0.7	94.4	-36.7	68.4	0.0	0.0	M	99.1
2/11/2022 3:00	1.5	112.4	-36.2	69.2	0.0	0.0	M	100.8
2/11/2022 4:00	2.0	144.1	-35.6	69.7	0.0	0.0	M	102.0
2/11/2022 5:00	1.0	124.3	-36.0	69.0	0.0	0.0	M	102.0
2/11/2022 6:00	0.2	111.0	-36.0	69.1	0.0	0.0	M	102.0
2/11/2022 7:00	0.2	104.8	-35.5	69.5	0.0	0.0	M	101.9
2/11/2022 8:00	C	C	-35.0	69.9	0.0	0.0	M	101.9
2/11/2022 9:00	0.1	11.8	-34.5	70.4	2.9	0.0	M	101.8
2/11/2022 10:00	0.2	11.8	-33.8	70.8	16.6	0.0	M	101.8
2/11/2022 11:00	0.1	11.8	-32.7	71.5	43.3	0.0	M	101.8
2/11/2022 12:00	0.3	11.8	-31.6	71.8	87.1	0.0	M	101.8
2/11/2022 13:00	0.1	11.7	-29.9	73.3	92.8	0.0	M	101.7
2/11/2022 14:00	0.1	11.6	-27.2	72.8	121.2	1.0	M	101.8
2/11/2022 15:00	4.8	276.7	-27.9	75.2	41.4	0.0	M	101.8
2/11/2022 16:00	9.8	269.1	-28.2	75.7	19.3	0.0	M	101.8
2/11/2022 17:00	10.3	270.4	-29.3	74.4	1.6	0.0	M	101.8
2/11/2022 18:00	10.8	269.9	-29.6	73.9	0.0	0.0	M	101.8
2/11/2022 19:00	9.9	268.5	-29.5	73.7	0.0	0.0	M	101.8
2/11/2022 20:00	10.8	268.8	-29.7	73.5	0.0	0.0	M	101.8
2/11/2022 21:00	12.1	271.4	-30.4	73.6	0.0	0.0	M	101.8
2/11/2022 22:00	11.6	271.7	-30.8	73.8	0.0	0.0	M	101.8
2/11/2022 23:00	10.2	272.3	-31.3	73.7	0.0	0.0	M	101.9
2/12/2022 0:00	10.5	269.2	-31.7	73.1	0.0	0.0	M	101.9
2/12/2022 1:00	10.2	267.1	-31.9	72.1	0.0	0.0	M	102.0
2/12/2022 2:00	10.7	270.8	-32.6	71.1	0.0	0.0	M	102.0
2/12/2022 3:00	10.7	276.8	-33.3	70.6	0.0	0.0	M	102.0
2/12/2022 4:00	10.6	278.2	-33.4	71.2	0.0	0.0	M	102.0
2/12/2022 5:00	11.2	272.5	-33.4	70.3	0.0	0.0	M	101.9
2/12/2022 6:00	12.9	269.4	-32.6	70.0	0.0	0.0	M	101.9
2/12/2022 7:00	12.7	267.8	-32.6	70.6	0.0	0.0	M	101.9
2/12/2022 8:00	11.9	269.4	-33.0	70.7	0.0	0.0	M	101.9
2/12/2022 9:00	12.1	269.7	-33.2	70.7	3.9	0.0	M	101.8
2/12/2022 10:00	12.5	270.1	-33.2	70.2	32.9	0.0	M	101.9
2/12/2022 11:00	12.4	271.2	-33.1	70.0	81.4	0.0	M	101.9
2/12/2022 12:00	10.1	267.7	-33.0	69.6	120.8	1.0	M	101.9
2/12/2022 13:00	9.5	263.9	-32.9	69.5	128.6	1.0	M	101.9
2/12/2022 14:00	8.4	268.0	-32.7	69.8	110.0	0.0	M	101.9
2/12/2022 15:00	9.2	269.0	-32.9	70.3	60.6	0.0	M	101.9
2/12/2022 16:00	8.0	273.6	-33.3	71.0	20.6	0.0	M	102.0
2/12/2022 17:00	8.8	267.0	-33.5	71.1	2.6	0.0	M	101.9
2/12/2022 18:00	10.5	265.9	-33.3	71.0	0.0	0.0	M	101.8
2/12/2022 19:00	11.4	270.8	-33.6	71.4	0.0	0.0	M	101.7
2/12/2022 20:00	9.5	275.4	-33.7	71.3	0.0	0.0	M	101.8
2/12/2022 21:00	8.1	282.9	-34.0	71.3	0.0	0.0	M	101.8
2/12/2022 22:00	8.6	275.5	-33.9	71.3	0.0	0.0	M	101.8
2/12/2022 23:00	7.3	275.3	-34.0	70.9	0.0	0.0	M	101.9

2/13/2022 0:00	6.3	278.5	-34.1	71.1	0.0	0.0	M	101.9
2/13/2022 1:00	6.5	291.4	-34.2	71.1	0.0	0.0	M	102.0
2/13/2022 2:00	4.1	294.6	-35.0	70.4	0.0	0.0	M	102.0
2/13/2022 3:00	4.6	289.6	-35.5	70.1	0.0	0.0	M	102.0
2/13/2022 4:00	6.4	284.6	-35.4	70.0	0.0	0.0	M	102.1
2/13/2022 5:00	6.1	292.3	-35.6	69.7	0.0	0.0	M	102.1
2/13/2022 6:00	2.9	274.6	-35.7	69.6	0.0	0.0	M	102.1
2/13/2022 7:00	5.6	274.6	-35.9	69.7	0.0	0.0	M	102.1
2/13/2022 8:00	6.0	280.0	-35.9	69.8	0.0	0.0	M	102.1
2/13/2022 9:00	7.4	274.6	-35.7	70.0	4.9	0.0	M	102.1
2/13/2022 10:00	8.9	275.1	-35.0	69.9	44.9	0.0	M	102.1
2/13/2022 11:00	8.6	276.0	-34.4	69.6	92.0	0.0	M	102.0
2/13/2022 12:00	10.5	274.9	-34.1	69.8	119.2	0.0	M	102.0
2/13/2022 13:00	10.7	276.2	-33.8	69.9	127.4	1.0	M	102.0
2/13/2022 14:00	11.7	273.6	-33.5	70.4	116.7	0.0	M	102.0
2/13/2022 15:00	10.7	275.2	-33.6	70.7	81.4	0.0	M	102.1
2/13/2022 16:00	10.2	273.4	-33.4	71.6	29.2	0.0	M	102.1
2/13/2022 17:00	9.6	266.3	-33.5	71.8	2.6	0.0	M	102.1
2/13/2022 18:00	11.3	260.9	-33.5	71.7	0.0	0.0	M	102.0
2/13/2022 19:00	11.2	263.2	-33.5	71.7	0.0	0.0	M	102.0
2/13/2022 20:00	10.7	266.2	-33.6	71.5	0.0	0.0	M	102.0
2/13/2022 21:00	9.7	268.6	-34.0	71.2	0.0	0.0	M	102.0
2/13/2022 22:00	10.4	267.7	-34.1	71.3	0.0	0.0	M	101.9
2/13/2022 23:00	10.0	267.7	-34.0	71.4	0.0	0.0	M	101.8
2/14/2022 0:00	12.6	261.8	-33.9	71.5	0.0	0.0	M	101.8
2/14/2022 1:00	11.1	261.2	-34.0	71.4	0.0	0.0	M	101.8
2/14/2022 2:00	11.2	264.2	-33.8	71.5	0.0	0.0	M	101.8
2/14/2022 3:00	11.6	264.4	-33.7	71.6	0.0	0.0	M	101.8
2/14/2022 4:00	10.7	262.3	-33.6	71.8	0.0	0.0	M	101.7
2/14/2022 5:00	11.5	264.0	-33.5	71.8	0.0	0.0	M	101.7
2/14/2022 6:00	10.8	265.8	-33.5	71.6	0.0	0.0	M	101.7
2/14/2022 7:00	8.9	267.3	-33.4	71.7	0.0	0.0	M	101.6
2/14/2022 8:00	10.1	267.6	-33.5	71.8	0.0	0.0	M	101.5
2/14/2022 9:00	11.2	270.0	-33.3	71.9	8.0	0.0	M	101.6
2/14/2022 10:00	9.3	274.4	-33.0	71.5	35.0	0.0	M	101.6
2/14/2022 11:00	9.0	275.4	-32.7	71.7	70.0	0.0	M	101.6
2/14/2022 12:00	10.1	274.4	-32.3	71.9	70.8	0.0	M	101.5
2/14/2022 13:00	8.6	273.7	-32.1	72.0	77.5	0.0	M	101.6
2/14/2022 14:00	7.2	278.8	-31.9	72.1	77.3	0.0	M	101.5
2/14/2022 15:00	8.6	277.0	-32.1	72.0	37.4	0.0	M	101.5
2/14/2022 16:00	9.0	272.5	-32.0	72.1	25.2	0.0	M	101.5
2/14/2022 17:00	8.7	269.1	-31.9	72.4	2.6	0.0	M	101.5
2/14/2022 18:00	9.7	269.9	-31.9	72.3	0.0	0.0	M	101.5
2/14/2022 19:00	11.4	274.8	-32.2	72.4	0.0	0.0	M	101.4
2/14/2022 20:00	12.8	270.6	-32.4	72.2	0.0	0.0	M	101.3
2/14/2022 21:00	14.7	270.3	-32.5	71.9	0.0	0.0	M	101.3
2/14/2022 22:00	12.8	269.3	-32.6	71.5	0.0	0.0	M	101.3
2/14/2022 23:00	12.4	266.0	-33.1	71.1	0.0	0.0	M	101.3
2/15/2022 0:00	11.7	269.4	-33.5	71.1	0.0	0.0	M	101.3
2/15/2022 1:00	10.9	273.3	-33.7	71.1	0.0	0.0	M	101.4
2/15/2022 2:00	11.5	272.4	-34.0	70.9	0.0	0.0	M	101.3
2/15/2022 3:00	14.0	273.2	-33.9	70.6	0.0	0.0	M	101.3
2/15/2022 4:00	14.2	277.5	-34.5	70.3	0.0	0.0	M	101.3
2/15/2022 5:00	12.5	272.5	-34.7	70.4	0.0	0.0	M	101.2
2/15/2022 6:00	11.9	266.6	-34.8	69.8	0.0	0.0	M	101.3
2/15/2022 7:00	11.0	264.5	-34.9	69.7	0.0	0.0	M	101.3
2/15/2022 8:00	11.2	261.0	-35.1	69.7	0.1	0.0	M	101.2
2/15/2022 9:00	14.3	262.9	-35.1	69.5	6.9	0.0	M	101.1
2/15/2022 10:00	13.5	262.1	-35.1	69.4	35.8	0.0	M	101.2
2/15/2022 11:00	14.3	264.5	-35.0	69.2	80.4	0.0	M	101.1
2/15/2022 12:00	15.2	265.3	-34.6	69.2	105.7	0.0	M	101.0
2/15/2022 13:00	15.2	265.3	-34.5	69.1	107.3	0.0	M	101.0
2/15/2022 14:00	16.1	264.5	-34.2	69.6	78.1	0.0	M	100.9
2/15/2022 15:00	16.1	264.0	-33.7	70.3	51.8	0.0	M	100.9
2/15/2022 16:00	15.4	266.3	-33.5	70.9	22.6	0.0	M	101.0
2/15/2022 17:00	16.6	268.8	-33.1	71.0	3.1	0.0	M	100.9
2/15/2022 18:00	15.5	269.3	-33.0	70.9	0.0	0.0	M	100.9
2/15/2022 19:00	16.5	270.5	-32.6	71.5	0.0	0.0	M	100.8
2/15/2022 20:00	15.8	270.1	-31.7	72.6	0.0	0.0	M	100.9
2/15/2022 21:00	15.1	268.2	-31.3	72.8	0.0	0.0	M	100.8
2/15/2022 22:00	13.8	267.2	-30.7	73.4	0.0	0.0	M	100.9
2/15/2022 23:00	14.3	266.5	-30.3	73.9	0.0	0.0	M	100.8
2/16/2022 0:00	12.5	264.9	-29.7	75.0	0.0	0.0	M	100.9
2/16/2022 1:00	12.6	261.7	-29.5	75.4	0.0	0.0	M	100.9
2/16/2022 2:00	14.2	265.4	-29.2	75.8	0.0	0.0	M	100.9
2/16/2022 3:00	14.5	267.0	-29.2	75.7	0.0	0.0	M	100.9
2/16/2022 4:00	15.7	265.8	-29.0	75.9	0.0	0.0	M	100.5
2/16/2022 5:00	16.6	266.3	-28.8	76.1	0.0	0.0	M	100.8
2/16/2022 6:00	14.5	267.3	-28.7	76.1	0.0	0.0	M	100.9
2/16/2022 7:00	13.9	269.9	-28.9	75.8	0.0	0.0	M	100.9

2/16/2022 8:00	15.3	268.5	-29.6	75.1	0.1	0.0	M	100.8
2/16/2022 9:00	16.3	269.8	-30.1	74.7	5.6	0.0	M	100.8
2/16/2022 10:00	15.3	270.2	-30.1	74.6	30.8	0.0	M	100.8
2/16/2022 11:00	14.3	272.0	-29.7	74.8	72.2	0.0	M	100.8
2/16/2022 12:00	14.5	271.1	-29.0	75.5	103.0	0.0	M	100.7
2/16/2022 13:00	15.2	268.6	-29.1	75.4	77.4	0.0	M	100.8
2/16/2022 14:00	14.9	268.4	-29.0	75.6	75.7	0.0	M	100.8
2/16/2022 15:00	13.8	266.9	-28.9	75.8	48.9	0.0	M	100.8
2/16/2022 16:00	11.2	266.3	-28.8	76.0	25.1	0.0	M	100.8
2/16/2022 17:00	14.0	265.4	-28.3	76.6	3.4	0.0	M	100.6
2/16/2022 18:00	16.4	266.9	-28.5	76.2	0.0	0.0	M	100.4
2/16/2022 19:00	15.2	267.9	-28.4	76.2	0.0	0.0	M	100.4
2/16/2022 20:00	16.1	271.2	-28.4	76.1	0.0	0.0	M	100.4
2/16/2022 21:00	15.5	274.0	-28.2	76.4	0.0	0.0	M	100.3
2/16/2022 22:00	16.1	276.1	-27.8	77.2	0.0	0.0	M	100.1
2/16/2022 23:00	18.4	270.8	-27.7	77.2	0.0	0.0	M	100.0
2/17/2022 0:00	18.4	272.6	-27.7	77.2	0.0	0.0	M	100.0
2/17/2022 1:00	18.6	270.8	-27.9	76.6	0.0	0.0	M	100.0
2/17/2022 2:00	16.0	275.2	-28.1	76.8	0.0	0.0	M	100.1
2/17/2022 3:00	17.3	271.4	-28.3	76.0	0.0	0.0	M	100.1
2/17/2022 4:00	16.9	271.0	-28.1	75.8	0.0	0.0	M	99.9
2/17/2022 5:00	16.4	270.3	-27.7	76.6	0.0	0.0	M	99.9
2/17/2022 6:00	16.5	271.7	-27.8	77.3	0.0	0.0	M	99.8
2/17/2022 7:00	15.3	268.3	-27.6	76.8	0.0	0.0	M	99.9
2/17/2022 8:00	14.7	270.0	-27.7	76.8	0.1	0.0	M	99.9
2/17/2022 9:00	13.3	269.5	-28.0	76.7	6.7	0.0	M	99.9
2/17/2022 10:00	13.6	268.5	-28.2	76.4	33.7	0.0	M	99.8
2/17/2022 11:00	14.9	267.6	-28.2	76.0	70.7	0.0	M	99.8
2/17/2022 12:00	15.3	270.1	-28.2	76.0	125.2	1.0	M	99.8
2/17/2022 13:00	14.1	270.0	-28.3	76.5	63.5	0.0	M	99.8
2/17/2022 14:00	15.6	269.0	-28.5	76.1	44.8	0.0	M	99.8
2/17/2022 15:00	15.3	269.0	-28.5	76.1	43.0	0.0	M	99.8
2/17/2022 16:00	13.6	267.9	-28.2	76.8	15.3	0.0	M	99.9
2/17/2022 17:00	12.4	271.1	-27.7	77.6	3.0	0.0	M	99.9
2/17/2022 18:00	11.2	278.7	-27.5	77.9	0.0	0.0	M	99.9
2/17/2022 19:00	12.2	281.8	-28.3	76.9	0.0	0.0	M	100.0
2/17/2022 20:00	10.8	285.5	-29.6	75.7	0.0	0.0	M	100.0
2/17/2022 21:00	9.1	288.1	-30.4	75.0	0.0	0.0	M	100.1
2/17/2022 22:00	9.7	295.8	-31.2	74.0	0.0	0.0	M	100.1
2/17/2022 23:00	10.1	309.1	-33.2	71.6	0.0	0.0	M	100.2
2/18/2022 0:00	10.1	319.3	-35.6	68.9	0.0	0.0	M	100.3
2/18/2022 1:00	9.5	310.7	-36.5	68.2	0.0	0.0	M	100.4
2/18/2022 2:00	10.1	298.7	-37.0	67.6	0.0	0.0	M	99.1
2/18/2022 3:00	7.4	298.6	-37.2	67.4	0.0	0.0	M	98.2
2/18/2022 4:00	8.3	313.2	-37.7	67.1	0.0	0.0	M	97.0
2/18/2022 5:00	8.9	316.3	-37.9	66.7	0.0	0.0	M	96.6
2/18/2022 6:00	8.5	297.4	-38.1	66.5	0.0	0.0	M	95.9
2/18/2022 7:00	7.3	291.7	-38.3	66.7	0.0	0.0	M	95.3
2/18/2022 8:00	9.7	297.0	-38.2	67.0	0.4	0.0	M	95.7
2/18/2022 9:00	8.6	290.8	-38.3	66.6	14.1	0.0	M	95.6
2/18/2022 10:00	8.1	287.0	-37.7	66.3	72.9	0.0	M	98.0
2/18/2022 11:00	8.0	295.2	-36.9	65.5	126.4	1.0	M	100.9
2/18/2022 12:00	8.7	301.9	-36.4	65.3	160.0	1.0	M	101.0
2/18/2022 13:00	7.7	298.5	-36.3	65.4	168.7	1.0	M	101.0
2/18/2022 14:00	7.7	282.5	-36.0	65.9	153.6	1.0	M	101.0
2/18/2022 15:00	7.8	284.2	-35.8	66.7	110.2	0.0	M	101.0
2/18/2022 16:00	8.0	293.3	-36.0	67.5	55.8	0.0	M	101.0
2/18/2022 17:00	9.0	291.3	-36.1	68.2	7.6	0.0	M	100.9
2/18/2022 18:00	8.5	283.1	-35.9	68.8	0.1	0.0	M	100.9
2/18/2022 19:00	8.9	284.4	-35.4	69.4	0.0	0.0	M	100.9
2/18/2022 20:00	8.3	288.5	-34.9	70.0	0.0	0.0	M	100.9
2/18/2022 21:00	7.7	292.2	-34.8	70.3	0.0	0.0	M	100.9
2/18/2022 22:00	6.3	291.9	-34.7	70.3	0.0	0.0	M	100.9
2/18/2022 23:00	7.5	295.7	-34.8	70.2	0.0	0.0	M	100.9
2/19/2022 0:00	5.4	299.7	-34.8	69.5	0.0	0.0	M	100.9
2/19/2022 1:00	5.9	304.5	-35.2	69.5	0.0	0.0	M	100.9
2/19/2022 2:00	5.0	287.7	-35.7	68.6	0.0	0.0	M	100.9
2/19/2022 3:00	4.1	273.5	-36.9	68.2	0.0	0.0	M	98.5
2/19/2022 4:00	3.5	275.5	-37.3	67.9	0.0	0.0	M	97.5
2/19/2022 5:00	3.7	272.6	-37.8	67.7	0.0	0.0	M	96.0
2/19/2022 6:00	2.1	290.9	-38.3	67.3	0.0	0.0	M	94.2
2/19/2022 7:00	2.9	305.9	-38.6	67.1	0.0	0.0	M	94.1
2/19/2022 8:00	2.6	290.0	-38.3	67.3	0.7	0.0	M	94.6
2/19/2022 9:00	7.5	284.5	-37.9	67.6	18.5	0.0	M	96.8
2/19/2022 10:00	8.6	279.6	-36.8	67.5	82.4	0.0	M	100.8
2/19/2022 11:00	9.7	283.2	-36.3	67.0	142.9	1.0	M	101.2
2/19/2022 12:00	8.8	282.5	-35.8	67.1	182.7	1.0	M	101.3
2/19/2022 13:00	7.6	280.6	-35.4	67.5	193.5	1.0	M	101.4
2/19/2022 14:00	6.6	276.0	-35.3	67.9	179.8	1.0	M	101.4
2/19/2022 15:00	7.9	281.4	-35.0	68.7	134.3	1.0	M	101.4

2/19/2022 16:00	7.7	283.5	-35.2	69.4	69.1	0.0	M	101.5
2/19/2022 17:00	6.1	283.8	-35.5	70.1	9.5	0.0	M	101.6
2/19/2022 18:00	6.0	281.2	-35.2	70.7	0.3	0.0	M	101.6
2/19/2022 19:00	7.6	272.9	-34.8	71.0	0.0	0.0	M	101.6
2/19/2022 20:00	10.0	271.4	-34.4	71.0	0.0	0.0	M	101.5
2/19/2022 21:00	11.5	273.9	-34.2	70.6	0.0	0.0	M	101.5
2/19/2022 22:00	13.1	273.8	-33.9	71.1	0.0	0.0	M	101.5
2/19/2022 23:00	15.2	270.6	-33.7	71.5	0.0	0.0	M	101.4
2/20/2022 0:00	14.0	267.4	-33.5	71.6	0.0	0.0	M	101.5
2/20/2022 1:00	10.5	262.8	-33.1	71.8	0.0	0.0	M	101.6
2/20/2022 2:00	7.7	267.4	-32.6	72.5	0.0	0.0	M	101.7
2/20/2022 3:00	6.3	273.3	-32.7	72.6	0.0	0.0	M	101.7
2/20/2022 4:00	10.1	264.2	-32.4	72.9	0.0	0.0	M	101.6
2/20/2022 5:00	10.0	266.3	-32.3	73.3	0.0	0.0	M	101.7
2/20/2022 6:00	10.4	264.9	-32.1	73.5	0.0	0.0	M	101.7
2/20/2022 7:00	10.3	264.0	-32.4	73.1	0.0	0.0	M	101.7
2/20/2022 8:00	11.3	265.1	-32.6	72.9	0.9	0.0	M	101.7
2/20/2022 9:00	12.4	263.4	-32.3	72.9	17.6	0.0	M	101.7
2/20/2022 10:00	12.3	265.1	-32.2	72.1	67.0	0.0	M	101.7
2/20/2022 11:00	13.6	267.7	-32.2	71.5	115.8	0.0	M	101.7
2/20/2022 12:00	13.1	267.4	-32.0	71.1	156.9	1.0	M	101.8
2/20/2022 13:00	12.2	267.9	-31.8	70.9	178.0	1.0	M	101.7
2/20/2022 14:00	12.1	266.1	-31.8	71.1	172.1	1.0	M	101.8
2/20/2022 15:00	11.1	267.4	-32.0	71.2	135.1	1.0	M	101.8
2/20/2022 16:00	10.9	266.0	-32.5	71.5	78.2	0.0	M	101.8
2/20/2022 17:00	11.9	266.5	-33.0	71.4	12.4	0.0	M	101.8
2/20/2022 18:00	11.6	267.0	-33.3	71.2	0.4	0.0	M	101.8
2/20/2022 19:00	12.1	263.8	-33.4	71.1	0.0	0.0	M	101.8
2/20/2022 20:00	12.5	268.2	-33.4	71.1	0.0	0.0	M	101.8
2/20/2022 21:00	9.6	272.2	-33.8	71.3	0.0	0.0	M	101.9
2/20/2022 22:00	8.7	272.3	-33.7	71.4	0.0	0.0	M	101.8
2/20/2022 23:00	9.4	275.8	-33.3	72.1	0.0	0.0	M	101.8
2/21/2022 0:00	10.3	283.0	-32.5	72.6	0.0	0.0	M	101.8
2/21/2022 1:00	10.8	283.0	-32.6	72.6	0.0	0.0	M	101.9
2/21/2022 2:00	9.9	282.8	-32.3	72.9	0.0	0.0	M	101.9
2/21/2022 3:00	10.0	285.5	-31.5	73.8	0.0	0.0	M	101.9
2/21/2022 4:00	10.3	285.9	-31.3	73.9	0.0	0.0	M	101.9
2/21/2022 5:00	9.3	290.3	-31.3	73.7	0.0	0.0	M	102.0
2/21/2022 6:00	8.0	289.8	-32.1	73.3	0.0	0.0	M	102.0
2/21/2022 7:00	7.6	292.7	-32.1	73.3	0.0	0.0	M	102.0
2/21/2022 8:00	5.9	295.0	-32.2	73.2	1.3	0.0	M	102.0
2/21/2022 9:00	5.3	302.2	-32.2	72.7	26.4	0.0	M	102.1
2/21/2022 10:00	6.5	298.6	-31.5	70.5	86.8	0.0	M	102.2
2/21/2022 11:00	9.3	294.4	-31.4	70.3	142.0	1.0	M	102.2
2/21/2022 12:00	9.2	297.9	-30.3	70.7	179.8	1.0	M	102.1
2/21/2022 13:00	9.3	294.6	-29.8	71.5	195.7	1.0	M	102.2
2/21/2022 14:00	8.5	296.1	-29.1	71.9	185.2	1.0	M	102.3
2/21/2022 15:00	9.5	293.7	-28.8	72.3	141.5	1.0	M	102.4
2/21/2022 16:00	8.4	295.1	-28.8	73.0	78.7	0.0	M	102.5
2/21/2022 17:00	6.3	298.1	-28.9	74.2	11.4	0.0	M	102.5
2/21/2022 18:00	8.3	300.8	-28.5	75.1	0.4	0.0	M	102.6
2/21/2022 19:00	8.9	298.4	-27.9	76.1	0.0	0.0	M	102.6
2/21/2022 20:00	7.1	286.3	-27.9	76.5	0.0	0.0	M	102.7
2/21/2022 21:00	8.7	285.8	-26.6	78.4	0.0	0.0	M	102.6
2/21/2022 22:00	9.5	292.4	-26.3	78.5	0.0	0.0	M	102.7
2/21/2022 23:00	9.6	277.7	-27.4	77.8	0.0	0.0	M	102.8
2/22/2022 0:00	7.1	278.1	-27.6	77.8	0.0	0.0	M	102.7
2/22/2022 1:00	7.5	293.9	-28.0	77.3	0.0	0.0	M	102.8
2/22/2022 2:00	8.8	289.8	-28.0	77.3	0.0	0.0	M	102.8
2/22/2022 3:00	8.7	291.6	-28.5	76.8	0.0	0.0	M	102.8
2/22/2022 4:00	8.0	292.0	-29.1	76.4	0.0	0.0	M	102.9
2/22/2022 5:00	9.6	287.5	-29.7	75.7	0.0	0.0	M	102.8
2/22/2022 6:00	8.3	286.5	-30.7	74.8	0.0	0.0	M	102.8
2/22/2022 7:00	9.6	279.1	-31.5	74.2	0.0	0.0	M	102.8
2/22/2022 8:00	7.4	281.9	-31.8	74.0	1.7	0.0	M	102.8
2/22/2022 9:00	8.2	287.8	-32.0	73.4	27.1	0.0	M	102.8
2/22/2022 10:00	8.1	283.9	-31.4	72.9	83.4	0.0	M	102.7
2/22/2022 11:00	5.0	292.7	-30.6	72.6	124.0	1.0	M	102.7
2/22/2022 12:00	3.6	293.4	-29.9	72.3	172.2	1.0	M	102.7
2/22/2022 13:00	3.9	287.6	-29.3	72.5	189.5	1.0	M	102.7
2/22/2022 14:00	3.7	294.5	-28.9	73.0	180.8	1.0	M	102.7
2/22/2022 15:00	2.6	280.2	-28.3	73.5	147.6	1.0	M	102.7
2/22/2022 16:00	2.3	267.5	-28.8	74.7	91.3	0.0	M	102.6
2/22/2022 17:00	1.2	164.1	-30.1	75.0	14.7	0.0	M	102.5
2/22/2022 18:00	0.6	129.8	-31.6	73.8	0.3	0.0	M	102.5
2/22/2022 19:00	1.2	110.4	-32.7	72.9	0.0	0.0	M	102.4
2/22/2022 20:00	0.3	88.6	-33.4	72.2	0.0	0.0	M	102.4
2/22/2022 21:00	0.9	97.4	-33.2	72.5	0.0	0.0	M	102.3
2/22/2022 22:00	1.0	105.1	-32.8	72.9	0.0	0.0	M	102.2
2/22/2022 23:00	1.7	119.9	-32.3	73.5	0.0	0.0	M	102.1

2/23/2022 0:00	1.2	115.2	-32.0	73.8	0.0	0.0	M	102.0
2/23/2022 1:00	1.8	116.7	-31.4	74.3	0.0	0.0	M	102.0
2/23/2022 2:00	1.1	117.3	-31.3	74.2	0.0	0.0	M	102.0
2/23/2022 3:00	1.5	130.8	-31.2	74.3	0.0	0.0	M	101.9
2/23/2022 4:00	1.3	136.9	-31.0	74.6	0.0	0.0	M	101.8
2/23/2022 5:00	1.4	132.0	-31.1	74.4	0.0	0.0	M	101.8
2/23/2022 6:00	0.7	120.5	-30.8	74.6	0.0	0.0	M	101.7
2/23/2022 7:00	1.1	125.5	-30.8	74.6	0.0	0.0	M	101.7
2/23/2022 8:00	1.7	139.2	-30.5	74.9	1.9	0.0	M	101.6
2/23/2022 9:00	1.4	147.1	-29.8	75.6	21.5	0.0	M	101.6
2/23/2022 10:00	1.1	121.1	-28.2	77.0	55.3	0.0	M	101.5
2/23/2022 11:00	0.9	93.1	-26.5	78.2	94.9	0.0	M	101.5
2/23/2022 12:00	2.5	133.9	-24.7	79.4	139.0	1.0	M	101.4
2/23/2022 13:00	2.5	104.3	-23.5	79.9	138.1	1.0	M	101.4
2/23/2022 14:00	5.7	151.9	-23.3	77.6	120.8	1.0	M	101.3
2/23/2022 15:00	4.8	155.9	-23.8	76.0	88.7	0.0	M	101.3
2/23/2022 16:00	2.4	102.5	-22.4	77.9	43.3	0.0	M	101.2
2/23/2022 17:00	4.4	132.9	-20.9	73.3	10.6	0.0	M	101.1
2/23/2022 18:00	9.0	172.8	-19.1	64.7	0.4	0.0	M	100.9
2/23/2022 19:00	7.8	184.6	-18.3	62.2	0.0	0.0	M	100.9
2/23/2022 20:00	9.5	205.9	-17.3	60.3	0.0	0.0	M	100.8
2/23/2022 21:00	7.8	213.3	-17.1	62.3	0.0	0.0	M	100.7
2/23/2022 22:00	7.9	209.8	-17.7	73.9	0.0	0.0	M	100.6
2/23/2022 23:00	7.6	213.8	-18.1	79.3	0.0	0.0	M	100.5
2/24/2022 0:00	7.5	209.0	-18.2	80.2	0.0	0.0	M	100.5
2/24/2022 1:00	6.5	201.1	-18.5	80.0	0.0	0.0	M	100.4
2/24/2022 2:00	8.0	199.5	-18.7	80.0	0.0	0.0	M	100.4
2/24/2022 3:00	8.0	193.9	-18.6	81.7	0.0	0.0	M	100.3
2/24/2022 4:00	7.6	201.7	-17.9	82.9	0.0	0.0	M	100.2
2/24/2022 5:00	9.3	195.2	-17.3	83.1	0.0	0.0	M	100.0
2/24/2022 6:00	7.2	204.3	-15.5	87.3	0.0	0.0	M	99.9
2/24/2022 7:00	10.6	252.1	-13.4	90.3	0.0	0.0	M	99.9
2/24/2022 8:00	10.9	255.8	-15.0	88.9	1.6	0.0	M	99.9
2/24/2022 9:00	13.8	264.3	-17.8	86.9	16.6	0.0	M	99.8
2/24/2022 10:00	13.0	263.4	-18.6	85.6	63.8	0.0	M	99.9
2/24/2022 11:00	11.8	257.3	-19.6	84.6	87.3	0.0	M	99.7
2/24/2022 12:00	11.8	265.5	-21.5	82.7	84.5	0.0	M	99.8
2/24/2022 13:00	13.4	263.7	-22.4	81.7	172.7	1.0	M	99.8
2/24/2022 14:00	13.8	268.4	-21.5	82.7	118.9	0.0	M	99.7
2/24/2022 15:00	15.0	272.3	-22.1	82.3	84.9	0.0	M	99.9
2/24/2022 16:00	12.4	268.7	-23.5	81.2	57.8	0.0	M	99.8
2/24/2022 17:00	12.9	267.7	-24.0	80.9	12.4	0.0	M	99.9
2/24/2022 18:00	11.2	272.9	-23.9	81.5	0.7	0.0	M	99.9
2/24/2022 19:00	12.6	271.6	-24.3	81.1	0.0	0.0	M	99.8
2/24/2022 20:00	11.0	272.3	-24.5	81.1	0.0	0.0	M	99.8
2/24/2022 21:00	11.2	275.7	-25.0	80.7	0.0	0.0	M	99.8
2/24/2022 22:00	11.3	279.1	-25.1	80.5	0.0	0.0	M	99.7
2/24/2022 23:00	11.4	282.3	-25.4	79.6	0.0	0.0	M	99.8
2/25/2022 0:00	11.2	281.1	-25.7	79.6	0.0	0.0	M	99.8
2/25/2022 1:00	11.0	283.2	-25.2	80.4	0.0	0.0	M	99.8
2/25/2022 2:00	10.7	278.6	-24.9	80.6	0.0	0.0	M	99.8
2/25/2022 3:00	10.0	274.6	-25.0	80.6	0.0	0.0	M	99.8
2/25/2022 4:00	10.6	277.4	-25.2	80.3	0.0	0.0	M	99.8
2/25/2022 5:00	9.5	282.4	-25.3	80.3	0.0	0.0	M	99.8
2/25/2022 6:00	8.1	287.3	-25.6	79.9	0.0	0.0	M	99.9
2/25/2022 7:00	8.2	287.8	-26.4	79.2	0.0	0.0	M	99.9
2/25/2022 8:00	9.6	286.1	-26.7	78.8	5.4	0.0	M	100.0
2/25/2022 9:00	8.5	285.6	-26.2	78.7	52.6	0.0	M	100.0
2/25/2022 10:00	8.4	287.0	-25.5	79.2	83.5	0.0	M	100.0
2/25/2022 11:00	7.7	295.3	-25.0	79.5	103.4	0.0	M	100.1
2/25/2022 12:00	8.9	301.2	-25.0	78.9	139.9	1.0	M	100.1
2/25/2022 13:00	8.3	305.7	-25.4	78.2	132.4	1.0	M	100.2
2/25/2022 14:00	7.3	311.5	-26.3	76.4	147.3	1.0	M	100.3
2/25/2022 15:00	7.7	311.7	-26.8	76.3	124.3	1.0	M	100.4
2/25/2022 16:00	8.2	308.9	-27.2	76.5	60.2	0.0	M	100.5
2/25/2022 17:00	11.4	297.0	-27.3	76.6	16.2	0.0	M	100.6
2/25/2022 18:00	9.5	300.6	-27.5	76.8	1.2	0.0	M	100.6
2/25/2022 19:00	8.4	300.5	-28.0	76.6	0.0	0.0	M	100.7
2/25/2022 20:00	7.4	310.6	-28.2	76.8	0.0	0.0	M	100.8
2/25/2022 21:00	7.9	299.7	-27.9	77.1	0.0	0.0	M	100.9
2/25/2022 22:00	5.6	298.4	-27.9	77.1	0.0	0.0	M	100.9
2/25/2022 23:00	6.0	282.5	-27.6	77.6	0.0	0.0	M	101.0
2/26/2022 0:00	6.0	301.4	-26.7	78.0	0.0	0.0	M	101.1
2/26/2022 1:00	5.4	308.1	-26.3	78.1	0.0	0.0	M	101.2
2/26/2022 2:00	5.6	302.5	-26.3	78.1	0.0	0.0	M	101.3
2/26/2022 3:00	4.0	303.0	-26.5	78.2	0.0	0.0	M	101.3
2/26/2022 4:00	5.8	317.0	-26.0	78.0	0.0	0.0	M	101.4
2/26/2022 5:00	4.7	305.6	-26.6	77.2	0.0	0.0	M	101.5
2/26/2022 6:00	6.2	286.3	-27.3	77.1	0.0	0.0	M	101.5
2/26/2022 7:00	5.7	280.6	-28.1	76.9	0.0	0.0	M	101.5

2/26/2022 8:00	6.6	287.4	-28.1	76.3	6.4	0.0	M	101.6
2/26/2022 9:00	10.4	291.9	-28.1	74.9	53.6	0.0	M	101.6
2/26/2022 10:00	10.8	286.4	-28.0	74.1	118.6	0.0	M	101.7
2/26/2022 11:00	10.1	290.1	-27.7	73.8	174.9	1.0	M	101.7
2/26/2022 12:00	7.9	287.0	-27.2	73.6	211.9	1.0	M	101.8
2/26/2022 13:00	7.6	287.1	-26.9	74.0	223.8	1.0	M	101.8
2/26/2022 14:00	8.3	286.3	-26.5	75.2	207.6	1.0	M	101.9
2/26/2022 15:00	7.5	290.2	-26.3	75.7	166.6	1.0	M	101.9
2/26/2022 16:00	7.7	288.0	-26.6	76.6	105.7	0.0	M	102.0
2/26/2022 17:00	7.4	276.3	-26.9	78.2	30.6	0.0	M	102.0
2/26/2022 18:00	7.9	275.9	-27.3	78.3	1.9	0.0	M	101.9
2/26/2022 19:00	10.3	271.3	-27.8	78.0	0.0	0.0	M	101.9
2/26/2022 20:00	9.7	279.4	-26.9	78.9	0.0	0.0	M	101.8
2/26/2022 21:00	10.5	271.1	-26.5	79.0	0.0	0.0	M	101.7
2/26/2022 22:00	12.9	267.2	-27.1	78.0	0.0	0.0	M	101.6
2/26/2022 23:00	13.5	265.8	-27.5	77.8	0.0	0.0	M	101.4
2/27/2022 0:00	15.0	264.1	-27.3	78.1	0.0	0.0	M	101.5
2/27/2022 1:00	14.3	269.9	-26.2	78.8	0.0	0.0	M	101.4
2/27/2022 2:00	12.4	267.0	-26.2	78.9	0.0	0.0	M	101.4
2/27/2022 3:00	11.5	274.4	-25.5	79.7	0.0	0.0	M	101.5
2/27/2022 4:00	11.3	275.5	-25.6	79.9	0.0	0.0	M	101.4
2/27/2022 5:00	10.6	273.9	-25.6	79.7	0.0	0.0	M	101.4
2/27/2022 6:00	9.4	278.2	-25.7	79.8	0.0	0.0	M	101.5
2/27/2022 7:00	9.0	288.1	-26.8	78.7	0.0	0.0	M	101.4
2/27/2022 8:00	8.7	281.8	-28.1	77.5	5.4	0.0	M	101.3
2/27/2022 9:00	11.1	279.2	-28.1	76.6	58.9	0.0	M	101.3
2/27/2022 10:00	11.7	283.2	-28.2	75.8	118.3	0.0	M	101.3
2/27/2022 11:00	12.3	281.4	-27.8	75.6	200.2	1.0	M	101.2
2/27/2022 12:00	11.9	281.8	-27.0	76.2	226.0	1.0	M	101.2
2/27/2022 13:00	12.6	277.8	-26.0	77.1	227.8	1.0	M	101.1
2/27/2022 14:00	14.5	277.1	-25.0	78.9	198.1	1.0	M	101.2
2/27/2022 15:00	14.8	281.4	-23.7	80.4	109.1	0.0	M	101.1
2/27/2022 16:00	13.9	283.5	-23.1	81.5	82.3	0.0	M	101.0
2/27/2022 17:00	11.7	286.3	-22.4	82.7	24.2	0.0	M	101.2
2/27/2022 18:00	9.7	295.2	-22.1	82.9	1.8	0.0	M	101.1
2/27/2022 19:00	10.7	302.4	-22.6	82.4	0.0	0.0	M	101.2
2/27/2022 20:00	8.7	302.9	-23.3	81.9	0.0	0.0	M	101.2
2/27/2022 21:00	6.9	293.2	-23.6	81.7	0.0	0.0	M	101.2
2/27/2022 22:00	5.6	312.2	-23.9	80.5	0.0	0.0	M	101.2
2/27/2022 23:00	6.3	312.2	-24.3	79.3	0.0	0.0	M	101.2
2/28/2022 0:00	5.0	291.4	-25.5	79.3	0.0	0.0	M	101.2
2/28/2022 1:00	7.1	306.1	-25.4	79.4	0.0	0.0	M	101.2
2/28/2022 2:00	6.2	293.0	-25.4	79.0	0.0	0.0	M	101.2
2/28/2022 3:00	8.8	282.2	-25.4	79.5	0.0	0.0	M	101.2
2/28/2022 4:00	8.5	288.6	-25.3	80.0	0.0	0.0	M	101.1
2/28/2022 5:00	6.6	274.9	-24.3	81.2	0.0	0.0	M	101.0
2/28/2022 6:00	6.2	297.0	-23.0	82.2	0.0	0.0	M	101.1
2/28/2022 7:00	8.1	320.8	-22.8	81.2	0.0	0.0	M	101.0
2/28/2022 8:00	6.3	315.3	-23.8	79.9	5.5	0.0	M	101.0
2/28/2022 9:00	8.1	318.9	-25.1	77.2	53.3	0.0	M	101.1
2/28/2022 10:00	7.5	321.9	-25.9	75.4	96.4	0.0	M	101.1
2/28/2022 11:00	5.8	317.1	-26.1	74.2	157.1	1.0	M	101.2
2/28/2022 12:00	6.9	321.0	-26.2	73.7	216.2	1.0	M	101.2
2/28/2022 13:00	5.9	318.6	-26.3	72.9	235.5	1.0	M	101.3
2/28/2022 14:00	5.2	326.9	-26.5	72.7	220.0	1.0	M	101.3
2/28/2022 15:00	4.9	281.9	-27.0	72.5	176.7	1.0	M	101.4
2/28/2022 16:00	4.9	301.5	-27.4	73.7	113.7	0.0	M	101.5
2/28/2022 17:00	4.4	314.7	-27.5	74.6	37.6	0.0	M	101.6
2/28/2022 18:00	4.1	317.4	-28.2	75.7	2.9	0.0	M	101.6
2/28/2022 19:00	3.7	324.5	-28.5	75.8	0.0	0.0	M	101.7
2/28/2022 20:00	4.4	348.1	-28.8	75.1	0.0	0.0	M	101.8
2/28/2022 21:00	3.1	335.9	-29.2	74.9	0.0	0.0	M	101.9
2/28/2022 22:00	3.3	331.5	-29.4	74.9	0.0	0.0	M	102.0
2/28/2022 23:00	3.7	320.6	-29.5	74.8	0.0	0.0	M	102.1
3/1/2022 0:00	3.1	311.1	-29.9	74.5	0.0	0.0	M	102.2
3/1/2022 1:00	4.3	292.9	-30.9	74.6	0.0	0.0	M	102.2
3/1/2022 2:00	4.7	292.7	-31.4	74.9	0.0	0.0	M	102.4
3/1/2022 3:00	3.5	296.9	-31.4	74.3	0.0	0.0	M	102.4
3/1/2022 4:00	6.2	283.4	-32.4	74.3	0.0	0.0	M	102.4
3/1/2022 5:00	8.2	280.9	-31.9	74.4	0.0	0.0	M	102.5
3/1/2022 6:00	10.0	279.8	-31.6	74.6	0.0	0.0	M	102.4
3/1/2022 7:00	10.8	282.0	-31.5	74.6	0.1	0.0	M	102.4
3/1/2022 8:00	12.3	280.6	-30.9	75.2	7.8	0.0	M	102.4
3/1/2022 9:00	13.6	281.1	-29.9	75.2	61.4	0.0	M	102.4
3/1/2022 10:00	14.7	275.9	-28.8	75.3	147.8	1.0	M	102.4
3/1/2022 11:00	14.8	280.1	-28.4	75.6	180.3	1.0	M	102.4
3/1/2022 12:00	15.7	275.3	-27.2	76.1	243.0	1.0	M	102.3
3/1/2022 13:00	15.4	276.8	-27.1	76.3	261.7	1.0	M	102.4
3/1/2022 14:00	15.6	275.8	-26.5	77.2	184.4	1.0	M	102.4
3/1/2022 15:00	15.3	273.5	-25.7	77.3	174.4	1.0	M	102.3

3/1/2022 16:00	15.8	276.0	-25.4	78.9	112.4	0.0	M	102.3
3/1/2022 17:00	15.1	277.1	-24.8	79.8	42.3	0.0	M	102.4
3/1/2022 18:00	14.7	283.1	-24.9	80.0	3.5	0.0	M	102.4
3/1/2022 19:00	12.3	278.4	-25.4	79.6	0.0	0.0	M	102.5
3/1/2022 20:00	11.0	278.9	-25.8	79.7	0.0	0.0	M	102.6
3/1/2022 21:00	8.5	288.2	-26.0	79.4	0.0	0.0	M	102.6
3/1/2022 22:00	10.1	280.5	-25.8	78.9	0.0	0.0	M	102.5
3/1/2022 23:00	10.7	283.4	-25.4	78.1	0.0	0.0	M	102.5
3/2/2022 0:00	8.0	289.4	-25.3	76.9	0.0	0.0	M	102.7
3/2/2022 1:00	8.9	295.5	-25.3	76.7	0.0	0.0	M	102.6
3/2/2022 2:00	11.9	284.5	-24.7	76.4	0.0	0.0	M	102.6
3/2/2022 3:00	12.0	279.9	-24.6	76.0	0.0	0.0	M	102.6
3/2/2022 4:00	12.1	279.0	-24.9	76.6	0.0	0.0	M	102.6
3/2/2022 5:00	13.0	279.7	-25.1	76.2	0.0	0.0	M	102.6
3/2/2022 6:00	12.3	283.6	-24.9	75.9	0.0	0.0	M	102.6
3/2/2022 7:00	13.5	280.7	-24.9	76.1	0.2	0.0	M	102.6
3/2/2022 8:00	12.3	280.8	-25.1	75.8	14.7	0.0	M	102.6
3/2/2022 9:00	12.0	285.2	-24.9	75.0	78.9	0.0	M	102.6
3/2/2022 10:00	10.7	283.2	-24.1	74.0	148.0	1.0	M	102.6
3/2/2022 11:00	11.0	281.8	-23.1	73.0	206.1	1.0	M	102.5
3/2/2022 12:00	12.0	281.5	-22.4	72.1	245.2	1.0	M	102.5
3/2/2022 13:00	10.7	283.6	-22.3	72.4	256.9	1.0	M	102.5
3/2/2022 14:00	13.0	278.6	-21.9	71.9	240.3	1.0	M	102.5
3/2/2022 15:00	13.3	278.9	-21.8	72.7	196.8	1.0	M	102.5
3/2/2022 16:00	12.1	287.6	-21.8	72.6	134.2	1.0	M	102.6
3/2/2022 17:00	9.5	290.3	-22.0	73.5	54.5	0.0	M	102.6
3/2/2022 18:00	6.5	286.6	-22.6	75.1	3.9	0.0	M	102.6
3/2/2022 19:00	7.4	292.6	-23.4	75.9	0.0	0.0	M	102.6
3/2/2022 20:00	7.7	294.7	-23.1	75.5	0.0	0.0	M	102.6
3/2/2022 21:00	6.8	284.7	-22.9	75.4	0.0	0.0	M	102.6
3/2/2022 22:00	7.0	283.5	-23.1	75.3	0.0	0.0	M	102.5
3/2/2022 23:00	7.9	286.4	-23.0	75.4	0.0	0.0	M	102.5
3/3/2022 0:00	8.2	286.8	-22.9	75.1	0.0	0.0	M	102.5
3/3/2022 1:00	8.9	287.3	-22.5	74.0	0.0	0.0	M	102.4
3/3/2022 2:00	10.1	289.3	-22.4	72.8	0.0	0.0	M	102.5
3/3/2022 3:00	9.4	288.3	-21.7	70.7	0.0	0.0	M	102.5
3/3/2022 4:00	8.5	288.2	-21.3	69.2	0.0	0.0	M	102.5
3/3/2022 5:00	7.7	286.4	-21.4	67.5	0.0	0.0	M	102.5
3/3/2022 6:00	7.3	C	-21.7	67.7	0.0	0.0	M	102.4
3/3/2022 7:00	6.8	285.5	-20.8	64.8	0.3	0.0	M	102.4
3/3/2022 8:00	6.4	287.2	-20.1	62.6	16.7	0.0	M	102.4
3/3/2022 9:00	4.6	286.4	-19.3	59.6	79.1	0.0	M	102.3
3/3/2022 10:00	3.4	258.0	-20.0	60.8	148.1	1.0	M	102.3
3/3/2022 11:00	1.9	193.8	-20.3	62.6	206.7	1.0	M	102.4
3/3/2022 12:00	0.8	126.8	-20.4	66.8	232.1	1.0	M	102.4
3/3/2022 13:00	0.5	162.1	-19.6	63.4	259.8	1.0	M	102.3
3/3/2022 14:00	0.9	106.0	-20.3	63.2	245.5	1.0	M	102.3
3/3/2022 15:00	0.2	64.2	-18.6	58.7	203.1	1.0	M	102.2
3/3/2022 16:00	0.2	232.4	-19.5	59.1	141.8	1.0	M	102.2
3/3/2022 17:00	0.3	72.0	-21.4	64.7	63.4	0.0	M	102.2
3/3/2022 18:00	0.2	38.2	-23.7	71.9	4.5	0.0	M	102.1
3/3/2022 19:00	0.5	78.0	-25.2	75.5	0.0	0.0	M	102.0
3/3/2022 20:00	0.4	47.0	-25.2	75.7	0.0	0.0	M	102.0
3/3/2022 21:00	0.4	59.4	-25.4	74.2	0.0	0.0	M	101.9
3/3/2022 22:00	0.4	81.1	-25.3	73.7	0.0	0.0	M	101.9
3/3/2022 23:00	0.7	69.6	-24.5	71.9	0.0	0.0	M	101.8
3/4/2022 0:00	1.9	64.1	-20.0	64.9	0.0	0.0	M	101.8
3/4/2022 1:00	4.0	182.4	-16.3	58.7	0.0	0.0	M	101.6
3/4/2022 2:00	4.1	157.1	-16.1	59.9	0.0	0.0	M	101.6
3/4/2022 3:00	5.1	180.8	-14.9	59.8	0.0	0.0	M	101.5
3/4/2022 4:00	6.1	211.4	-13.6	59.9	0.0	0.0	M	101.5
3/4/2022 5:00	5.8	208.7	-13.6	63.6	0.0	0.0	M	101.4
3/4/2022 6:00	5.1	210.9	-13.7	72.4	0.0	0.0	M	101.4
3/4/2022 7:00	4.5	211.4	-13.7	75.7	0.1	0.0	M	101.3
3/4/2022 8:00	3.6	216.3	-13.6	77.3	6.1	0.0	M	101.3
3/4/2022 9:00	4.4	217.0	-12.9	79.0	41.3	0.0	M	101.2
3/4/2022 10:00	4.9	212.6	-13.0	81.6	86.0	0.0	M	101.2
3/4/2022 11:00	4.8	213.4	-12.7	79.0	188.9	1.0	M	101.2
3/4/2022 12:00	3.3	219.7	-12.2	74.1	250.0	1.0	M	101.1
3/4/2022 13:00	5.2	249.5	-13.3	78.5	261.6	1.0	M	101.1
3/4/2022 14:00	5.7	257.3	-14.6	78.3	115.5	0.0	M	101.1
3/4/2022 15:00	7.2	269.9	-14.9	75.8	163.9	1.0	M	101.0
3/4/2022 16:00	8.6	270.2	-14.9	74.7	71.4	0.0	M	101.0
3/4/2022 17:00	5.5	274.1	-14.8	78.3	27.1	0.0	M	101.0
3/4/2022 18:00	8.5	272.5	-15.2	81.6	3.3	0.0	M	101.0
3/4/2022 19:00	7.7	274.9	-16.3	84.9	0.0	0.0	M	101.0
3/4/2022 20:00	5.5	273.0	-17.2	86.4	0.0	0.0	M	101.0
3/4/2022 21:00	7.0	271.9	-17.3	86.7	0.0	0.0	M	101.0
3/4/2022 22:00	9.1	272.3	-18.4	85.0	0.0	0.0	M	101.0
3/4/2022 23:00	7.5	265.0	-19.9	84.4	0.0	0.0	M	101.0

3/5/2022 0:00	8.3	267.3	-20.5	84.4	0.0	0.0	M	101.0
3/5/2022 1:00	8.2	275.3	-20.8	84.2	0.0	0.0	M	101.0
3/5/2022 2:00	9.2	283.0	-21.0	83.9	0.0	0.0	M	101.0
3/5/2022 3:00	9.8	280.5	-21.0	84.5	0.0	0.0	M	101.1
3/5/2022 4:00	8.0	287.8	-20.2	85.3	0.0	0.0	M	101.1
3/5/2022 5:00	7.7	294.7	-19.4	81.5	0.0	0.0	M	101.2
3/5/2022 6:00	7.7	292.3	-19.6	80.0	0.0	0.0	M	101.2
3/5/2022 7:00	6.6	313.2	-19.8	79.0	0.4	0.0	M	101.2
3/5/2022 8:00	5.3	303.3	-19.3	79.0	10.5	0.0	M	101.3
3/5/2022 9:00	3.6	317.1	-18.8	79.1	39.2	0.0	M	101.3
3/5/2022 10:00	4.0	301.3	-18.5	79.7	81.5	0.0	M	101.4
3/5/2022 11:00	5.1	295.7	-18.3	80.9	113.7	0.0	M	101.4
3/5/2022 12:00	5.0	294.1	-17.9	80.8	140.4	1.0	M	101.4
3/5/2022 13:00	5.5	297.5	-17.6	80.8	146.9	1.0	M	101.4
3/5/2022 14:00	5.1	312.4	-17.7	80.8	159.4	1.0	M	101.5
3/5/2022 15:00	4.3	323.5	-18.1	78.6	180.3	1.0	M	101.5
3/5/2022 16:00	4.0	303.8	-19.1	79.6	95.4	0.0	M	101.5
3/5/2022 17:00	4.1	281.1	-20.4	82.1	42.7	0.0	M	101.5
3/5/2022 18:00	3.2	265.1	-20.9	81.9	5.1	0.0	M	101.5
3/5/2022 19:00	3.3	291.8	-20.6	80.9	0.0	0.0	M	101.6
3/5/2022 20:00	3.5	288.9	-20.5	82.5	0.0	0.0	M	101.5
3/5/2022 21:00	3.6	284.0	-20.4	84.1	0.0	0.0	M	101.5
3/5/2022 22:00	4.0	290.4	-21.1	84.9	0.0	0.0	M	101.5
3/5/2022 23:00	2.5	290.9	-21.5	84.7	0.0	0.0	M	101.5
3/6/2022 0:00	3.4	295.2	-21.9	84.3	0.0	0.0	M	101.4
3/6/2022 1:00	3.5	294.2	-22.3	84.1	0.0	0.0	M	101.4
3/6/2022 2:00	2.1	261.3	-22.8	83.3	0.0	0.0	M	101.3
3/6/2022 3:00	0.6	125.9	-24.5	81.4	0.0	0.0	M	101.3
3/6/2022 4:00	0.8	97.8	-25.9	80.2	0.0	0.0	M	101.2
3/6/2022 5:00	0.8	98.7	-26.5	79.5	0.0	0.0	M	101.1
3/6/2022 6:00	0.9	79.0	-27.0	79.2	0.0	0.0	M	101.1
3/6/2022 7:00	0.6	73.0	-26.8	79.3	0.7	0.0	M	101.0
3/6/2022 8:00	1.2	105.3	-25.7	80.4	46.1	0.0	M	100.8
3/6/2022 9:00	3.1	138.7	-23.7	82.2	52.0	0.0	M	100.8
3/6/2022 10:00	2.9	139.1	-22.0	83.3	117.2	0.0	M	100.7
3/6/2022 11:00	2.7	128.3	-20.2	85.0	131.9	1.0	M	100.5
3/6/2022 12:00	3.8	147.1	-19.6	84.8	198.7	1.0	M	100.5
3/6/2022 13:00	3.6	152.0	-19.4	85.4	134.7	1.0	M	100.4
3/6/2022 14:00	1.8	141.5	-18.3	86.3	115.1	0.0	M	100.4
3/6/2022 15:00	1.0	105.7	-18.0	87.0	91.0	0.0	M	100.4
3/6/2022 16:00	0.7	74.6	-17.8	87.2	58.1	0.0	M	100.4
3/6/2022 17:00	0.5	46.7	-17.5	87.2	23.2	0.0	M	100.3
3/6/2022 18:00	1.1	53.0	-17.6	87.3	3.4	0.0	M	100.3
3/6/2022 19:00	0.5	36.9	-17.9	87.1	0.0	0.0	M	100.3
3/6/2022 20:00	1.1	16.3	-17.7	87.5	0.0	0.0	M	100.4
3/6/2022 21:00	4.7	316.6	-17.7	87.0	0.0	0.0	M	100.4
3/6/2022 22:00	5.0	316.3	-19.7	85.4	0.0	0.0	M	100.5
3/6/2022 23:00	4.9	317.9	-20.2	84.8	0.0	0.0	M	100.6
3/7/2022 0:00	3.5	296.3	-20.2	84.6	0.0	0.0	M	100.8
3/7/2022 1:00	5.4	289.9	-21.6	83.5	0.0	0.0	M	100.9
3/7/2022 2:00	5.7	295.8	-21.6	83.4	0.0	0.0	M	100.9
3/7/2022 3:00	6.0	281.6	-21.8	83.9	0.0	0.0	M	100.9
3/7/2022 4:00	9.5	277.2	-21.2	84.1	0.0	0.0	M	100.9
3/7/2022 5:00	9.6	279.5	-22.1	83.5	0.0	0.0	M	101.1
3/7/2022 6:00	8.1	280.7	-20.8	85.4	0.0	0.0	M	101.1
3/7/2022 7:00	9.4	275.1	-19.7	86.0	0.7	0.0	M	101.0
3/7/2022 8:00	11.0	266.1	-19.4	85.7	11.9	0.0	M	101.1
3/7/2022 9:00	10.4	279.1	-19.3	85.8	47.6	0.0	M	101.1
3/7/2022 10:00	9.9	287.5	-18.4	86.5	95.7	0.0	M	101.2
3/7/2022 11:00	8.9	302.9	-18.4	85.1	138.5	1.0	M	101.2
3/7/2022 12:00	10.3	301.4	-19.4	83.9	217.0	1.0	M	101.2
3/7/2022 13:00	9.1	317.9	-19.4	84.5	182.6	1.0	M	101.4
3/7/2022 14:00	9.1	322.8	-19.0	83.6	193.6	1.0	M	101.5
3/7/2022 15:00	10.0	320.6	-20.8	82.1	155.6	1.0	M	101.6
3/7/2022 16:00	9.1	312.2	-22.3	81.0	112.8	0.0	M	101.7
3/7/2022 17:00	7.7	299.6	-22.2	81.0	50.1	0.0	M	101.8
3/7/2022 18:00	8.5	278.4	-22.8	82.0	12.0	0.0	M	101.7
3/7/2022 19:00	10.1	270.8	-22.6	82.4	0.1	0.0	M	101.8
3/7/2022 20:00	10.1	278.0	-22.2	83.0	0.0	0.0	M	101.8
3/7/2022 21:00	11.1	276.4	-21.8	83.2	0.0	0.0	M	101.8
3/7/2022 22:00	11.4	280.7	-21.9	83.3	0.0	0.0	M	101.8
3/7/2022 23:00	10.3	283.5	-22.1	83.2	0.0	0.0	M	101.8
3/8/2022 0:00	10.1	288.2	-21.9	83.2	0.0	0.0	M	101.9
3/8/2022 1:00	9.3	276.2	-21.6	83.5	0.0	0.0	M	101.9
3/8/2022 2:00	10.0	283.8	-21.6	83.5	0.0	0.0	M	101.9
3/8/2022 3:00	9.6	285.4	-21.3	83.6	0.0	0.0	M	102.0
3/8/2022 4:00	10.6	288.6	-21.2	83.6	0.0	0.0	M	101.9
3/8/2022 5:00	11.6	285.3	-21.6	83.0	0.0	0.0	M	101.9
3/8/2022 6:00	10.6	285.4	-21.7	83.3	0.0	0.0	M	101.9
3/8/2022 7:00	10.4	281.3	-21.3	84.0	0.9	0.0	M	101.9

3/8/2022 8:00	11.8	284.0	-20.7	84.3	18.1	0.0	M	101.9
3/8/2022 9:00	11.8	274.5	-20.3	83.5	65.3	0.0	M	101.9
3/8/2022 10:00	12.9	287.5	-20.8	83.3	123.6	1.0	M	102.0
3/8/2022 11:00	11.8	277.3	-21.1	82.1	186.1	1.0	M	102.0
3/8/2022 12:00	12.8	279.3	-20.3	81.0	283.8	1.0	M	102.0
3/8/2022 13:00	12.5	280.0	-19.9	81.4	291.3	1.0	M	102.1
3/8/2022 14:00	12.5	277.4	-20.2	82.1	253.7	1.0	M	102.0
3/8/2022 15:00	11.1	281.0	-20.4	82.2	173.1	1.0	M	102.0
3/8/2022 16:00	10.9	283.9	-20.5	81.8	124.1	1.0	M	101.9
3/8/2022 17:00	12.3	267.4	-21.1	83.1	69.4	0.0	M	101.9
3/8/2022 18:00	12.4	277.0	-21.5	83.5	12.5	0.0	M	101.8
3/8/2022 19:00	10.6	279.7	-22.3	83.1	0.3	0.0	M	101.8
3/8/2022 20:00	7.8	275.6	-23.3	82.2	0.0	0.0	M	101.8
3/8/2022 21:00	8.4	271.8	-24.3	81.4	0.0	0.0	M	101.7
3/8/2022 22:00	8.3	282.9	-24.7	81.2	0.0	0.0	M	101.6
3/8/2022 23:00	8.4	281.8	-24.0	81.6	0.0	0.0	M	101.5
3/9/2022 0:00	9.4	280.3	-23.4	81.7	0.0	0.0	M	101.4
3/9/2022 1:00	9.5	289.6	-23.3	80.2	0.0	0.0	M	101.3
3/9/2022 2:00	9.3	295.6	-24.1	79.2	0.0	0.0	M	101.2
3/9/2022 3:00	7.3	304.2	-26.1	76.5	0.0	0.0	M	101.2
3/9/2022 4:00	6.6	291.1	-27.3	77.0	0.0	0.0	M	101.2
3/9/2022 5:00	6.9	295.7	-26.9	77.9	0.0	0.0	M	101.1
3/9/2022 6:00	5.9	297.4	-26.5	77.7	0.0	0.0	M	101.0
3/9/2022 7:00	6.0	293.9	-26.5	78.2	1.7	0.0	M	101.0
3/9/2022 8:00	5.0	304.9	-26.9	77.5	34.2	0.0	M	100.9
3/9/2022 9:00	4.9	307.1	-26.6	75.2	125.5	1.0	M	100.9
3/9/2022 10:00	4.7	303.5	-26.8	73.0	192.3	1.0	M	100.9
3/9/2022 11:00	5.1	298.1	-26.9	71.7	250.6	1.0	M	100.9
3/9/2022 12:00	4.9	297.0	-26.8	70.6	293.3	1.0	M	100.9
3/9/2022 13:00	5.5	306.8	-26.7	70.2	317.0	1.0	M	100.9
3/9/2022 14:00	7.5	301.0	-27.0	72.8	233.3	1.0	M	100.9
3/9/2022 15:00	8.5	308.3	-27.5	73.3	175.2	1.0	M	100.9
3/9/2022 16:00	10.0	316.4	-28.5	73.1	95.6	0.0	M	100.9
3/9/2022 17:00	8.8	305.2	-28.3	74.6	44.8	0.0	M	100.9
3/9/2022 18:00	8.6	303.4	-27.7	75.7	9.7	0.0	M	101.0
3/9/2022 19:00	8.1	306.3	-28.0	75.0	0.4	0.0	M	101.0
3/9/2022 20:00	9.1	304.6	-27.9	75.1	0.0	0.0	M	101.0
3/9/2022 21:00	9.1	295.2	-27.7	76.0	0.0	0.0	M	100.9
3/9/2022 22:00	10.1	312.3	-27.2	77.0	0.0	0.0	M	101.0
3/9/2022 23:00	8.3	314.5	-27.4	76.4	0.0	0.0	M	101.0
3/10/2022 0:00	7.9	293.7	-27.7	76.9	0.0	0.0	M	101.0
3/10/2022 1:00	8.2	289.8	-27.5	77.7	0.0	0.0	M	101.0
3/10/2022 2:00	9.6	275.1	-27.6	77.7	0.0	0.0	M	101.0
3/10/2022 3:00	11.8	281.8	-26.1	79.5	0.0	0.0	M	100.9
3/10/2022 4:00	13.8	280.8	-25.6	79.9	0.0	0.0	M	100.8
3/10/2022 5:00	12.8	280.2	-25.2	80.5	0.0	0.0	M	100.8
3/10/2022 6:00	14.9	270.9	-25.2	80.3	0.0	0.0	M	100.6
3/10/2022 7:00	14.0	272.6	-24.7	80.9	1.6	0.0	M	100.6
3/10/2022 8:00	13.7	272.3	-23.5	82.1	10.7	0.0	M	100.6
3/10/2022 9:00	13.5	272.8	-22.0	83.3	51.1	0.0	M	100.4
3/10/2022 10:00	14.0	278.0	-20.7	84.3	102.5	0.0	M	100.4
3/10/2022 11:00	14.9	278.6	-19.2	85.5	135.6	1.0	M	100.3
3/10/2022 12:00	13.9	279.8	-18.4	86.0	160.1	1.0	M	100.3
3/10/2022 13:00	12.1	289.9	-17.0	87.3	176.8	1.0	M	100.4
3/10/2022 14:00	11.1	310.5	-16.2	86.8	171.2	1.0	M	100.5
3/10/2022 15:00	9.1	308.9	-16.5	84.9	182.4	1.0	M	100.6
3/10/2022 16:00	8.1	308.4	-17.1	84.6	126.1	1.0	M	100.6
3/10/2022 17:00	8.2	311.3	-18.1	83.9	81.1	0.0	M	100.6
3/10/2022 18:00	12.6	317.9	-18.8	83.3	15.0	0.0	M	100.6
3/10/2022 19:00	10.6	315.1	-19.3	82.3	0.5	0.0	M	100.7
3/10/2022 20:00	8.7	307.8	-20.2	80.7	0.0	0.0	M	100.8
3/10/2022 21:00	7.8	298.3	-22.0	82.5	0.0	0.0	M	100.8
3/10/2022 22:00	8.0	300.8	-22.4	82.0	0.0	0.0	M	100.8
3/10/2022 23:00	6.3	301.6	-23.1	80.9	0.0	0.0	M	100.8
3/11/2022 0:00	8.8	280.5	-23.6	81.1	0.0	0.0	M	100.8
3/11/2022 1:00	10.3	279.5	-23.7	81.0	0.0	0.0	M	100.8
3/11/2022 2:00	10.7	279.1	-23.8	81.4	0.0	0.0	M	100.8
3/11/2022 3:00	11.1	272.5	-24.4	80.9	0.0	0.0	M	100.8
3/11/2022 4:00	10.7	269.3	-24.8	80.9	0.0	0.0	M	100.7
3/11/2022 5:00	11.6	274.9	-24.9	80.6	0.0	0.0	M	100.6
3/11/2022 6:00	10.2	277.0	-24.9	80.8	0.0	0.0	M	100.7
3/11/2022 7:00	10.0	280.1	-24.6	80.9	3.5	0.0	M	100.6
3/11/2022 8:00	10.0	284.8	-24.5	80.5	35.1	0.0	M	100.6
3/11/2022 9:00	9.8	277.3	-24.7	80.1	86.5	0.0	M	100.5
3/11/2022 10:00	9.0	275.6	-24.7	78.9	172.8	1.0	M	100.5
3/11/2022 11:00	9.5	273.7	-24.4	77.6	289.9	1.0	M	100.5
3/11/2022 12:00	10.1	267.3	-24.4	77.1	304.5	1.0	M	100.5
3/11/2022 13:00	9.6	275.0	-24.2	75.8	318.2	1.0	M	100.4
3/11/2022 14:00	12.0	280.6	-24.1	75.2	299.8	1.0	M	100.4
3/11/2022 15:00	12.3	283.7	-24.1	75.9	250.3	1.0	M	100.3

3/11/2022 16:00	10.2	279.4	-24.2	76.1	182.6	1.0	M	100.4
3/11/2022 17:00	9.9	277.2	-24.6	77.1	102.9	0.0	M	100.3
3/11/2022 18:00	9.4	275.4	-25.2	78.1	22.0	0.0	M	100.3
3/11/2022 19:00	9.2	272.3	-25.4	78.4	0.6	0.0	M	100.3
3/11/2022 20:00	8.1	278.4	-26.1	78.3	0.0	0.0	M	100.3
3/11/2022 21:00	9.8	274.6	-26.3	78.5	0.0	0.0	M	100.2
3/11/2022 22:00	10.0	276.7	-27.0	78.7	0.0	0.0	M	100.1
3/11/2022 23:00	10.1	276.8	-27.0	78.6	0.0	0.0	M	100.1
3/12/2022 0:00	11.0	282.2	-27.3	78.7	0.0	0.0	M	100.1
3/12/2022 1:00	10.7	284.3	-27.4	78.4	0.0	0.0	M	100.1
3/12/2022 2:00	9.4	289.5	-27.6	78.3	0.0	0.0	M	100.1
3/12/2022 3:00	7.1	288.0	-28.2	77.8	0.0	0.0	M	100.2
3/12/2022 4:00	7.6	279.2	-28.1	77.9	0.0	0.0	M	100.2
3/12/2022 5:00	5.4	279.0	-28.2	77.4	0.0	0.0	M	100.2
3/12/2022 6:00	3.7	290.6	-29.2	76.0	0.0	0.0	M	100.2
3/12/2022 7:00	4.6	291.6	-29.8	75.3	4.2	0.0	M	100.2
3/12/2022 8:00	6.5	277.5	-29.4	75.5	43.7	0.0	M	100.2
3/12/2022 9:00	8.7	281.3	-28.7	74.6	120.3	1.0	M	100.1
3/12/2022 10:00	9.0	283.6	-28.3	73.3	196.9	1.0	M	100.2
3/12/2022 11:00	8.8	285.3	-28.0	72.0	260.7	1.0	M	100.2
3/12/2022 12:00	9.0	281.7	-27.5	72.7	301.7	1.0	M	100.2
3/12/2022 13:00	8.7	280.8	-26.9	73.1	337.1	1.0	M	100.2
3/12/2022 14:00	9.7	268.9	-26.5	73.9	314.4	1.0	M	100.1
3/12/2022 15:00	12.2	269.4	-26.5	74.5	256.5	1.0	M	100.1
3/12/2022 16:00	13.1	268.6	-26.6	75.4	159.1	1.0	M	100.0
3/12/2022 17:00	12.1	265.0	-27.3	75.8	59.0	0.0	M	100.1
3/12/2022 18:00	11.5	265.4	-27.6	76.9	18.7	0.0	M	100.0
3/12/2022 19:00	10.2	274.5	-27.9	77.4	0.8	0.0	M	100.0
3/12/2022 20:00	11.6	272.9	-28.3	76.4	0.0	0.0	M	100.0
3/12/2022 21:00	9.9	276.3	-28.8	76.1	0.0	0.0	M	100.0
3/12/2022 22:00	10.2	271.3	-28.6	76.5	0.0	0.0	M	99.9
3/12/2022 23:00	8.8	277.2	-28.5	77.0	0.0	0.0	M	99.9
3/13/2022 0:00	7.7	276.5	-28.9	76.6	0.0	0.0	M	99.9
3/13/2022 1:00	8.3	281.7	-29.6	75.6	0.0	0.0	M	99.9
3/13/2022 2:00	8.1	281.4	-29.8	75.2	0.0	0.0	M	99.9
3/13/2022 3:00	8.2	285.3	-30.5	74.4	0.0	0.0	M	99.9
3/13/2022 4:00	7.6	289.7	-30.9	74.3	0.0	0.0	M	99.9
3/13/2022 5:00	7.3	292.4	-31.2	73.9	0.0	0.0	M	100.0
3/13/2022 6:00	7.1	299.8	-31.5	73.2	0.0	0.0	M	99.9
3/13/2022 7:00	8.0	298.4	-30.9	73.6	3.2	0.0	M	100.0
3/13/2022 8:00	5.6	296.2	-30.1	73.9	37.0	0.0	M	100.0
3/13/2022 9:00	6.8	289.9	-29.0	74.5	89.8	0.0	M	99.9
3/13/2022 10:00	7.0	289.2	-28.2	74.2	181.7	1.0	M	99.9
3/13/2022 11:00	7.1	283.6	-27.4	74.3	236.2	1.0	M	99.9
3/13/2022 12:00	8.7	281.2	-26.4	73.7	304.6	1.0	M	99.9
3/13/2022 13:00	10.3	282.4	-25.8	74.2	319.3	1.0	M	99.9
3/13/2022 14:00	10.9	282.3	-25.2	74.2	259.3	1.0	M	99.9
3/13/2022 15:00	9.9	282.1	-24.7	75.2	206.7	1.0	M	99.9
3/13/2022 16:00	10.4	281.3	-24.4	77.0	148.9	1.0	M	99.9
3/13/2022 17:00	10.4	275.7	-24.3	78.7	63.5	0.0	M	99.9
3/13/2022 18:00	10.4	267.6	-23.8	79.7	11.9	0.0	M	99.9
3/13/2022 19:00	11.5	266.4	-22.6	81.1	0.6	0.0	M	99.8
3/13/2022 20:00	13.4	264.7	-22.0	82.1	0.0	0.0	M	99.7
3/13/2022 21:00	12.6	265.2	-22.4	82.1	0.0	0.0	M	99.7
3/13/2022 22:00	14.1	267.3	-23.2	81.2	0.0	0.0	M	99.7
3/13/2022 23:00	12.9	273.5	-23.8	81.3	0.0	0.0	M	99.7
3/14/2022 0:00	13.1	277.4	-24.5	80.8	0.0	0.0	M	99.7
3/14/2022 1:00	10.0	277.0	-24.8	80.8	0.0	0.0	M	99.8
3/14/2022 2:00	10.5	270.9	-24.5	80.8	0.0	0.0	M	99.8
3/14/2022 3:00	11.0	269.6	-24.5	80.3	0.0	0.0	M	99.8
3/14/2022 4:00	10.0	264.3	-24.8	80.2	0.0	0.0	M	99.7
3/14/2022 5:00	11.1	264.1	-24.6	80.0	0.0	0.0	M	99.7
3/14/2022 6:00	13.1	264.3	-23.7	80.6	0.0	0.0	M	99.6
3/14/2022 7:00	13.2	261.0	-23.2	81.7	6.9	0.0	M	99.5
3/14/2022 8:00	11.7	260.1	-23.2	81.7	46.2	0.0	M	99.5
3/14/2022 9:00	12.0	261.2	-23.2	81.4	87.7	0.0	M	99.5
3/14/2022 10:00	10.2	262.7	-23.2	80.7	160.7	1.0	M	99.5
3/14/2022 11:00	10.3	261.0	-22.8	80.0	267.0	1.0	M	99.4
3/14/2022 12:00	10.7	260.0	-22.4	80.4	253.9	1.0	M	99.4
3/14/2022 13:00	10.2	260.2	-22.1	81.0	220.5	1.0	M	99.4
3/14/2022 14:00	10.2	266.9	-21.4	80.2	309.0	1.0	M	99.4
3/14/2022 15:00	11.0	261.2	-21.2	80.2	266.8	1.0	M	99.4
3/14/2022 16:00	10.9	262.8	-21.3	80.7	201.5	1.0	M	99.4
3/14/2022 17:00	11.2	261.7	-21.4	81.0	123.9	1.0	M	99.3
3/14/2022 18:00	10.5	258.7	-21.9	81.6	35.4	0.0	M	99.3
3/14/2022 19:00	11.0	260.7	-22.1	82.2	1.7	0.0	M	99.3
3/14/2022 20:00	10.1	260.5	-22.3	82.4	0.0	0.0	M	99.3
3/14/2022 21:00	10.6	261.2	-22.7	82.5	0.0	0.0	M	99.3
3/14/2022 22:00	11.6	261.2	-23.3	82.1	0.0	0.0	M	99.2
3/14/2022 23:00	11.8	263.0	-23.1	81.0	0.0	0.0	M	99.3

3/15/2022 0:00	12.2	262.8	-23.6	81.3	0.0	0.0	M	99.3
3/15/2022 1:00	12.4	262.7	-24.3	80.9	0.0	0.0	M	99.3
3/15/2022 2:00	11.8	265.4	-24.9	79.9	0.0	0.0	M	99.4
3/15/2022 3:00	11.6	265.3	-25.7	79.2	0.0	0.0	M	99.3
3/15/2022 4:00	12.3	266.6	-25.5	79.1	0.0	0.0	M	99.4
3/15/2022 5:00	12.5	266.7	-25.3	79.2	0.0	0.0	M	99.3
3/15/2022 6:00	13.8	267.3	-24.3	80.4	0.0	0.0	M	99.3
3/15/2022 7:00	14.6	266.1	-23.6	80.6	6.4	0.0	M	99.3
3/15/2022 8:00	14.7	266.4	-23.3	80.0	48.4	0.0	M	99.3
3/15/2022 9:00	14.1	265.8	-23.7	78.6	128.2	1.0	M	99.3
3/15/2022 10:00	14.4	263.7	-24.2	77.5	224.0	1.0	M	99.3
3/15/2022 11:00	14.3	262.7	-24.4	77.7	291.1	1.0	M	99.3
3/15/2022 12:00	14.8	266.0	-23.8	77.7	313.1	1.0	M	99.3
3/15/2022 13:00	15.3	265.9	-23.4	78.4	324.0	1.0	M	99.3
3/15/2022 14:00	15.3	266.9	-23.0	79.7	293.7	1.0	M	99.2
3/15/2022 15:00	16.4	266.5	-22.7	80.2	247.1	1.0	M	99.2
3/15/2022 16:00	17.7	266.9	-22.1	81.2	188.8	1.0	M	99.1
3/15/2022 17:00	19.5	268.7	-21.5	81.7	135.0	1.0	M	99.0
3/15/2022 18:00	19.4	268.7	-21.3	82.2	51.4	0.0	M	98.9
3/15/2022 19:00	19.7	266.3	-21.3	83.1	3.4	0.0	M	99.0
3/15/2022 20:00	20.7	265.8	-21.3	83.1	0.0	0.0	M	98.8
3/15/2022 21:00	20.8	266.4	-21.3	83.5	0.0	0.0	M	98.8
3/15/2022 22:00	20.4	268.4	-21.3	83.3	0.0	0.0	M	99.0
3/15/2022 23:00	17.8	262.8	-21.8	83.2	0.0	0.0	M	99.0
3/16/2022 0:00	18.1	264.0	-22.0	83.1	0.0	0.0	M	99.0
3/16/2022 1:00	16.7	260.6	-21.9	83.4	0.0	0.0	M	99.1
3/16/2022 2:00	16.4	259.5	-21.7	83.7	0.0	0.0	M	99.0
3/16/2022 3:00	16.8	261.8	-21.3	84.0	0.0	0.0	M	99.0
3/16/2022 4:00	17.8	269.6	-21.2	83.7	0.0	0.0	M	99.0
3/16/2022 5:00	17.3	268.2	-21.1	84.0	0.0	0.0	M	99.0
3/16/2022 6:00	16.4	266.8	-20.5	84.2	0.0	0.0	M	99.1
3/16/2022 7:00	14.0	273.4	-20.2	85.0	4.2	0.0	M	99.0
3/16/2022 8:00	16.3	271.0	-20.5	84.3	42.4	0.0	M	99.1
3/16/2022 9:00	15.2	270.8	-20.7	83.9	104.7	0.0	M	99.1
3/16/2022 10:00	14.5	270.3	-20.9	83.3	176.9	1.0	M	99.2
3/16/2022 11:00	14.2	271.2	-21.0	83.0	221.4	1.0	M	99.2
3/16/2022 12:00	14.4	269.7	-21.0	82.6	246.7	1.0	M	99.2
3/16/2022 13:00	14.6	271.9	-20.9	82.4	271.3	1.0	M	99.3
3/16/2022 14:00	13.8	274.6	-20.5	83.2	232.6	1.0	M	99.4
3/16/2022 15:00	14.3	273.3	-20.4	83.5	161.3	1.0	M	99.4
3/16/2022 16:00	12.9	276.3	-20.2	84.5	80.7	0.0	M	99.4
3/16/2022 17:00	13.3	271.6	-20.0	84.3	91.6	0.0	M	99.4
3/16/2022 18:00	15.2	271.2	-20.0	84.6	32.3	0.0	M	99.4
3/16/2022 19:00	13.6	271.1	-19.6	85.1	2.6	0.0	M	99.4
3/16/2022 20:00	14.3	272.2	-19.4	85.1	0.0	0.0	M	99.5
3/16/2022 21:00	13.8	269.2	-19.6	84.9	0.0	0.0	M	99.4
3/16/2022 22:00	14.5	270.3	-20.1	84.5	0.0	0.0	M	99.3
3/16/2022 23:00	15.0	277.0	-20.3	84.8	0.0	0.0	M	99.3
3/17/2022 0:00	14.5	281.2	-20.0	85.0	0.0	0.0	M	99.4
3/17/2022 1:00	14.2	273.5	-20.6	84.5	0.0	0.0	M	99.4
3/17/2022 2:00	13.7	275.1	-20.6	84.4	0.0	0.0	M	99.5
3/17/2022 3:00	11.8	281.5	-20.8	84.3	0.0	0.0	M	99.5
3/17/2022 4:00	13.4	271.4	-21.1	84.1	0.0	0.0	M	99.6
3/17/2022 5:00	13.9	269.2	-21.2	83.4	0.0	0.0	M	99.5
3/17/2022 6:00	13.5	270.5	-21.4	83.2	0.1	0.0	M	99.5
3/17/2022 7:00	14.0	267.1	-21.9	82.9	11.6	0.0	M	99.4
3/17/2022 8:00	15.5	266.1	-21.9	81.9	64.1	0.0	M	99.5
3/17/2022 9:00	16.9	267.5	-21.7	80.4	154.4	1.0	M	99.6
3/17/2022 10:00	14.9	266.8	-21.5	80.0	229.6	1.0	M	99.5
3/17/2022 11:00	15.5	269.7	-21.1	80.9	286.3	1.0	M	99.6
3/17/2022 12:00	15.7	267.8	-20.7	80.6	355.6	1.0	M	99.7
3/17/2022 13:00	15.8	269.6	-20.7	81.5	216.5	1.0	M	99.7
3/17/2022 14:00	14.8	270.1	-20.5	82.3	132.2	1.0	M	99.9
3/17/2022 15:00	11.8	266.6	-20.0	81.8	141.9	1.0	M	99.9
3/17/2022 16:00	11.7	275.4	-19.8	80.5	248.8	1.0	M	99.8
3/17/2022 17:00	12.2	267.3	-19.9	81.3	107.7	0.0	M	99.9
3/17/2022 18:00	12.0	267.6	-19.6	82.6	35.4	0.0	M	100.0
3/17/2022 19:00	11.2	276.8	-19.0	84.9	2.4	0.0	M	100.1
3/17/2022 20:00	11.6	278.6	-18.7	85.8	0.0	0.0	M	100.0
3/17/2022 21:00	11.7	284.2	-18.4	86.1	0.0	0.0	M	100.0
3/17/2022 22:00	12.6	284.5	-18.4	86.0	0.0	0.0	M	100.1
3/17/2022 23:00	11.4	280.5	-18.2	85.8	0.0	0.0	M	100.1
3/18/2022 0:00	11.1	279.5	-18.0	85.2	0.0	0.0	M	100.1
3/18/2022 1:00	11.4	272.1	-17.8	84.5	0.0	0.0	M	100.3
3/18/2022 2:00	11.8	268.8	-17.6	84.0	0.0	0.0	M	100.3
3/18/2022 3:00	10.4	275.4	-17.7	85.2	0.0	0.0	M	100.4
3/18/2022 4:00	10.9	270.0	-17.8	85.0	0.0	0.0	M	100.4
3/18/2022 5:00	8.9	268.5	-17.9	85.1	0.0	0.0	M	100.5
3/18/2022 6:00	9.4	268.6	-18.2	85.9	0.2	0.0	M	100.5
3/18/2022 7:00	9.2	269.1	-18.6	85.3	15.5	0.0	M	100.6

3/18/2022 8:00	5.9	281.8	-19.5	83.8	62.3	0.0	M	100.6
3/18/2022 9:00	8.9	270.5	-19.5	83.0	190.8	1.0	M	100.6
3/18/2022 10:00	7.7	272.6	-19.4	83.7	200.9	1.0	M	100.7
3/18/2022 11:00	9.1	271.7	-18.8	85.0	219.2	1.0	M	100.7
3/18/2022 12:00	9.6	266.5	-18.5	84.7	351.0	1.0	M	100.7
3/18/2022 13:00	9.4	264.9	-18.5	83.4	379.0	1.0	M	100.7
3/18/2022 14:00	11.1	272.3	-19.2	82.3	348.0	1.0	M	100.8
3/18/2022 15:00	8.7	265.3	-19.6	81.1	300.7	1.0	M	100.9
3/18/2022 16:00	7.8	266.0	-20.0	80.6	228.8	1.0	M	100.9
3/18/2022 17:00	6.6	271.3	-20.4	80.9	143.7	1.0	M	100.9
3/18/2022 18:00	5.6	267.1	-20.8	81.6	59.0	0.0	M	100.9
3/18/2022 19:00	6.9	272.2	-21.1	82.2	4.0	0.0	M	100.9
3/18/2022 20:00	7.2	269.8	-21.2	82.2	0.0	0.0	M	100.9
3/18/2022 21:00	6.4	270.7	-21.0	82.8	0.0	0.0	M	101.0
3/18/2022 22:00	2.2	259.8	-22.6	84.0	0.0	0.0	M	101.0
3/18/2022 23:00	0.9	160.3	-24.8	81.5	0.0	0.0	M	101.0
3/19/2022 0:00	0.6	125.6	-25.8	80.3	0.0	0.0	M	101.0
3/19/2022 1:00	0.5	117.7	-26.2	79.9	0.0	0.0	M	101.0
3/19/2022 2:00	0.7	76.6	-26.5	79.8	0.0	0.0	M	100.9
3/19/2022 3:00	0.7	129.4	-26.6	79.6	0.0	0.0	M	100.9
3/19/2022 4:00	0.4	57.6	-26.5	79.7	0.0	0.0	M	100.9
3/19/2022 5:00	0.7	63.0	-25.9	80.2	0.0	0.0	M	100.9
3/19/2022 6:00	0.7	67.1	-25.8	80.3	0.6	0.0	M	100.9
3/19/2022 7:00	0.5	68.4	-24.9	80.7	13.3	0.0	M	100.8
3/19/2022 8:00	0.8	133.2	-23.9	81.5	52.0	0.0	M	100.8
3/19/2022 9:00	1.2	121.4	-21.9	81.9	207.2	1.0	M	100.8
3/19/2022 10:00	1.3	135.4	-21.5	83.4	167.3	1.0	M	100.8
3/19/2022 11:00	0.5	90.1	-19.5	84.5	200.3	1.0	M	100.8
3/19/2022 12:00	0.6	88.0	-17.6	82.3	257.0	1.0	M	100.8
3/19/2022 13:00	0.5	135.1	-15.5	76.7	235.1	1.0	M	100.8
3/19/2022 14:00	0.7	67.9	-16.4	78.9	193.2	1.0	M	100.8
3/19/2022 15:00	0.6	126.0	-15.2	78.9	199.8	1.0	M	100.8
3/19/2022 16:00	0.8	248.2	-14.5	79.0	168.4	1.0	M	100.8
3/19/2022 17:00	4.2	265.9	-14.5	84.1	114.1	0.0	M	100.8
3/19/2022 18:00	7.2	261.7	-16.7	86.8	56.0	0.0	M	100.8
3/19/2022 19:00	8.7	266.4	-18.9	86.3	3.7	0.0	M	100.8
3/19/2022 20:00	9.0	270.8	-20.6	84.7	0.0	0.0	M	100.9
3/19/2022 21:00	9.0	280.3	-21.6	83.9	0.0	0.0	M	100.9
3/19/2022 22:00	9.2	280.2	-21.9	83.9	0.0	0.0	M	100.9
3/19/2022 23:00	7.7	276.0	-21.8	83.5	0.0	0.0	M	101.1
3/20/2022 0:00	5.1	283.4	-21.9	83.5	0.0	0.0	M	101.1
3/20/2022 1:00	9.2	278.4	-22.0	83.3	0.0	0.0	M	101.1
3/20/2022 2:00	10.5	266.2	-21.6	83.3	0.0	0.0	M	101.2
3/20/2022 3:00	8.3	260.8	-20.8	82.8	0.0	0.0	M	101.3
3/20/2022 4:00	9.2	263.1	-20.1	84.0	0.0	0.0	M	101.2
3/20/2022 5:00	8.2	275.3	-20.8	82.8	0.0	0.0	M	101.4
3/20/2022 6:00	5.3	282.3	-22.1	82.2	0.8	0.0	M	101.4
3/20/2022 7:00	3.1	288.4	-23.2	81.4	14.8	0.0	M	101.5
3/20/2022 8:00	5.4	270.1	-23.7	80.0	51.6	0.0	M	101.5
3/20/2022 9:00	3.6	288.7	-23.6	78.0	100.2	0.0	M	101.6
3/20/2022 10:00	2.9	271.0	-23.1	76.4	165.7	1.0	M	101.7
3/20/2022 11:00	4.4	275.1	-22.8	75.7	200.8	1.0	M	101.7
3/20/2022 12:00	3.7	287.9	-22.7	75.4	176.0	1.0	M	101.8
3/20/2022 13:00	4.4	279.8	-22.8	75.9	195.2	1.0	M	101.8
3/20/2022 14:00	3.6	285.9	-22.2	74.0	228.9	1.0	M	101.9
3/20/2022 15:00	4.3	285.7	-21.8	73.7	177.7	1.0	M	101.9
3/20/2022 16:00	2.4	308.8	-21.1	73.7	156.5	1.0	M	101.9
3/20/2022 17:00	1.4	23.1	-21.2	73.8	91.9	0.0	M	101.9
3/20/2022 18:00	1.5	40.2	-21.8	75.6	36.9	0.0	M	101.9
3/20/2022 19:00	1.5	98.0	-21.5	77.5	4.3	0.0	M	101.8
3/20/2022 20:00	2.4	114.7	-21.0	83.2	0.0	0.0	M	101.9
3/20/2022 21:00	2.6	102.7	-21.3	83.2	0.0	0.0	M	101.8
3/20/2022 22:00	3.1	110.1	-20.8	85.0	0.0	0.0	M	101.9
3/20/2022 23:00	5.1	83.9	-21.3	83.8	0.0	0.0	M	101.8
3/21/2022 0:00	5.2	78.4	-21.3	83.2	0.0	0.0	M	101.8
3/21/2022 1:00	5.3	73.4	-21.4	82.4	0.0	0.0	M	101.8
3/21/2022 2:00	4.9	78.4	-21.4	82.6	0.0	0.0	M	101.8
3/21/2022 3:00	4.9	76.1	-21.2	83.4	0.0	0.0	M	101.8
3/21/2022 4:00	5.7	73.3	-20.9	83.4	0.0	0.0	M	101.7
3/21/2022 5:00	6.4	71.7	-20.6	83.8	0.0	0.0	M	101.7
3/21/2022 6:00	5.9	74.7	-20.3	83.7	0.5	0.0	M	101.7
3/21/2022 7:00	6.5	68.5	-20.3	83.1	12.9	0.0	M	101.7
3/21/2022 8:00	6.1	70.8	-20.1	82.5	57.3	0.0	M	101.7
3/21/2022 9:00	6.6	72.7	-19.7	81.8	132.1	1.0	M	101.7
3/21/2022 10:00	6.7	72.4	-19.3	81.1	206.7	1.0	M	101.7
3/21/2022 11:00	6.1	69.8	-18.9	80.2	257.5	1.0	M	101.6
3/21/2022 12:00	6.4	69.1	-18.7	79.6	299.3	1.0	M	101.7
3/21/2022 13:00	6.3	59.0	-18.6	80.1	255.7	1.0	M	101.6
3/21/2022 14:00	6.5	57.3	-18.4	80.6	252.0	1.0	M	101.7
3/21/2022 15:00	6.9	55.8	-18.5	81.1	217.8	1.0	M	101.7

3/21/2022 16:00	6.5	52.5	-18.8	80.6	192.6	1.0	M	101.7
3/21/2022 17:00	6.1	47.2	-19.3	81.7	106.1	0.0	M	101.7
3/21/2022 18:00	5.5	43.8	-20.1	82.0	41.8	0.0	M	101.7
3/21/2022 19:00	5.6	30.7	-21.4	82.6	4.9	0.0	M	101.8
3/21/2022 20:00	4.9	27.0	-22.0	82.5	0.0	0.0	M	101.8
3/21/2022 21:00	4.2	25.4	-22.6	82.1	0.0	0.0	M	101.8
3/21/2022 22:00	4.5	24.7	-22.8	81.9	0.0	0.0	M	101.8
3/21/2022 23:00	3.8	20.2	-23.7	81.6	0.0	0.0	M	101.8
3/22/2022 0:00	3.5	16.5	-23.5	81.5	0.0	0.0	M	101.8
3/22/2022 1:00	3.2	14.6	-24.0	81.2	0.0	0.0	M	101.8
3/22/2022 2:00	4.2	355.1	-23.3	81.0	0.0	0.0	M	101.8
3/22/2022 3:00	6.6	12.3	-23.4	81.2	0.0	0.0	M	101.8
3/22/2022 4:00	6.7	10.1	-23.5	80.6	0.0	0.0	M	101.8
3/22/2022 5:00	6.4	10.0	-23.2	80.3	0.0	0.0	M	101.9
3/22/2022 6:00	6.8	5.7	-23.2	79.7	0.8	0.0	M	101.9
3/22/2022 7:00	6.3	5.6	-23.3	77.9	18.8	0.0	M	101.9
3/22/2022 8:00	6.9	0.1	-23.7	74.7	73.8	0.0	M	101.9
3/22/2022 9:00	7.7	2.2	-24.1	74.8	155.1	1.0	M	102.0
3/22/2022 10:00	5.8	351.2	-23.4	72.1	270.1	1.0	M	102.0
3/22/2022 11:00	5.4	346.5	-22.6	70.3	341.4	1.0	M	102.0
3/22/2022 12:00	5.7	344.2	-21.9	70.7	396.1	1.0	M	102.0
3/22/2022 13:00	6.2	329.8	-21.6	71.1	399.5	1.0	M	102.0
3/22/2022 14:00	7.8	328.8	-21.7	72.2	379.5	1.0	M	102.1
3/22/2022 15:00	5.3	313.2	-21.5	71.2	333.5	1.0	M	102.2
3/22/2022 16:00	5.3	316.8	-22.0	73.2	259.5	1.0	M	102.2
3/22/2022 17:00	5.1	307.6	-22.5	73.5	171.5	1.0	M	102.2
3/22/2022 18:00	5.1	291.7	-24.1	76.2	78.1	0.0	M	102.2
3/22/2022 19:00	4.6	281.8	-25.4	77.9	9.3	0.0	M	102.2
3/22/2022 20:00	4.7	284.5	-25.7	77.9	0.0	0.0	M	102.1
3/22/2022 21:00	4.0	277.0	-27.3	78.7	0.0	0.0	M	102.1
3/22/2022 22:00	4.1	284.5	-27.2	79.0	0.0	0.0	M	102.1
3/22/2022 23:00	5.0	288.7	-28.0	78.3	0.0	0.0	M	102.1
3/23/2022 0:00	5.7	287.8	-28.4	77.9	0.0	0.0	M	102.2
3/23/2022 1:00	4.9	292.4	-27.8	78.6	0.0	0.0	M	102.2
3/23/2022 2:00	5.6	282.3	-29.3	76.9	0.0	0.0	M	102.2
3/23/2022 3:00	5.1	292.0	-29.1	77.3	0.0	0.0	M	102.2
3/23/2022 4:00	3.0	288.9	-28.5	77.5	0.0	0.0	M	102.0
3/23/2022 5:00	1.0	297.2	-28.8	77.2	0.0	0.0	M	102.0
3/23/2022 6:00	1.4	328.4	-28.5	77.5	2.5	0.0	M	102.0
3/23/2022 7:00	1.1	340.6	-27.0	77.9	40.5	0.0	M	102.0
3/23/2022 8:00	2.9	296.0	-27.7	76.9	84.9	0.0	M	102.0
3/23/2022 9:00	3.1	303.9	-26.7	76.8	174.6	1.0	M	102.0
3/23/2022 10:00	3.2	308.9	-26.0	76.3	235.4	1.0	M	101.9
3/23/2022 11:00	3.3	319.9	-25.6	75.9	248.0	1.0	M	101.9
3/23/2022 12:00	4.0	357.6	-25.2	74.9	324.9	1.0	M	101.8
3/23/2022 13:00	2.6	358.5	-23.6	71.6	433.9	1.0	M	101.8
3/23/2022 14:00	4.0	351.5	-23.9	73.8	321.9	1.0	M	101.8
3/23/2022 15:00	3.4	347.8	-24.0	73.2	288.7	1.0	M	101.8
3/23/2022 16:00	4.0	353.4	-24.3	74.3	232.8	1.0	M	101.8
3/23/2022 17:00	5.3	354.5	-24.9	74.8	186.8	1.0	M	101.8
3/23/2022 18:00	5.4	349.6	-25.5	76.1	77.6	0.0	M	101.8
3/23/2022 19:00	4.7	357.0	-25.8	77.0	7.5	0.0	M	101.8
3/23/2022 20:00	5.6	7.4	-26.0	76.9	0.1	0.0	M	101.8
3/23/2022 21:00	6.0	12.6	-26.7	76.0	0.0	0.0	M	101.8
3/23/2022 22:00	4.2	13.3	-27.2	75.3	0.0	0.0	M	101.9
3/23/2022 23:00	4.2	358.5	-27.8	74.9	0.0	0.0	M	101.9
3/24/2022 0:00	3.4	347.4	-28.1	75.0	0.0	0.0	M	101.9
3/24/2022 1:00	3.5	316.2	-29.3	74.7	0.0	0.0	M	101.9
3/24/2022 2:00	2.9	334.4	-30.4	74.1	0.0	0.0	M	102.0
3/24/2022 3:00	6.3	347.6	-31.3	73.1	0.0	0.0	M	102.0
3/24/2022 4:00	3.3	333.5	-31.4	72.2	0.0	0.0	M	102.1
3/24/2022 5:00	4.3	328.6	-31.8	72.6	0.0	0.0	M	102.1
3/24/2022 6:00	4.5	295.9	-33.5	71.5	1.9	0.0	M	102.2
3/24/2022 7:00	4.5	279.7	-34.2	70.1	35.3	0.0	M	102.2
3/24/2022 8:00	5.4	298.5	-34.1	68.1	122.1	1.0	M	102.3
3/24/2022 9:00	5.7	314.4	-33.4	67.4	216.4	1.0	M	102.4
3/24/2022 10:00	4.4	298.7	-33.1	65.2	298.9	1.0	M	102.4
3/24/2022 11:00	7.2	308.2	-33.2	65.4	351.3	1.0	M	102.4
3/24/2022 12:00	6.4	306.0	-32.7	65.6	391.8	1.0	M	102.5
3/24/2022 13:00	7.5	302.7	-32.1	66.1	406.7	1.0	M	102.5
3/24/2022 14:00	8.4	306.5	-31.7	67.3	356.4	1.0	M	102.6
3/24/2022 15:00	7.7	306.1	-31.8	68.1	298.4	1.0	M	102.6
3/24/2022 16:00	7.7	307.9	-32.0	68.9	212.6	1.0	M	102.7
3/24/2022 17:00	8.4	298.5	-32.3	69.1	135.6	1.0	M	102.7
3/24/2022 18:00	8.8	301.4	-32.4	70.2	53.9	0.0	M	102.8
3/24/2022 19:00	8.9	304.0	-32.1	71.4	9.3	0.0	M	102.8
3/24/2022 20:00	9.8	307.2	-32.0	72.1	0.2	0.0	M	102.8
3/24/2022 21:00	10.6	296.2	-32.5	71.5	0.0	0.0	M	102.8
3/24/2022 22:00	11.2	295.1	-32.9	70.9	0.0	0.0	M	102.9
3/24/2022 23:00	9.1	293.6	-33.0	70.3	0.0	0.0	M	102.9

3/25/2022 0:00	10.5	294.6	-33.2	69.7	0.0	0.0	M	102.8
3/25/2022 1:00	10.8	293.5	-33.2	69.8	0.0	0.0	M	102.8
3/25/2022 2:00	12.5	298.9	-33.2	69.9	0.0	0.0	M	102.9
3/25/2022 3:00	11.1	290.1	-33.2	70.9	0.0	0.0	M	103.0
3/25/2022 4:00	10.3	290.5	-33.2	71.2	0.0	0.0	M	103.0
3/25/2022 5:00	10.0	283.9	-33.0	71.3	0.0	0.0	M	103.1
3/25/2022 6:00	9.6	280.2	-33.2	71.7	3.0	0.0	M	103.1
3/25/2022 7:00	9.7	279.9	-32.9	71.6	35.5	0.0	M	103.1
3/25/2022 8:00	9.3	276.5	-32.5	70.8	129.2	1.0	M	103.2
3/25/2022 9:00	9.3	274.4	-31.5	71.0	227.5	1.0	M	103.1
3/25/2022 10:00	10.6	276.8	-30.3	72.0	284.3	1.0	M	103.1
3/25/2022 11:00	10.8	288.8	-29.4	71.9	361.6	1.0	M	103.0
3/25/2022 12:00	11.2	285.5	-28.9	72.1	413.4	1.0	M	103.1
3/25/2022 13:00	11.5	288.9	-28.3	73.1	408.1	1.0	M	103.1
3/25/2022 14:00	10.9	295.0	-27.5	73.0	379.2	1.0	M	103.2
3/25/2022 15:00	10.7	290.3	-27.2	73.1	348.2	1.0	M	103.2
3/25/2022 16:00	9.5	283.2	-27.1	73.5	279.4	1.0	M	103.2
3/25/2022 17:00	10.2	283.6	-27.5	74.1	187.5	1.0	M	103.2
3/25/2022 18:00	9.9	277.6	-27.6	74.5	90.6	0.0	M	103.1
3/25/2022 19:00	10.9	269.5	-28.3	75.5	15.9	0.0	M	103.0
3/25/2022 20:00	9.9	265.5	-28.7	75.3	0.4	0.0	M	103.0
3/25/2022 21:00	9.2	266.1	-29.1	74.7	0.0	0.0	M	102.9
3/25/2022 22:00	10.7	272.3	-29.4	74.4	0.0	0.0	M	102.8
3/25/2022 23:00	12.7	267.3	-29.1	73.4	0.0	0.0	M	102.7
3/26/2022 0:00	11.4	261.0	-29.3	73.3	0.0	0.0	M	102.7
3/26/2022 1:00	9.5	260.1	-29.3	72.0	0.0	0.0	M	102.7
3/26/2022 2:00	10.6	262.2	-29.3	71.6	0.0	0.0	M	102.7
3/26/2022 3:00	10.7	262.3	-29.2	71.1	0.0	0.0	M	102.7
3/26/2022 4:00	11.6	262.7	-29.1	71.1	0.0	0.0	M	102.5
3/26/2022 5:00	12.5	264.5	-28.7	70.6	0.0	0.0	M	102.4
3/26/2022 6:00	13.4	267.0	-28.3	71.2	2.5	0.0	M	102.4
3/26/2022 7:00	13.1	266.9	-27.8	69.8	31.2	0.0	M	102.4
3/26/2022 8:00	12.2	266.9	-27.7	69.7	102.8	0.0	M	102.3
3/26/2022 9:00	11.4	266.5	-27.6	67.8	175.5	1.0	M	102.3
3/26/2022 10:00	10.5	266.3	-27.1	68.4	315.7	1.0	M	102.2
3/26/2022 11:00	11.8	268.8	-26.4	68.8	344.9	1.0	M	102.2
3/26/2022 12:00	12.8	271.8	-26.0	70.5	387.3	1.0	M	102.1
3/26/2022 13:00	11.6	276.8	-25.4	71.1	423.1	1.0	M	102.1
3/26/2022 14:00	11.7	274.5	-25.0	72.1	407.3	1.0	M	102.1
3/26/2022 15:00	12.6	272.8	-24.7	72.7	351.7	1.0	M	102.1
3/26/2022 16:00	11.8	272.0	-24.7	74.5	212.6	1.0	M	102.1
3/26/2022 17:00	10.4	269.9	-24.6	75.8	147.1	1.0	M	102.1
3/26/2022 18:00	9.3	273.5	-24.7	75.5	106.6	0.0	M	102.1
3/26/2022 19:00	8.8	275.8	-25.0	78.6	15.2	0.0	M	102.1
3/26/2022 20:00	9.5	270.8	-24.7	78.9	0.5	0.0	M	102.0
3/26/2022 21:00	8.7	268.4	-25.0	78.2	0.0	0.0	M	102.0
3/26/2022 22:00	8.1	268.2	-25.4	76.3	0.0	0.0	M	102.0
3/26/2022 23:00	7.1	268.3	-25.9	75.7	0.0	0.0	M	102.0
3/27/2022 0:00	7.9	270.1	-26.3	76.3	0.0	0.0	M	101.9
3/27/2022 1:00	8.0	269.1	-26.5	76.5	0.0	0.0	M	101.9
3/27/2022 2:00	8.0	266.0	-26.5	77.2	0.0	0.0	M	101.9
3/27/2022 3:00	8.1	268.5	-26.1	77.4	0.0	0.0	M	101.9
3/27/2022 4:00	6.4	267.5	-26.2	76.8	0.0	0.0	M	102.0
3/27/2022 5:00	3.9	271.6	-26.0	76.9	0.0	0.0	M	102.0
3/27/2022 6:00	4.0	271.9	-26.4	76.8	4.0	0.0	M	101.9
3/27/2022 7:00	5.5	277.4	-26.7	76.1	30.9	0.0	M	101.9
3/27/2022 8:00	5.0	280.6	-26.0	73.5	111.3	0.0	M	101.9
3/27/2022 9:00	6.7	277.9	-25.6	72.9	231.1	1.0	M	101.9
3/27/2022 10:00	5.1	284.5	-25.0	71.4	315.6	1.0	M	101.9
3/27/2022 11:00	4.3	285.5	-24.1	70.1	379.9	1.0	M	101.9
3/27/2022 12:00	4.6	283.4	-23.7	70.9	421.8	1.0	M	101.9
3/27/2022 13:00	3.7	279.1	-23.2	71.0	433.2	1.0	M	101.9
3/27/2022 14:00	3.0	279.8	-22.4	68.8	412.9	1.0	M	101.9
3/27/2022 15:00	2.9	288.1	-22.1	68.7	364.3	1.0	M	101.9
3/27/2022 16:00	2.6	285.3	-22.2	68.1	290.8	1.0	M	101.9
3/27/2022 17:00	2.0	286.3	-22.5	67.8	193.9	1.0	M	101.9
3/27/2022 18:00	0.8	249.5	-23.0	68.4	104.1	0.0	M	101.9
3/27/2022 19:00	0.6	78.7	-24.2	70.3	19.6	0.0	M	101.9
3/27/2022 20:00	0.8	93.1	-26.0	76.1	0.8	0.0	M	101.9
3/27/2022 21:00	0.7	71.8	-26.7	77.9	0.0	0.0	M	101.9
3/27/2022 22:00	0.6	87.2	-27.1	78.1	0.0	0.0	M	101.9
3/27/2022 23:00	0.6	94.4	-27.4	78.1	0.0	0.0	M	101.9
3/28/2022 0:00	0.8	123.4	-27.5	78.0	0.0	0.0	M	101.9
3/28/2022 1:00	1.0	137.7	-27.3	77.7	0.0	0.0	M	101.9
3/28/2022 2:00	1.0	92.4	-27.3	77.8	0.0	0.0	M	101.9
3/28/2022 3:00	1.2	99.8	-28.1	77.3	0.0	0.0	M	101.9
3/28/2022 4:00	1.2	108.5	-28.9	77.2	0.0	0.0	M	101.9
3/28/2022 5:00	1.5	98.6	-29.0	76.8	0.0	0.0	M	101.8
3/28/2022 6:00	1.4	99.5	-29.2	76.7	5.7	0.0	M	101.9
3/28/2022 7:00	1.3	85.8	-29.3	74.8	53.1	0.0	M	101.8

3/28/2022 8:00	1.1	84.3	-27.8	72.1	143.5	1.0	M	101.8
3/28/2022 9:00	1.9	105.6	-27.3	71.6	228.9	1.0	M	101.8
3/28/2022 10:00	2.9	126.9	-27.6	69.6	342.8	1.0	M	101.8
3/28/2022 11:00	2.2	98.1	-26.3	70.8	340.9	1.0	M	101.8
3/28/2022 12:00	3.4	102.3	-24.8	69.7	402.3	1.0	M	101.7
3/28/2022 13:00	3.6	129.4	-24.4	68.5	459.6	1.0	M	101.8
3/28/2022 14:00	4.3	111.4	-23.6	75.8	416.9	1.0	M	101.7
3/28/2022 15:00	3.6	87.4	-24.3	74.9	334.6	1.0	M	101.7
3/28/2022 16:00	3.7	86.3	-24.0	72.3	258.5	1.0	M	101.7
3/28/2022 17:00	3.7	77.0	-24.3	71.2	197.8	1.0	M	101.6
3/28/2022 18:00	3.7	79.3	-24.7	72.3	114.4	0.0	M	101.6
3/28/2022 19:00	4.5	76.5	-25.0	74.2	41.5	0.0	M	101.6
3/28/2022 20:00	3.5	66.2	-25.5	75.8	1.2	0.0	M	101.6
3/28/2022 21:00	2.2	76.5	-26.2	76.6	0.0	0.0	M	101.6
3/28/2022 22:00	1.8	71.2	-26.9	76.9	0.0	0.0	M	101.5
3/28/2022 23:00	2.2	54.6	-27.6	77.2	0.0	0.0	M	101.5
3/29/2022 0:00	2.2	64.4	-28.4	77.2	0.0	0.0	M	101.5
3/29/2022 1:00	2.7	71.7	-28.8	77.1	0.0	0.0	M	101.5
3/29/2022 2:00	2.4	68.7	-29.4	76.7	0.0	0.0	M	101.5
3/29/2022 3:00	1.9	76.7	-29.2	76.2	0.0	0.0	M	101.5
3/29/2022 4:00	2.0	77.5	-29.1	75.5	0.0	0.0	M	101.4
3/29/2022 5:00	1.9	70.0	-29.2	74.1	0.0	0.0	M	101.4
3/29/2022 6:00	2.0	69.6	-29.0	72.9	5.5	0.0	M	101.4
3/29/2022 7:00	2.2	65.1	-28.5	70.7	59.6	0.0	M	101.4
3/29/2022 8:00	3.6	77.6	-27.3	68.4	162.8	1.0	M	101.4
3/29/2022 9:00	3.6	70.1	-26.9	67.1	263.7	1.0	M	101.4
3/29/2022 10:00	3.6	71.9	-26.7	68.7	234.0	1.0	M	101.3
3/29/2022 11:00	3.1	67.6	-26.0	70.0	336.9	1.0	M	101.3
3/29/2022 12:00	3.3	72.3	-24.3	70.4	404.0	1.0	M	101.3
3/29/2022 13:00	5.1	83.8	-23.6	74.1	369.9	1.0	M	101.3
3/29/2022 14:00	4.6	88.6	-23.0	75.9	389.4	1.0	M	101.3
3/29/2022 15:00	4.8	87.0	-22.4	75.0	349.3	1.0	M	101.3
3/29/2022 16:00	4.3	87.7	-22.3	75.9	263.1	1.0	M	101.3
3/29/2022 17:00	4.2	79.0	-22.6	75.7	204.4	1.0	M	101.3
3/29/2022 18:00	3.3	68.3	-22.5	77.1	106.3	0.0	M	101.3
3/29/2022 19:00	2.0	54.9	-23.3	78.6	21.8	0.0	M	101.3
3/29/2022 20:00	1.8	68.3	-23.9	79.2	1.5	0.0	M	101.3
3/29/2022 21:00	1.8	49.4	-24.5	79.8	0.0	0.0	M	101.3
3/29/2022 22:00	1.7	41.1	-25.0	80.4	0.0	0.0	M	101.3
3/29/2022 23:00	0.9	72.4	-25.1	80.2	0.0	0.0	M	101.3
3/30/2022 0:00	1.5	51.3	-25.4	80.3	0.0	0.0	M	101.3
3/30/2022 1:00	1.0	51.4	-25.8	79.8	0.0	0.0	M	101.3
3/30/2022 2:00	0.2	35.4	-26.1	79.7	0.0	0.0	M	101.4
3/30/2022 3:00	0.6	256.4	-26.1	79.6	0.0	0.0	M	101.4
3/30/2022 4:00	1.3	310.2	-25.9	79.7	0.0	0.0	M	101.4
3/30/2022 5:00	2.7	295.0	-26.0	79.8	0.1	0.0	M	101.4
3/30/2022 6:00	3.6	287.8	-25.9	79.9	12.1	0.0	M	101.4
3/30/2022 7:00	1.7	302.5	-25.0	79.6	64.6	0.0	M	101.4
3/30/2022 8:00	0.8	26.6	-25.0	78.5	110.3	0.0	M	101.5
3/30/2022 9:00	2.5	290.7	-24.3	76.7	188.2	1.0	M	101.4
3/30/2022 10:00	3.6	285.6	-23.9	74.0	318.9	1.0	M	101.4
3/30/2022 11:00	3.5	286.2	-23.6	72.6	339.7	1.0	M	101.4
3/30/2022 12:00	2.9	283.3	-22.9	70.7	416.1	1.0	M	101.5
3/30/2022 13:00	3.3	281.6	-22.8	71.0	408.7	1.0	M	101.5
3/30/2022 14:00	3.3	279.9	-22.9	72.8	336.1	1.0	M	101.5
3/30/2022 15:00	2.9	282.7	-23.2	74.0	199.7	1.0	M	101.5
3/30/2022 16:00	2.6	287.1	-23.1	74.6	176.7	1.0	M	101.5
3/30/2022 17:00	1.9	306.8	-23.0	74.8	129.9	1.0	M	101.5
3/30/2022 18:00	1.9	289.3	-23.2	75.9	64.2	0.0	M	101.5
3/30/2022 19:00	2.4	285.5	-23.4	77.5	18.7	0.0	M	101.5
3/30/2022 20:00	1.2	297.7	-23.4	78.4	1.3	0.0	M	101.5
3/30/2022 21:00	1.0	310.1	-23.5	78.6	0.0	0.0	M	101.5
3/30/2022 22:00	0.3	28.6	-23.7	79.5	0.0	0.0	M	101.4
3/30/2022 23:00	0.7	254.9	-23.7	79.5	0.0	0.0	M	101.5
3/31/2022 0:00	0.6	302.6	-23.4	79.6	0.0	0.0	M	101.4
3/31/2022 1:00	0.4	19.5	-23.4	79.7	0.0	0.0	M	101.4
3/31/2022 2:00	0.8	265.7	-23.7	79.7	0.0	0.0	M	101.4
3/31/2022 3:00	0.9	271.8	-24.6	80.5	0.0	0.0	M	101.4
3/31/2022 4:00	1.1	268.5	-25.5	80.8	0.0	0.0	M	101.4
3/31/2022 5:00	1.0	333.4	-25.7	80.6	0.1	0.0	M	101.3
3/31/2022 6:00	0.2	183.0	-26.2	79.6	8.1	0.0	M	101.3
3/31/2022 7:00	0.0	74.8	-26.1	79.2	31.6	0.0	M	101.3
3/31/2022 8:00	0.3	126.7	-23.2	77.2	142.5	1.0	M	101.3
3/31/2022 9:00	0.3	62.1	-22.8	70.9	215.2	1.0	M	101.3
3/31/2022 10:00	0.2	138.8	-21.6	68.0	256.6	1.0	M	101.2
3/31/2022 11:00	0.2	78.0	-20.7	66.1	276.4	1.0	M	101.2
3/31/2022 12:00	0.6	61.7	-20.8	62.5	349.3	1.0	M	101.2
3/31/2022 13:00	1.1	23.1	-20.9	64.1	432.8	1.0	M	101.2
3/31/2022 14:00	1.6	35.2	-21.8	69.1	409.2	1.0	M	101.2
3/31/2022 15:00	1.1	48.0	-22.0	70.5	292.4	1.0	M	101.2

3/31/2022 16:00	1.3	43.4	-22.1	71.8	251.8	1.0	M	101.2
3/31/2022 17:00	1.3	308.7	-22.3	73.5	140.9	1.0	M	101.1
3/31/2022 18:00	1.5	308.8	-22.9	76.7	77.0	0.0	M	101.1
3/31/2022 19:00	2.8	301.1	-23.3	78.2	33.4	0.0	M	101.1
3/31/2022 20:00	1.3	294.6	-23.8	78.8	1.8	0.0	M	101.1
3/31/2022 21:00	1.0	314.6	-24.2	79.9	0.0	0.0	M	101.1
3/31/2022 22:00	0.8	306.9	-24.8	80.3	0.0	0.0	M	101.1
3/31/2022 23:00	0.6	281.6	-24.8	80.1	0.0	0.0	M	101.2
4/1/2022 0:00	1.6	4.7	-25.3	79.1	0.0	0.0	M	101.1
4/1/2022 1:00	2.6	274.0	-26.1	78.8	0.0	0.0	M	101.1
4/1/2022 2:00	3.4	280.7	-26.8	79.0	0.0	0.0	M	101.1
4/1/2022 3:00	4.5	285.6	-27.3	78.7	0.0	0.0	M	101.1
4/1/2022 4:00	5.4	285.7	-26.9	79.0	0.0	0.0	M	101.1
4/1/2022 5:00	5.0	279.6	-27.7	77.9	0.2	0.0	M	101.1
4/1/2022 6:00	6.5	275.0	-28.3	77.7	10.3	0.0	M	101.1
4/1/2022 7:00	7.9	272.9	-27.8	77.2	69.7	0.0	M	101.1
4/1/2022 8:00	9.2	273.5	-28.0	75.5	173.1	1.0	M	101.1
4/1/2022 9:00	10.0	272.1	-27.7	74.6	283.1	1.0	M	101.1
4/1/2022 10:00	10.7	263.2	-27.6	73.9	350.8	1.0	M	101.0
4/1/2022 11:00	9.7	261.9	-27.3	73.4	371.0	1.0	M	101.0
4/1/2022 12:00	9.6	254.2	-26.8	72.6	450.4	1.0	M	101.0
4/1/2022 13:00	10.2	256.4	-26.3	72.3	467.1	1.0	M	101.0
4/1/2022 14:00	9.8	255.1	-26.0	71.9	461.5	1.0	M	101.0
4/1/2022 15:00	9.8	255.4	-25.7	72.5	408.1	1.0	M	101.0
4/1/2022 16:00	8.5	256.3	-25.5	72.5	330.9	1.0	M	101.1
4/1/2022 17:00	7.9	253.6	-25.2	72.9	240.4	1.0	M	101.1
4/1/2022 18:00	5.7	252.3	-25.3	73.6	135.8	1.0	M	101.1
4/1/2022 19:00	4.4	243.0	-25.9	74.2	37.7	0.0	M	101.1
4/1/2022 20:00	4.6	239.8	-26.4	74.0	2.2	0.0	M	101.1
4/1/2022 21:00	3.3	210.9	-27.0	72.4	0.0	0.0	M	101.1
4/1/2022 22:00	2.7	162.9	-28.5	75.3	0.0	0.0	M	101.1
4/1/2022 23:00	2.4	183.9	-28.9	76.5	0.0	0.0	M	101.1
4/2/2022 0:00	1.7	85.6	-29.2	76.9	0.0	0.0	M	101.1
4/2/2022 1:00	1.7	127.4	-29.7	76.3	0.0	0.0	M	101.1
4/2/2022 2:00	1.3	122.2	-30.2	75.6	0.0	0.0	M	101.1
4/2/2022 3:00	0.8	112.5	-30.7	74.9	0.0	0.0	M	101.1
4/2/2022 4:00	0.8	129.7	-31.0	74.7	0.0	0.0	M	101.1
4/2/2022 5:00	1.0	144.1	-31.1	74.7	0.5	0.0	M	101.1
4/2/2022 6:00	1.5	142.1	-30.5	74.8	25.3	0.0	M	101.1
4/2/2022 7:00	1.8	139.7	-29.6	74.8	111.8	0.0	M	101.1
4/2/2022 8:00	1.7	144.2	-28.9	73.7	114.5	0.0	M	101.1
4/2/2022 9:00	1.7	150.1	-27.9	71.2	238.4	1.0	M	101.1
4/2/2022 10:00	1.2	136.0	-25.6	68.9	342.4	1.0	M	101.2
4/2/2022 11:00	1.4	98.5	-25.2	69.2	361.7	1.0	M	101.1
4/2/2022 12:00	1.2	114.4	-23.7	67.1	441.9	1.0	M	101.2
4/2/2022 13:00	1.2	125.3	-22.5	64.4	480.6	1.0	M	101.2
4/2/2022 14:00	1.8	130.4	-22.5	65.8	468.8	1.0	M	101.2
4/2/2022 15:00	2.1	146.0	-22.6	64.1	414.5	1.0	M	101.2
4/2/2022 16:00	1.7	157.0	-22.7	66.3	339.8	1.0	M	101.3
4/2/2022 17:00	1.2	153.4	-22.3	65.3	247.3	1.0	M	101.3
4/2/2022 18:00	2.1	152.6	-23.6	68.0	147.3	1.0	M	101.3
4/2/2022 19:00	1.7	153.9	-25.5	72.4	50.3	0.0	M	101.3
4/2/2022 20:00	1.1	88.7	-27.0	75.9	3.4	0.0	M	101.3
4/2/2022 21:00	1.1	142.6	-27.7	76.3	0.0	0.0	M	101.3
4/2/2022 22:00	0.9	89.4	-28.7	76.4	0.0	0.0	M	101.3
4/2/2022 23:00	1.2	111.7	-29.5	76.3	0.0	0.0	M	101.3
4/3/2022 0:00	1.3	110.6	-29.8	76.2	0.0	0.0	M	101.3
4/3/2022 1:00	1.4	128.0	-30.2	75.7	0.0	0.0	M	101.3
4/3/2022 2:00	1.4	135.0	-30.8	74.9	0.0	0.0	M	101.3
4/3/2022 3:00	1.5	137.2	-31.3	74.6	0.0	0.0	M	101.3
4/3/2022 4:00	1.3	121.2	-31.3	74.5	0.0	0.0	M	101.3
4/3/2022 5:00	1.4	122.9	-31.7	74.2	0.8	0.0	M	101.3
4/3/2022 6:00	1.0	104.5	-31.5	73.9	28.6	0.0	M	101.3
4/3/2022 7:00	1.0	98.3	-30.9	73.2	97.7	0.0	M	101.3
4/3/2022 8:00	1.6	115.0	-31.0	72.8	158.4	1.0	M	101.3
4/3/2022 9:00	1.3	110.2	-29.5	73.3	219.4	1.0	M	101.2
4/3/2022 10:00	2.2	121.6	-28.5	72.5	350.3	1.0	M	101.2
4/3/2022 11:00	2.2	123.4	-27.1	71.4	462.4	1.0	M	101.2
4/3/2022 12:00	1.9	118.1	-25.5	70.7	517.4	1.0	M	101.2
4/3/2022 13:00	1.7	117.4	-24.1	70.4	522.1	1.0	M	101.2
4/3/2022 14:00	1.7	122.1	-22.8	68.5	487.3	1.0	M	101.2
4/3/2022 15:00	2.1	107.8	-22.0	71.7	439.3	1.0	M	101.2
4/3/2022 16:00	2.8	111.0	-21.7	76.3	345.6	1.0	M	101.1
4/3/2022 17:00	2.8	115.5	-21.9	78.4	263.3	1.0	M	101.1
4/3/2022 18:00	3.2	88.5	-23.3	76.5	152.6	1.0	M	101.0
4/3/2022 19:00	2.9	77.4	-25.1	74.9	58.9	0.0	M	101.0
4/3/2022 20:00	2.7	92.6	-26.0	78.5	4.0	0.0	M	101.0
4/3/2022 21:00	2.1	106.1	-26.2	79.9	0.0	0.0	M	100.9
4/3/2022 22:00	1.3	90.1	-27.0	78.7	0.0	0.0	M	100.9
4/3/2022 23:00	1.1	90.5	-27.5	78.2	0.0	0.0	M	100.9

4/4/2022 0:00	1.4	91.6	-28.0	77.8	0.0	0.0	M	100.8
4/4/2022 1:00	1.5	101.3	-28.2	77.7	0.0	0.0	M	100.8
4/4/2022 2:00	1.3	89.1	-28.5	77.2	0.0	0.0	M	100.8
4/4/2022 3:00	1.1	80.7	-28.7	76.9	0.0	0.0	M	100.7
4/4/2022 4:00	1.6	97.1	-28.6	77.0	0.0	0.0	M	100.6
4/4/2022 5:00	1.4	90.8	-28.5	77.1	1.1	0.0	M	100.6
4/4/2022 6:00	1.7	98.6	-27.5	77.1	42.3	0.0	M	100.5
4/4/2022 7:00	2.0	111.3	-25.8	78.0	97.3	0.0	M	100.4
4/4/2022 8:00	2.8	94.1	-24.6	74.7	161.4	1.0	M	100.4
4/4/2022 9:00	4.7	113.7	-21.7	81.2	236.3	1.0	M	100.3
4/4/2022 10:00	5.7	126.7	-20.8	72.8	359.1	1.0	M	100.2
4/4/2022 11:00	6.9	123.4	-19.6	73.6	396.0	1.0	M	100.2
4/4/2022 12:00	7.9	117.4	-18.8	77.9	328.8	1.0	M	100.2
4/4/2022 13:00	9.0	112.9	-17.9	83.8	300.3	1.0	M	100.1
4/4/2022 14:00	9.7	114.2	-17.7	84.6	328.2	1.0	M	100.0
4/4/2022 15:00	10.3	106.9	-16.3	87.8	220.7	1.0	M	100.0
4/4/2022 16:00	10.5	109.9	-16.2	88.1	161.5	1.0	M	99.9
4/4/2022 17:00	8.1	112.7	-15.7	88.8	116.6	0.0	M	99.8
4/4/2022 18:00	8.4	112.4	-15.3	89.2	68.9	0.0	M	99.8
4/4/2022 19:00	8.8	112.6	-15.3	89.4	33.6	0.0	M	99.7
4/4/2022 20:00	7.0	116.6	-14.5	90.1	10.3	0.0	M	99.7
4/4/2022 21:00	5.9	127.2	-14.9	89.7	0.0	0.0	M	99.7
4/4/2022 22:00	6.3	139.7	-14.7	89.9	0.0	0.0	M	99.7
4/4/2022 23:00	7.3	149.3	-14.3	89.2	0.0	0.0	M	99.7
4/5/2022 0:00	5.6	152.0	-14.0	88.5	0.0	0.0	M	99.7
4/5/2022 1:00	3.9	147.4	-13.6	88.2	0.0	0.0	M	99.7
4/5/2022 2:00	2.6	154.6	-13.9	88.0	0.0	0.0	M	99.7
4/5/2022 3:00	1.7	136.2	-14.5	88.4	0.0	0.0	M	99.8
4/5/2022 4:00	2.2	139.2	-15.4	87.7	0.0	0.0	M	99.8
4/5/2022 5:00	1.1	88.1	-15.8	87.1	1.2	0.0	M	99.8
4/5/2022 6:00	1.3	86.4	-16.5	86.3	20.9	0.0	M	99.8
4/5/2022 7:00	0.9	93.3	-15.4	83.6	93.4	0.0	M	99.9
4/5/2022 8:00	1.4	63.5	-15.1	82.7	149.9	1.0	M	99.9
4/5/2022 9:00	2.6	116.0	-13.8	83.7	154.1	1.0	M	99.9
4/5/2022 10:00	3.4	139.4	-12.6	82.2	238.9	1.0	M	100.0
4/5/2022 11:00	3.8	147.3	-11.6	81.4	302.3	1.0	M	100.0
4/5/2022 12:00	3.6	155.2	-10.4	80.9	334.0	1.0	M	100.0
4/5/2022 13:00	3.9	171.5	-9.4	78.6	395.4	1.0	M	100.1
4/5/2022 14:00	3.4	174.0	-9.4	80.1	287.4	1.0	M	100.1
4/5/2022 15:00	1.7	160.3	-8.9	84.6	289.5	1.0	M	100.2
4/5/2022 16:00	1.8	164.6	-8.6	83.8	240.4	1.0	M	100.2
4/5/2022 17:00	2.1	149.2	-8.6	83.9	184.7	1.0	M	100.3
4/5/2022 18:00	2.0	169.7	-8.8	85.4	75.1	0.0	M	100.3
4/5/2022 19:00	1.6	217.8	-8.8	85.7	17.5	0.0	M	100.4
4/5/2022 20:00	2.8	260.7	-9.0	86.3	2.8	0.0	M	100.4
4/5/2022 21:00	6.6	266.2	-10.7	89.1	0.0	0.0	M	100.5
4/5/2022 22:00	8.2	266.0	-12.7	90.5	0.0	0.0	M	100.6
4/5/2022 23:00	8.1	268.4	-13.4	89.2	0.0	0.0	M	100.7
4/6/2022 0:00	9.1	261.4	-13.8	89.0	0.0	0.0	M	100.7
4/6/2022 1:00	8.6	260.3	-13.7	89.3	0.0	0.0	M	100.8
4/6/2022 2:00	9.9	266.0	-13.6	89.4	0.0	0.0	M	100.9
4/6/2022 3:00	10.3	262.9	-14.0	89.6	0.0	0.0	M	101.0
4/6/2022 4:00	9.5	263.7	-14.3	89.2	0.0	0.0	M	101.0
4/6/2022 5:00	10.3	260.4	-14.8	89.2	1.1	0.0	M	101.2
4/6/2022 6:00	10.3	255.2	-14.8	89.1	15.9	0.0	M	101.2
4/6/2022 7:00	10.7	264.6	-15.0	88.8	56.6	0.0	M	101.2
4/6/2022 8:00	13.4	265.1	-15.0	88.3	104.8	0.0	M	101.4
4/6/2022 9:00	11.2	263.0	-15.0	88.2	154.8	1.0	M	101.5
4/6/2022 10:00	10.6	261.8	-14.9	88.2	199.1	1.0	M	101.5
4/6/2022 11:00	10.8	262.4	-14.6	87.8	241.9	1.0	M	101.6
4/6/2022 12:00	9.4	261.8	-14.3	87.1	281.1	1.0	M	101.7
4/6/2022 13:00	9.1	264.8	-14.2	85.1	324.9	1.0	M	101.8
4/6/2022 14:00	9.3	264.9	-14.3	83.9	330.4	1.0	M	101.8
4/6/2022 15:00	9.7	269.3	-14.4	82.3	277.1	1.0	M	102.0
4/6/2022 16:00	9.5	267.5	-14.4	84.8	219.9	1.0	M	102.0
4/6/2022 17:00	8.4	266.6	-14.5	85.6	206.6	1.0	M	102.1
4/6/2022 18:00	7.6	266.8	-15.0	84.7	162.8	1.0	M	102.1
4/6/2022 19:00	8.0	266.5	-15.7	84.4	69.0	0.0	M	102.1
4/6/2022 20:00	6.6	258.6	-16.9	85.0	5.9	0.0	M	102.2
4/6/2022 21:00	4.9	276.9	-17.9	85.3	0.0	0.0	M	102.2
4/6/2022 22:00	4.6	271.9	-18.0	82.5	0.0	0.0	M	102.2
4/6/2022 23:00	3.6	254.7	-17.6	83.7	0.0	0.0	M	102.3
4/7/2022 0:00	3.4	243.3	-17.1	85.0	0.0	0.0	M	102.3
4/7/2022 1:00	2.1	239.8	-16.9	85.0	0.0	0.0	M	102.3
4/7/2022 2:00	1.1	232.1	-16.9	85.3	0.0	0.0	M	102.3
4/7/2022 3:00	1.4	178.8	-16.9	85.9	0.0	0.0	M	102.3
4/7/2022 4:00	1.0	110.0	-17.4	86.5	0.0	0.0	M	102.3
4/7/2022 5:00	0.8	127.9	-17.7	86.8	2.5	0.0	M	102.3
4/7/2022 6:00	0.7	102.5	-18.0	86.8	24.3	0.0	M	102.2
4/7/2022 7:00	0.8	85.5	-17.9	85.7	76.8	0.0	M	102.2

4/7/2022 8:00	1.2	100.8	-17.4	84.4	140.7	1.0	M	102.2
4/7/2022 9:00	1.7	85.0	-16.6	83.3	226.5	1.0	M	102.2
4/7/2022 10:00	2.5	100.2	-14.9	85.0	295.1	1.0	M	102.1
4/7/2022 11:00	4.6	109.9	-13.3	89.9	326.2	1.0	M	102.1
4/7/2022 12:00	4.0	109.3	-12.9	89.8	392.4	1.0	M	102.0
4/7/2022 13:00	4.5	107.6	-12.6	89.8	416.6	1.0	M	102.0
4/7/2022 14:00	4.7	105.1	-12.1	89.1	472.8	1.0	M	101.9
4/7/2022 15:00	5.5	90.4	-12.6	87.3	438.7	1.0	M	101.8
4/7/2022 16:00	5.1	88.6	-12.6	87.1	335.0	1.0	M	101.8
4/7/2022 17:00	4.7	89.8	-12.6	86.7	299.6	1.0	M	101.8
4/7/2022 18:00	4.9	84.5	-13.2	86.8	173.8	1.0	M	101.8
4/7/2022 19:00	4.4	80.5	-13.9	88.2	56.8	0.0	M	101.7
4/7/2022 20:00	4.1	72.3	-14.7	89.4	5.9	0.0	M	101.7
4/7/2022 21:00	4.3	73.2	-15.1	89.6	0.1	0.0	M	101.6
4/7/2022 22:00	2.2	83.1	-15.0	89.7	0.0	0.0	M	101.6
4/7/2022 23:00	1.9	80.0	-14.8	90.0	0.0	0.0	M	101.6
4/8/2022 0:00	1.7	89.6	-14.7	90.9	0.0	0.0	M	101.6
4/8/2022 1:00	1.3	87.4	-14.5	90.4	0.0	0.0	M	101.5
4/8/2022 2:00	1.9	47.1	-15.2	89.6	0.0	0.0	M	101.5
4/8/2022 3:00	0.8	75.5	-15.0	89.7	0.0	0.0	M	101.5
4/8/2022 4:00	0.3	64.7	-15.0	89.7	0.0	0.0	M	101.5
4/8/2022 5:00	0.4	58.4	-15.2	89.5	1.6	0.0	M	101.5
4/8/2022 6:00	C	C	-15.3	89.6	16.7	0.0	M	101.5
4/8/2022 7:00	M	M	-15.1	89.6	49.1	0.0	M	101.4
4/8/2022 8:00	M	M	-14.0	90.1	107.8	0.0	M	101.4
4/8/2022 9:00	0.1	69.8	-13.6	89.8	175.9	1.0	M	101.4
4/8/2022 10:00	0.7	66.7	-10.3	89.3	217.8	1.0	M	101.4
4/8/2022 11:00	1.7	47.0	-10.4	83.5	263.1	1.0	M	101.3
4/8/2022 12:00	2.4	29.8	-11.4	79.3	313.1	1.0	M	101.3
4/8/2022 13:00	2.8	51.2	-9.8	75.3	410.3	1.0	M	101.3
4/8/2022 14:00	2.9	24.6	-11.6	72.6	424.5	1.0	M	101.3
4/8/2022 15:00	3.1	40.5	-11.6	72.5	378.0	1.0	M	101.3
4/8/2022 16:00	3.5	48.7	-12.8	76.6	259.0	1.0	M	101.3
4/8/2022 17:00	2.8	41.6	-13.2	76.6	202.4	1.0	M	101.3
4/8/2022 18:00	2.0	50.1	-13.6	71.3	128.0	1.0	M	101.3
4/8/2022 19:00	2.3	39.6	-16.7	75.9	41.4	0.0	M	101.3
4/8/2022 20:00	2.0	38.8	-16.9	84.3	7.0	0.0	M	101.3
4/8/2022 21:00	4.5	35.2	-16.5	86.5	0.2	0.0	M	101.3
4/8/2022 22:00	1.9	33.2	-17.7	87.9	0.0	0.0	M	101.4
4/8/2022 23:00	2.4	31.1	-17.0	88.4	0.0	0.0	M	101.4
4/9/2022 0:00	2.6	34.3	-16.4	88.8	0.0	0.0	M	101.4
4/9/2022 1:00	2.9	33.9	-16.4	89.4	0.0	0.0	M	101.4
4/9/2022 2:00	2.9	13.2	-16.6	89.0	0.0	0.0	M	101.4
4/9/2022 3:00	2.6	12.9	-17.4	88.1	0.0	0.0	M	101.4
4/9/2022 4:00	2.0	357.9	-18.0	87.4	0.0	0.0	M	101.5
4/9/2022 5:00	2.4	7.4	-19.4	86.1	3.4	0.0	M	101.5
4/9/2022 6:00	1.4	34.2	-20.5	85.2	28.6	0.0	M	101.5
4/9/2022 7:00	1.3	27.3	-20.3	85.2	74.1	0.0	M	101.5
4/9/2022 8:00	1.5	12.8	-19.8	85.1	145.5	1.0	M	101.5
4/9/2022 9:00	2.0	17.4	-19.8	84.7	215.9	1.0	M	101.5
4/9/2022 10:00	3.3	27.7	-19.9	83.8	347.0	1.0	M	101.5
4/9/2022 11:00	3.2	19.4	-19.3	82.8	449.6	1.0	M	101.5
4/9/2022 12:00	2.2	1.3	-18.5	82.3	454.5	1.0	M	101.6
4/9/2022 13:00	3.0	359.0	-18.3	79.4	550.4	1.0	M	101.6
4/9/2022 14:00	2.8	0.9	-18.4	78.9	491.8	1.0	M	101.6
4/9/2022 15:00	2.2	357.9	-17.9	77.6	453.9	1.0	M	101.6
4/9/2022 16:00	2.3	342.8	-18.0	78.0	358.3	1.0	M	101.7
4/9/2022 17:00	2.7	332.3	-18.4	78.9	259.0	1.0	M	101.7
4/9/2022 18:00	2.4	322.8	-18.7	81.6	142.0	1.0	M	101.7
4/9/2022 19:00	2.1	310.2	-19.4	82.9	65.0	0.0	M	101.8
4/9/2022 20:00	2.6	323.1	-20.1	83.9	10.7	0.0	M	101.8
4/9/2022 21:00	1.4	11.8	-21.6	82.4	0.3	0.0	M	101.8
4/9/2022 22:00	0.9	47.0	-23.1	82.7	0.0	0.0	M	101.8
4/9/2022 23:00	1.2	276.1	-23.4	83.3	0.0	0.0	M	101.9
4/10/2022 0:00	2.9	274.8	-24.0	83.3	0.0	0.0	M	101.9
4/10/2022 1:00	2.8	271.4	-24.6	82.1	0.0	0.0	M	101.9
4/10/2022 2:00	2.4	269.0	-24.7	81.9	0.0	0.0	M	101.9
4/10/2022 3:00	2.8	275.1	-24.8	81.5	0.0	0.0	M	101.9
4/10/2022 4:00	3.0	279.8	-25.6	80.8	0.0	0.0	M	102.0
4/10/2022 5:00	2.0	267.8	-25.3	81.0	6.5	0.0	M	102.0
4/10/2022 6:00	1.3	254.5	-24.9	80.4	58.9	0.0	M	102.0
4/10/2022 7:00	3.3	277.0	-24.5	80.7	97.0	0.0	M	102.0
4/10/2022 8:00	4.1	289.4	-23.5	81.1	149.0	1.0	M	102.0
4/10/2022 9:00	3.4	286.8	-22.5	81.5	244.0	1.0	M	102.0
4/10/2022 10:00	3.5	284.3	-21.6	81.2	345.5	1.0	M	102.0
4/10/2022 11:00	1.7	267.7	-20.1	81.9	429.3	1.0	M	102.0
4/10/2022 12:00	2.1	153.2	-20.6	83.2	470.0	1.0	M	102.0
4/10/2022 13:00	2.1	144.0	-20.7	84.0	400.1	1.0	M	102.0
4/10/2022 14:00	0.9	148.7	-18.1	86.0	522.9	1.0	M	102.0
4/10/2022 15:00	1.1	231.7	-16.7	85.0	460.7	1.0	M	102.0

4/10/2022 16:00	3.1	281.0	-18.4	82.8	340.0	1.0	M	102.0
4/10/2022 17:00	4.1	275.5	-18.5	83.5	286.8	1.0	M	102.0
4/10/2022 18:00	4.8	286.5	-19.0	83.6	188.5	1.0	M	102.1
4/10/2022 19:00	4.7	288.0	-20.2	83.6	93.3	0.0	M	102.1
4/10/2022 20:00	2.5	281.5	-21.0	84.2	9.3	0.0	M	102.1
4/10/2022 21:00	2.3	258.8	-20.5	84.8	0.3	0.0	M	102.1
4/10/2022 22:00	2.8	293.0	-19.9	85.3	0.0	0.0	M	102.1
4/10/2022 23:00	3.5	327.3	-19.9	84.8	0.0	0.0	M	102.2
4/11/2022 0:00	4.3	324.1	-20.8	84.4	0.0	0.0	M	102.2
4/11/2022 1:00	4.7	325.0	-20.9	84.2	0.0	0.0	M	102.2
4/11/2022 2:00	4.6	340.5	-21.7	83.3	0.0	0.0	M	102.3
4/11/2022 3:00	3.7	350.5	-21.9	83.0	0.0	0.0	M	102.3
4/11/2022 4:00	4.1	3.8	-23.2	81.8	0.0	0.0	M	102.3
4/11/2022 5:00	3.3	341.5	-23.9	81.0	7.4	0.0	M	102.4
4/11/2022 6:00	3.7	278.5	-25.1	79.9	39.6	0.0	M	102.4
4/11/2022 7:00	4.3	308.8	-25.0	78.2	99.6	0.0	M	102.5
4/11/2022 8:00	4.4	289.1	-25.3	76.7	164.3	1.0	M	102.5
4/11/2022 9:00	4.9	293.8	-24.4	75.8	329.2	1.0	M	102.6
4/11/2022 10:00	6.5	284.3	-24.4	77.0	354.4	1.0	M	102.6
4/11/2022 11:00	6.6	283.1	-23.1	77.7	405.6	1.0	M	102.6
4/11/2022 12:00	6.8	285.6	-22.1	77.1	462.2	1.0	M	102.7
4/11/2022 13:00	6.8	290.0	-21.3	76.1	522.4	1.0	M	102.7
4/11/2022 14:00	7.2	294.6	-21.2	75.8	447.8	1.0	M	102.7
4/11/2022 15:00	6.6	297.2	-21.0	75.3	412.6	1.0	M	102.8
4/11/2022 16:00	5.6	284.4	-20.7	76.2	316.0	1.0	M	102.8
4/11/2022 17:00	5.3	292.0	-20.6	77.1	216.4	1.0	M	102.9
4/11/2022 18:00	4.6	294.4	-20.8	75.9	124.7	1.0	M	102.9
4/11/2022 19:00	5.0	279.4	-22.2	78.2	83.4	0.0	M	103.0
4/11/2022 20:00	3.7	278.1	-24.6	80.6	17.9	0.0	M	103.0
4/11/2022 21:00	3.5	289.6	-25.7	80.4	0.6	0.0	M	103.0
4/11/2022 22:00	3.5	280.7	-26.3	80.0	0.0	0.0	M	103.1
4/11/2022 23:00	3.8	278.8	-27.3	78.8	0.0	0.0	M	103.1
4/12/2022 0:00	5.2	281.2	-27.9	78.5	0.0	0.0	M	103.1
4/12/2022 1:00	5.9	277.8	-27.8	78.4	0.0	0.0	M	103.1
4/12/2022 2:00	5.4	283.2	-27.9	78.4	0.0	0.0	M	103.1
4/12/2022 3:00	4.9	288.0	-27.8	78.4	0.0	0.0	M	103.2
4/12/2022 4:00	6.5	276.7	-26.7	79.5	0.1	0.0	M	103.2
4/12/2022 5:00	6.5	273.8	-25.7	79.8	8.1	0.0	M	103.2
4/12/2022 6:00	8.5	266.9	-24.2	80.1	63.2	0.0	M	103.2
4/12/2022 7:00	9.8	264.6	-23.6	80.2	115.5	0.0	M	103.1
4/12/2022 8:00	9.2	265.5	-24.0	79.1	202.6	1.0	M	103.2
4/12/2022 9:00	9.2	266.6	-23.8	78.2	339.9	1.0	M	103.1
4/12/2022 10:00	8.6	267.6	-23.3	77.6	442.2	1.0	M	103.2
4/12/2022 11:00	10.6	264.9	-22.7	78.1	495.0	1.0	M	103.2
4/12/2022 12:00	11.4	265.3	-22.2	78.9	544.7	1.0	M	103.2
4/12/2022 13:00	9.2	269.8	-21.3	78.5	545.5	1.0	M	103.2
4/12/2022 14:00	10.2	267.6	-20.7	78.5	526.2	1.0	M	103.2
4/12/2022 15:00	9.7	264.5	-20.3	78.9	476.1	1.0	M	103.2
4/12/2022 16:00	10.1	266.0	-20.2	79.6	396.8	1.0	M	103.2
4/12/2022 17:00	9.8	264.3	-20.3	80.3	297.7	1.0	M	103.3
4/12/2022 18:00	9.7	263.9	-20.3	80.8	197.2	1.0	M	103.2
4/12/2022 19:00	10.0	265.8	-20.5	82.0	96.7	0.0	M	103.2
4/12/2022 20:00	9.6	263.3	-20.7	83.4	19.3	0.0	M	103.3
4/12/2022 21:00	10.7	262.5	-20.4	84.5	0.6	0.0	M	103.2
4/12/2022 22:00	10.1	260.4	-20.3	84.5	0.0	0.0	M	103.2
4/12/2022 23:00	9.9	260.5	-20.3	84.4	0.0	0.0	M	103.1
4/13/2022 0:00	9.4	258.9	-20.1	83.3	0.0	0.0	M	103.1
4/13/2022 1:00	5.9	249.6	-20.2	80.3	0.0	0.0	M	103.1
4/13/2022 2:00	7.5	242.1	-19.2	74.2	0.0	0.0	M	103.1
4/13/2022 3:00	5.4	217.2	-19.7	71.7	0.0	0.0	M	103.0
4/13/2022 4:00	4.9	206.4	-20.4	71.9	0.1	0.0	M	102.9
4/13/2022 5:00	5.5	193.3	-21.0	72.9	7.2	0.0	M	102.8
4/13/2022 6:00	4.4	195.6	-20.6	71.5	60.7	0.0	M	102.8
4/13/2022 7:00	6.7	202.3	-18.6	66.7	127.8	1.0	M	102.6
4/13/2022 8:00	8.5	212.2	-17.2	65.6	222.9	1.0	M	102.5
4/13/2022 9:00	6.8	199.0	-15.8	63.5	340.9	1.0	M	102.4
4/13/2022 10:00	9.3	198.1	-15.3	65.4	426.2	1.0	M	102.3
4/13/2022 11:00	9.7	198.9	-14.2	65.9	467.1	1.0	M	102.2
4/13/2022 12:00	7.3	189.9	-12.4	66.4	534.3	1.0	M	102.1
4/13/2022 13:00	9.0	216.2	-10.9	64.7	379.7	1.0	M	102.0
4/13/2022 14:00	10.2	220.1	-9.9	65.5	453.7	1.0	M	101.9
4/13/2022 15:00	13.7	241.1	-8.8	67.8	355.2	1.0	M	101.9
4/13/2022 16:00	14.0	253.5	-9.5	81.7	255.0	1.0	M	101.7
4/13/2022 17:00	14.3	258.7	-10.2	91.8	165.3	1.0	M	101.8
4/13/2022 18:00	14.9	267.8	-10.9	91.4	98.2	0.0	M	101.9
4/13/2022 19:00	15.7	269.1	-12.4	88.9	60.9	0.0	M	101.9
4/13/2022 20:00	12.9	274.4	-14.0	88.3	31.2	0.0	M	102.1
4/13/2022 21:00	7.8	297.6	-16.0	82.9	2.3	0.0	M	102.3
4/13/2022 22:00	6.3	301.5	-17.9	80.1	0.0	0.0	M	102.4
4/13/2022 23:00	3.2	291.0	-19.8	78.9	0.0	0.0	M	102.4

4/14/2022 0:00	5.1	278.3	-21.3	80.5	0.0	0.0	M	102.5
4/14/2022 1:00	4.6	277.4	-22.7	80.5	0.0	0.0	M	102.5
4/14/2022 2:00	3.4	285.6	-23.3	79.5	0.0	0.0	M	102.5
4/14/2022 3:00	5.7	264.7	-23.1	78.4	0.0	0.0	M	102.4
4/14/2022 4:00	7.1	257.5	-23.2	80.9	0.4	0.0	M	102.4
4/14/2022 5:00	7.6	256.9	-23.7	81.0	12.2	0.0	M	102.4
4/14/2022 6:00	7.7	256.4	-23.6	79.7	76.0	0.0	M	102.4
4/14/2022 7:00	7.0	261.1	-23.2	78.4	142.8	1.0	M	102.5
4/14/2022 8:00	8.3	259.9	-22.8	77.7	226.9	1.0	M	102.5
4/14/2022 9:00	8.6	263.7	-22.4	77.8	363.0	1.0	M	102.4
4/14/2022 10:00	9.2	266.4	-21.7	77.7	467.2	1.0	M	102.4
4/14/2022 11:00	9.9	270.9	-21.5	77.0	515.3	1.0	M	102.4
4/14/2022 12:00	10.0	271.5	-20.9	77.2	553.4	1.0	M	102.3
4/14/2022 13:00	8.4	270.6	-20.5	75.8	558.2	1.0	M	102.4
4/14/2022 14:00	9.4	270.6	-20.3	74.8	536.5	1.0	M	102.4
4/14/2022 15:00	9.1	274.0	-20.1	76.0	467.8	1.0	M	102.4
4/14/2022 16:00	9.8	269.5	-20.1	76.1	325.8	1.0	M	102.4
4/14/2022 17:00	10.0	268.3	-20.1	75.4	287.6	1.0	M	102.4
4/14/2022 18:00	9.3	270.1	-20.3	76.6	190.2	1.0	M	102.4
4/14/2022 19:00	6.5	278.2	-20.8	78.7	72.8	0.0	M	102.4
4/14/2022 20:00	7.1	271.0	-21.2	79.7	25.0	0.0	M	102.4
4/14/2022 21:00	6.7	272.1	-21.7	78.9	1.6	0.0	M	102.4
4/14/2022 22:00	6.6	266.0	-22.0	78.2	0.0	0.0	M	102.4
4/14/2022 23:00	6.2	274.3	-22.6	78.6	0.0	0.0	M	102.5
4/15/2022 0:00	5.5	279.0	-23.5	80.4	0.0	0.0	M	102.4
4/15/2022 1:00	6.0	272.4	-23.6	80.2	0.0	0.0	M	102.4
4/15/2022 2:00	5.8	280.9	-24.7	81.1	0.0	0.0	M	102.4
4/15/2022 3:00	6.1	271.1	-24.8	81.4	0.0	0.0	M	102.4
4/15/2022 4:00	7.3	265.2	-24.8	81.4	0.5	0.0	M	102.4
4/15/2022 5:00	7.5	268.4	-24.8	80.9	12.7	0.0	M	102.3
4/15/2022 6:00	8.5	263.4	-25.1	80.0	63.6	0.0	M	102.3
4/15/2022 7:00	9.3	262.1	-25.0	79.2	133.8	1.0	M	102.3
4/15/2022 8:00	9.8	266.7	-24.8	78.3	227.3	1.0	M	102.3
4/15/2022 9:00	8.7	268.4	-24.7	77.4	372.5	1.0	M	102.3
4/15/2022 10:00	9.7	261.9	-24.2	77.1	462.6	1.0	M	102.2
4/15/2022 11:00	9.3	265.4	-23.8	76.5	521.4	1.0	M	102.2
4/15/2022 12:00	10.5	264.4	-23.4	76.4	567.5	1.0	M	102.1
4/15/2022 13:00	10.7	268.4	-23.1	75.8	567.8	1.0	M	102.1
4/15/2022 14:00	10.9	268.9	-22.8	75.2	523.0	1.0	M	102.1
4/15/2022 15:00	11.1	269.3	-22.5	75.9	435.4	1.0	M	102.1
4/15/2022 16:00	11.3	270.2	-22.4	75.8	390.8	1.0	M	102.1
4/15/2022 17:00	10.7	274.4	-22.4	75.9	276.5	1.0	M	102.1
4/15/2022 18:00	10.0	276.1	-22.4	76.9	205.1	1.0	M	102.1
4/15/2022 19:00	8.5	282.2	-22.8	76.1	107.6	0.0	M	102.1
4/15/2022 20:00	7.9	279.7	-23.5	79.0	30.2	0.0	M	102.2
4/15/2022 21:00	6.2	286.5	-24.4	78.1	1.7	0.0	M	102.2
4/15/2022 22:00	5.8	286.1	-25.2	78.2	0.0	0.0	M	102.2
4/15/2022 23:00	5.5	281.6	-26.2	78.7	0.0	0.0	M	102.2
4/16/2022 0:00	6.4	288.3	-26.5	78.9	0.0	0.0	M	102.2
4/16/2022 1:00	6.7	293.2	-26.6	79.1	0.0	0.0	M	102.2
4/16/2022 2:00	5.3	304.2	-27.0	78.6	0.0	0.0	M	102.3
4/16/2022 3:00	5.4	303.2	-27.2	78.0	0.0	0.0	M	102.3
4/16/2022 4:00	5.0	299.3	-27.8	77.9	0.7	0.0	M	102.3
4/16/2022 5:00	6.6	287.9	-27.7	78.0	18.4	0.0	M	102.3
4/16/2022 6:00	7.6	286.6	-27.0	77.2	66.8	0.0	M	102.2
4/16/2022 7:00	9.0	280.0	-26.3	77.8	118.5	0.0	M	102.2
4/16/2022 8:00	8.7	276.3	-25.2	77.6	214.5	1.0	M	102.2
4/16/2022 9:00	10.8	272.2	-23.6	77.8	367.5	1.0	M	102.1
4/16/2022 10:00	10.5	267.1	-22.6	78.0	442.0	1.0	M	102.0
4/16/2022 11:00	11.3	268.0	-21.6	79.5	483.9	1.0	M	102.0
4/16/2022 12:00	12.4	266.0	-21.8	79.8	537.2	1.0	M	101.9
4/16/2022 13:00	12.3	267.2	-21.4	79.8	563.7	1.0	M	101.8
4/16/2022 14:00	12.6	266.9	-20.3	80.8	528.8	1.0	M	101.8
4/16/2022 15:00	11.6	269.9	-19.0	82.2	433.2	1.0	M	101.8
4/16/2022 16:00	10.5	271.3	-17.9	82.5	343.5	1.0	M	101.9
4/16/2022 17:00	10.0	264.3	-18.0	83.4	220.9	1.0	M	101.8
4/16/2022 18:00	9.8	258.1	-17.8	85.9	122.7	1.0	M	101.8
4/16/2022 19:00	7.9	266.9	-17.6	85.8	111.4	0.0	M	101.9
4/16/2022 20:00	4.7	285.9	-19.0	84.9	33.1	0.0	M	101.9
4/16/2022 21:00	4.9	294.8	-20.4	85.2	2.3	0.0	M	101.9
4/16/2022 22:00	5.3	288.2	-21.3	84.4	0.0	0.0	M	101.9
4/16/2022 23:00	4.3	290.9	-22.2	83.7	0.0	0.0	M	101.9
4/17/2022 0:00	4.5	285.1	-23.0	83.1	0.0	0.0	M	101.9
4/17/2022 1:00	5.5	283.7	-24.0	82.3	0.0	0.0	M	101.9
4/17/2022 2:00	5.2	286.6	-24.1	82.2	0.0	0.0	M	101.9
4/17/2022 3:00	5.4	275.9	-24.0	82.1	0.0	0.0	M	101.9
4/17/2022 4:00	6.5	264.8	-24.0	82.1	0.7	0.0	M	101.8
4/17/2022 5:00	6.7	265.9	-23.8	82.1	18.8	0.0	M	101.8
4/17/2022 6:00	7.7	271.6	-23.1	81.6	84.8	0.0	M	101.8
4/17/2022 7:00	8.2	268.6	-22.3	81.5	142.9	1.0	M	101.7

4/17/2022 8:00	8.4	265.6	-21.8	81.4	210.3	1.0	M	101.7
4/17/2022 9:00	8.2	261.2	-21.0	81.3	343.8	1.0	M	101.6
4/17/2022 10:00	8.1	263.6	-20.0	81.1	457.8	1.0	M	101.5
4/17/2022 11:00	8.5	259.2	-19.0	81.4	525.9	1.0	M	101.5
4/17/2022 12:00	9.3	257.0	-17.6	82.4	478.5	1.0	M	101.4
4/17/2022 13:00	8.7	260.0	-16.2	83.3	527.4	1.0	M	101.4
4/17/2022 14:00	8.3	265.7	-15.3	82.3	514.5	1.0	M	101.3
4/17/2022 15:00	8.6	267.2	-15.0	82.4	519.8	1.0	M	101.2
4/17/2022 16:00	8.6	268.0	-15.0	84.1	386.4	1.0	M	101.2
4/17/2022 17:00	7.9	267.5	-15.1	84.7	233.7	1.0	M	101.2
4/17/2022 18:00	7.4	269.0	-15.4	85.2	184.7	1.0	M	101.2
4/17/2022 19:00	5.5	276.7	-16.4	86.1	116.8	0.0	M	101.2
4/17/2022 20:00	3.7	292.6	-17.9	87.1	37.3	0.0	M	101.2
4/17/2022 21:00	4.0	300.1	-18.4	87.6	2.4	0.0	M	101.2
4/17/2022 22:00	3.3	318.4	-17.1	86.6	0.0	0.0	M	101.3
4/17/2022 23:00	4.2	268.8	-20.1	85.6	0.0	0.0	M	101.2
4/18/2022 0:00	4.9	277.7	-22.0	84.4	0.0	0.0	M	101.3
4/18/2022 1:00	4.2	288.8	-22.2	84.0	0.0	0.0	M	101.3
4/18/2022 2:00	4.8	292.5	-22.2	84.0	0.0	0.0	M	101.4
4/18/2022 3:00	5.9	293.3	-22.8	83.2	0.0	0.0	M	101.4
4/18/2022 4:00	4.9	284.1	-24.5	81.4	1.2	0.0	M	101.4
4/18/2022 5:00	3.7	286.1	-25.2	80.9	14.7	0.0	M	101.5
4/18/2022 6:00	3.8	283.2	-25.1	80.7	48.2	0.0	M	101.5
4/18/2022 7:00	3.1	288.5	-24.3	81.1	112.0	0.0	M	101.5
4/18/2022 8:00	2.7	282.7	-23.2	80.7	197.5	1.0	M	101.6
4/18/2022 9:00	2.0	271.5	-22.5	79.4	356.6	1.0	M	101.6
4/18/2022 10:00	2.6	279.9	-21.8	79.5	444.5	1.0	M	101.6
4/18/2022 11:00	2.6	268.4	-21.2	79.3	511.2	1.0	M	101.6
4/18/2022 12:00	2.6	271.6	-20.6	78.7	573.3	1.0	M	101.6
4/18/2022 13:00	2.7	278.8	-19.9	78.7	586.7	1.0	M	101.6
4/18/2022 14:00	2.7	276.5	-19.3	79.0	545.3	1.0	M	101.6
4/18/2022 15:00	3.0	275.8	-19.4	79.6	499.8	1.0	M	101.5
4/18/2022 16:00	2.8	273.9	-19.4	80.0	418.7	1.0	M	101.5
4/18/2022 17:00	2.0	276.9	-18.9	79.6	329.8	1.0	M	101.5
4/18/2022 18:00	2.8	284.1	-19.3	80.4	234.0	1.0	M	101.5
4/18/2022 19:00	2.2	281.7	-19.9	81.5	141.3	1.0	M	101.5
4/18/2022 20:00	1.9	265.3	-21.1	83.5	46.4	0.0	M	101.4
4/18/2022 21:00	1.3	275.1	-21.9	84.1	3.6	0.0	M	101.4
4/18/2022 22:00	0.6	270.3	-23.1	83.3	0.0	0.0	M	101.4
4/18/2022 23:00	0.2	278.7	-23.5	82.7	0.0	0.0	M	101.3
4/19/2022 0:00	0.2	34.6	-23.8	82.4	0.0	0.0	M	101.3
4/19/2022 1:00	0.7	125.3	-23.3	82.8	0.0	0.0	M	101.2
4/19/2022 2:00	0.5	127.9	-22.6	83.1	0.0	0.0	M	101.2
4/19/2022 3:00	0.1	120.3	-21.9	83.5	0.0	0.0	M	101.1
4/19/2022 4:00	0.1	31.6	-21.4	84.0	0.7	0.0	M	101.0
4/19/2022 5:00	0.4	159.1	-20.3	85.1	12.6	0.0	M	101.0
4/19/2022 6:00	4.7	254.9	-18.2	86.9	66.9	0.0	M	100.9
4/19/2022 7:00	5.1	256.7	-17.8	86.5	146.1	1.0	M	100.8
4/19/2022 8:00	3.4	211.4	-16.5	85.3	250.8	1.0	M	100.8
4/19/2022 9:00	4.3	214.6	-15.5	82.3	328.1	1.0	M	100.7
4/19/2022 10:00	6.0	247.7	-15.5	83.9	385.3	1.0	M	100.6
4/19/2022 11:00	5.3	243.4	-14.8	82.1	387.8	1.0	M	100.6
4/19/2022 12:00	5.8	241.4	-14.3	77.4	518.8	1.0	M	100.5
4/19/2022 13:00	6.1	257.7	-14.4	80.2	446.3	1.0	M	100.5
4/19/2022 14:00	5.9	268.8	-14.9	79.1	595.3	1.0	M	100.5
4/19/2022 15:00	5.7	273.7	-16.2	80.3	386.3	1.0	M	100.5
4/19/2022 16:00	5.1	275.4	-16.5	81.2	363.8	1.0	M	100.5
4/19/2022 17:00	4.1	301.6	-16.4	82.3	218.8	1.0	M	100.6
4/19/2022 18:00	3.9	323.7	-16.7	82.0	134.2	1.0	M	100.6
4/19/2022 19:00	3.4	314.6	-16.9	83.4	72.8	0.0	M	100.6
4/19/2022 20:00	4.2	305.7	-17.2	85.2	19.1	0.0	M	100.7
4/19/2022 21:00	3.5	319.9	-16.6	84.9	2.1	0.0	M	100.8
4/19/2022 22:00	3.6	24.5	-16.2	83.9	0.0	0.0	M	100.9
4/19/2022 23:00	4.6	20.4	-17.1	82.8	0.0	0.0	M	101.0
4/20/2022 0:00	4.7	3.8	-19.4	84.0	0.0	0.0	M	101.0
4/20/2022 1:00	5.0	14.2	-21.3	85.1	0.0	0.0	M	101.1
4/20/2022 2:00	3.4	10.6	-21.7	84.2	0.0	0.0	M	101.2
4/20/2022 3:00	1.6	7.4	-22.9	83.0	0.0	0.0	M	101.3
4/20/2022 4:00	1.8	6.3	-23.8	82.3	2.3	0.0	M	101.3
4/20/2022 5:00	1.0	307.6	-23.5	81.4	33.9	0.0	M	101.4
4/20/2022 6:00	1.0	293.8	-22.7	78.6	102.2	0.0	M	101.5
4/20/2022 7:00	1.1	346.9	-21.8	76.4	168.1	1.0	M	101.5
4/20/2022 8:00	1.5	304.3	-21.6	72.4	260.2	1.0	M	101.5
4/20/2022 9:00	2.2	286.2	-21.8	72.6	401.2	1.0	M	101.5
4/20/2022 10:00	0.8	320.2	-19.4	69.7	475.7	1.0	M	101.5
4/20/2022 11:00	0.9	58.1	-18.9	66.1	544.8	1.0	M	101.6
4/20/2022 12:00	0.8	91.7	-18.9	65.3	559.0	1.0	M	101.6
4/20/2022 13:00	1.1	132.6	-18.7	66.2	595.2	1.0	M	101.6
4/20/2022 14:00	1.3	129.4	-18.7	67.4	590.1	1.0	M	101.6
4/20/2022 15:00	1.9	142.9	-18.7	70.4	509.2	1.0	M	101.6

4/20/2022 16:00	2.9	147.0	-19.1	73.7	433.7	1.0	M	101.5
4/20/2022 17:00	3.2	140.3	-19.1	74.1	336.2	1.0	M	101.5
4/20/2022 18:00	4.0	128.4	-19.2	77.7	243.9	1.0	M	101.5
4/20/2022 19:00	3.4	131.5	-19.7	81.2	110.8	0.0	M	101.4
4/20/2022 20:00	3.3	138.9	-20.8	82.7	39.7	0.0	M	101.3
4/20/2022 21:00	3.1	137.7	-21.5	83.9	4.4	0.0	M	101.2
4/20/2022 22:00	4.3	140.4	-22.0	83.6	0.0	0.0	M	101.2
4/20/2022 23:00	5.0	140.6	-22.4	83.2	0.0	0.0	M	101.1
4/21/2022 0:00	4.2	142.8	-22.5	83.1	0.0	0.0	M	100.9
4/21/2022 1:00	5.3	142.5	-22.3	83.3	0.0	0.0	M	100.9
4/21/2022 2:00	2.3	126.8	-21.7	83.8	0.0	0.0	M	100.8
4/21/2022 3:00	3.5	142.3	-22.0	83.0	0.0	0.0	M	100.7
4/21/2022 4:00	3.9	141.3	-22.4	81.8	2.3	0.0	M	100.6
4/21/2022 5:00	1.9	130.1	-22.4	82.3	27.4	0.0	M	100.5
4/21/2022 6:00	1.3	120.2	-22.0	79.0	95.6	0.0	M	100.5
4/21/2022 7:00	0.4	83.3	-20.3	74.5	156.6	1.0	M	100.4
4/21/2022 8:00	0.2	66.7	-18.2	67.2	261.7	1.0	M	100.4
4/21/2022 9:00	0.9	254.1	-16.5	58.2	406.0	1.0	M	100.4
4/21/2022 10:00	3.1	275.9	-19.2	70.6	491.6	1.0	M	100.4
4/21/2022 11:00	6.5	285.1	-19.4	74.2	550.7	1.0	M	100.4
4/21/2022 12:00	7.9	285.9	-19.3	75.9	600.6	1.0	M	100.5
4/21/2022 13:00	7.6	283.5	-19.1	77.4	606.4	1.0	M	100.5
4/21/2022 14:00	7.8	290.4	-19.0	77.9	574.1	1.0	M	100.6
4/21/2022 15:00	6.9	286.7	-17.9	78.1	521.7	1.0	M	100.6
4/21/2022 16:00	9.6	279.8	-17.7	79.3	431.5	1.0	M	100.6
4/21/2022 17:00	10.3	279.4	-17.8	81.2	335.3	1.0	M	100.7
4/21/2022 18:00	10.2	280.2	-18.1	79.4	251.8	1.0	M	100.8
4/21/2022 19:00	9.1	278.4	-18.6	81.1	148.6	1.0	M	100.8
4/21/2022 20:00	9.6	275.0	-19.5	82.6	60.7	0.0	M	100.8
4/21/2022 21:00	10.4	275.4	-19.8	82.2	6.5	0.0	M	100.8
4/21/2022 22:00	7.1	284.1	-20.6	82.4	0.2	0.0	M	100.9
4/21/2022 23:00	5.8	287.1	-22.1	83.3	0.0	0.0	M	101.0
4/22/2022 0:00	4.6	284.2	-23.3	82.6	0.0	0.0	M	101.1
4/22/2022 1:00	4.7	294.3	-24.2	81.0	0.0	0.0	M	101.2
4/22/2022 2:00	4.2	285.1	-25.4	78.9	0.0	0.0	M	101.3
4/22/2022 3:00	4.1	289.5	-26.5	79.6	0.0	0.0	M	101.4
4/22/2022 4:00	3.5	293.0	-27.3	78.4	3.8	0.0	M	101.4
4/22/2022 5:00	3.4	293.0	-27.5	75.0	50.2	0.0	M	101.5
4/22/2022 6:00	4.9	286.9	-27.3	73.3	135.3	1.0	M	101.5
4/22/2022 7:00	6.7	279.7	-27.3	72.1	187.1	1.0	M	101.6
4/22/2022 8:00	6.6	281.4	-26.9	70.5	306.3	1.0	M	101.7
4/22/2022 9:00	6.2	288.9	-26.2	68.4	435.8	1.0	M	101.8
4/22/2022 10:00	7.6	283.4	-25.6	67.8	503.9	1.0	M	101.8
4/22/2022 11:00	8.4	283.5	-25.0	67.2	563.7	1.0	M	101.9
4/22/2022 12:00	7.5	279.0	-24.4	68.2	602.7	1.0	M	102.0
4/22/2022 13:00	8.1	278.6	-23.8	68.9	611.0	1.0	M	102.1
4/22/2022 14:00	8.1	283.1	-23.1	69.5	588.5	1.0	M	102.2
4/22/2022 15:00	8.0	286.6	-22.5	69.2	537.8	1.0	M	102.2
4/22/2022 16:00	8.1	287.3	-22.3	70.1	461.8	1.0	M	102.3
4/22/2022 17:00	7.7	293.2	-22.2	71.6	366.8	1.0	M	102.4
4/22/2022 18:00	7.2	296.9	-22.2	72.1	260.6	1.0	M	102.5
4/22/2022 19:00	5.9	287.5	-22.6	73.7	156.0	1.0	M	102.5
4/22/2022 20:00	6.3	287.0	-23.4	75.7	65.1	0.0	M	102.7
4/22/2022 21:00	5.2	283.7	-24.4	77.1	7.4	0.0	M	102.7
4/22/2022 22:00	3.0	290.0	-25.1	78.5	0.2	0.0	M	102.8
4/22/2022 23:00	2.4	293.6	-25.6	78.6	0.0	0.0	M	102.9
4/23/2022 0:00	2.3	296.1	-25.6	78.9	0.0	0.0	M	103.0
4/23/2022 1:00	1.9	284.9	-25.8	79.1	0.0	0.0	M	103.0
4/23/2022 2:00	1.4	272.2	-26.0	78.7	0.0	0.0	M	103.1
4/23/2022 3:00	0.6	226.7	-26.5	79.1	0.1	0.0	M	103.1
4/23/2022 4:00	0.8	161.6	-27.4	78.5	6.0	0.0	M	103.2
4/23/2022 5:00	0.7	105.4	-27.6	77.5	53.6	0.0	M	103.2
4/23/2022 6:00	0.6	97.8	-26.1	75.6	138.9	1.0	M	103.3
4/23/2022 7:00	0.5	122.1	-24.6	70.5	204.5	1.0	M	103.3
4/23/2022 8:00	0.8	110.5	-24.3	65.9	302.2	1.0	M	103.3
4/23/2022 9:00	1.0	94.3	-23.6	67.1	419.5	1.0	M	103.4
4/23/2022 10:00	2.4	124.9	-22.0	73.5	495.4	1.0	M	103.4
4/23/2022 11:00	2.9	136.5	-20.6	73.7	569.1	1.0	M	103.4
4/23/2022 12:00	3.8	143.4	-19.6	70.3	603.9	1.0	M	103.4
4/23/2022 13:00	4.1	159.7	-18.3	67.9	612.1	1.0	M	103.4
4/23/2022 14:00	4.1	172.9	-17.2	62.7	589.2	1.0	M	103.4
4/23/2022 15:00	3.8	166.2	-16.5	63.7	537.7	1.0	M	103.4
4/23/2022 16:00	3.9	154.6	-16.3	65.4	463.7	1.0	M	103.4
4/23/2022 17:00	4.4	153.4	-16.2	68.1	368.6	1.0	M	103.4
4/23/2022 18:00	4.4	148.0	-16.4	69.6	265.2	1.0	M	103.4
4/23/2022 19:00	2.3	142.5	-17.1	73.2	162.7	1.0	M	103.4
4/23/2022 20:00	2.1	151.9	-18.4	77.9	72.4	0.0	M	103.4
4/23/2022 21:00	3.0	149.5	-19.8	78.7	10.6	0.0	M	103.3
4/23/2022 22:00	3.8	151.0	-20.9	78.7	0.4	0.0	M	103.3
4/23/2022 23:00	3.9	141.0	-21.6	78.2	0.0	0.0	M	103.3

4/24/2022 0:00	4.1	137.8	-22.3	76.3	0.0	0.0	M	103.3
4/24/2022 1:00	1.1	137.4	-22.9	75.6	0.0	0.0	M	103.3
4/24/2022 2:00	1.2	136.7	-23.1	75.7	0.0	0.0	M	103.3
4/24/2022 3:00	0.9	137.4	-23.5	74.6	0.1	0.0	M	103.2
4/24/2022 4:00	2.0	135.1	-23.4	74.8	6.9	0.0	M	103.2
4/24/2022 5:00	1.6	123.0	-22.9	73.4	57.2	0.0	M	103.1
4/24/2022 6:00	2.8	128.7	-21.8	71.1	127.6	1.0	M	103.0
4/24/2022 7:00	3.2	127.6	-20.6	75.1	175.1	1.0	M	103.0
4/24/2022 8:00	2.6	129.0	-18.8	67.2	292.8	1.0	M	102.8
4/24/2022 9:00	6.4	154.1	-17.8	66.2	427.0	1.0	M	102.8
4/24/2022 10:00	6.5	139.7	-16.0	66.5	510.3	1.0	M	102.7
4/24/2022 11:00	5.1	132.8	-14.0	70.0	570.1	1.0	M	102.7
4/24/2022 12:00	4.7	162.6	-11.3	68.1	607.4	1.0	M	102.6
4/24/2022 13:00	6.3	169.7	-10.3	68.7	614.9	1.0	M	102.5
4/24/2022 14:00	5.4	159.4	-9.3	72.0	590.5	1.0	M	102.5
4/24/2022 15:00	6.5	174.5	-8.4	72.2	537.4	1.0	M	102.4
4/24/2022 16:00	4.8	173.9	-7.6	73.4	462.3	1.0	M	102.4
4/24/2022 17:00	4.5	184.9	-6.5	72.4	368.3	1.0	M	102.4
4/24/2022 18:00	1.7	149.8	-6.5	74.4	263.3	1.0	M	102.3
4/24/2022 19:00	1.4	149.4	-7.1	75.6	150.1	1.0	M	102.3
4/24/2022 20:00	0.9	107.4	-8.3	79.4	58.7	0.0	M	102.2
4/24/2022 21:00	0.4	120.0	-9.9	82.3	7.7	0.0	M	102.2
4/24/2022 22:00	0.3	61.5	-9.6	83.3	0.5	0.0	M	102.1
4/24/2022 23:00	0.3	50.3	-9.5	83.0	0.0	0.0	M	102.1
4/25/2022 0:00	0.7	97.0	-9.1	82.4	0.0	0.0	M	102.1
4/25/2022 1:00	0.8	147.0	-7.3	78.6	0.0	0.0	M	102.1
4/25/2022 2:00	0.7	106.1	-7.9	76.5	0.0	0.0	M	102.1
4/25/2022 3:00	0.5	151.7	-9.0	78.9	0.1	0.0	M	102.1
4/25/2022 4:00	0.8	67.9	-9.7	78.2	5.4	0.0	M	102.1
4/25/2022 5:00	1.0	87.4	-10.0	76.0	49.1	0.0	M	102.1
4/25/2022 6:00	1.2	89.2	-10.6	74.8	131.3	1.0	M	102.1
4/25/2022 7:00	2.3	125.8	-10.4	75.1	185.7	1.0	M	102.1
4/25/2022 8:00	4.6	140.7	-10.6	75.7	293.6	1.0	M	102.0
4/25/2022 9:00	3.6	127.8	-9.4	74.7	429.1	1.0	M	102.0
4/25/2022 10:00	3.3	122.5	-8.4	74.9	514.7	1.0	M	102.0
4/25/2022 11:00	4.2	133.7	-7.9	72.2	573.9	1.0	M	102.0
4/25/2022 12:00	4.2	127.2	-6.9	72.9	612.9	1.0	M	102.0
4/25/2022 13:00	4.4	114.3	-5.3	74.0	621.9	1.0	M	102.0
4/25/2022 14:00	4.5	109.1	-4.8	72.3	601.0	1.0	M	102.0
4/25/2022 15:00	6.3	108.3	-4.9	73.7	551.4	1.0	M	102.0
4/25/2022 16:00	6.2	109.2	-5.6	81.0	475.8	1.0	M	101.9
4/25/2022 17:00	5.6	111.1	-5.7	83.3	380.3	1.0	M	102.0
4/25/2022 18:00	6.5	105.8	-6.4	84.1	275.5	1.0	M	102.0
4/25/2022 19:00	4.9	105.4	-7.4	85.8	171.5	1.0	M	101.9
4/25/2022 20:00	3.6	102.6	-9.0	86.4	80.0	0.0	M	101.9
4/25/2022 21:00	2.6	88.1	-10.5	88.0	15.1	0.0	M	102.0
4/25/2022 22:00	2.4	97.9	-11.6	89.1	0.8	0.0	M	101.9
4/25/2022 23:00	1.6	106.5	-12.5	88.9	0.0	0.0	M	102.0
4/26/2022 0:00	2.0	103.5	-13.2	88.7	0.0	0.0	M	102.0
4/26/2022 1:00	2.0	84.3	-14.5	87.1	0.0	0.0	M	102.0
4/26/2022 2:00	1.9	95.3	-15.0	86.2	0.0	0.0	M	102.0
4/26/2022 3:00	1.8	98.9	-15.3	84.6	0.3	0.0	M	102.0
4/26/2022 4:00	1.8	93.3	-15.5	82.8	9.0	0.0	M	102.0
4/26/2022 5:00	2.0	99.2	-15.1	79.5	61.8	0.0	M	102.0
4/26/2022 6:00	3.2	90.0	-14.6	77.7	149.2	1.0	M	102.0
4/26/2022 7:00	4.7	85.3	-14.2	76.3	209.0	1.0	M	102.0
4/26/2022 8:00	4.5	94.0	-12.3	74.9	350.8	1.0	M	101.9
4/26/2022 9:00	5.9	110.1	-10.0	80.3	476.3	1.0	M	101.9
4/26/2022 10:00	5.5	101.8	-9.0	77.6	530.2	1.0	M	101.9
4/26/2022 11:00	5.0	99.7	-7.8	76.5	519.8	1.0	M	101.9
4/26/2022 12:00	5.5	103.3	-6.6	76.6	554.7	1.0	M	101.9
4/26/2022 13:00	6.6	105.0	-5.8	77.3	645.9	1.0	M	101.9
4/26/2022 14:00	7.0	110.8	-5.4	77.2	567.2	1.0	M	101.9
4/26/2022 15:00	7.7	110.1	-5.1	76.5	544.3	1.0	M	101.8
4/26/2022 16:00	7.8	109.8	-4.8	75.9	461.1	1.0	M	101.8
4/26/2022 17:00	7.5	105.4	-5.0	77.5	303.2	1.0	M	101.8
4/26/2022 18:00	7.2	105.2	-5.7	81.1	180.0	1.0	M	101.8
4/26/2022 19:00	5.9	113.2	-6.0	84.3	67.4	0.0	M	101.8
4/26/2022 20:00	6.6	109.5	-6.7	86.0	36.0	0.0	M	101.7
4/26/2022 21:00	8.1	115.6	-6.7	85.8	8.1	0.0	M	101.7
4/26/2022 22:00	7.2	118.7	-6.9	86.8	0.5	0.0	M	101.7
4/26/2022 23:00	7.8	122.6	-7.0	86.4	0.0	0.0	M	101.6
4/27/2022 0:00	5.8	118.5	-6.9	87.0	0.0	0.0	M	101.6
4/27/2022 1:00	3.4	131.4	-6.5	89.1	0.0	0.0	M	101.6
4/27/2022 2:00	2.6	140.3	-6.3	89.3	0.0	0.0	M	101.6
4/27/2022 3:00	2.3	102.3	-6.1	89.8	0.1	0.0	M	101.6
4/27/2022 4:00	1.7	106.3	-6.0	90.0	4.6	0.0	M	101.6
4/27/2022 5:00	1.4	104.6	-5.8	90.3	22.9	0.0	M	101.6
4/27/2022 6:00	1.1	118.6	-5.3	89.2	79.4	0.0	M	101.6
4/27/2022 7:00	0.9	112.7	-4.8	86.8	169.8	1.0	M	101.5

4/27/2022 8:00	0.6	135.3	-3.8	82.0	279.4	1.0	M	101.5
4/27/2022 9:00	4.5	262.7	-3.8	86.1	298.1	1.0	M	101.5
4/27/2022 10:00	7.1	268.8	-4.3	93.8	367.3	1.0	M	101.5
4/27/2022 11:00	7.3	268.5	-4.4	92.2	379.4	1.0	M	101.5
4/27/2022 12:00	9.6	272.8	-4.3	91.8	569.5	1.0	M	101.5
4/27/2022 13:00	8.8	265.6	-5.0	92.7	415.1	1.0	M	101.6
4/27/2022 14:00	10.0	265.8	-5.7	93.1	330.2	1.0	M	101.5
4/27/2022 15:00	9.6	273.1	-5.9	93.4	266.6	1.0	M	101.6
4/27/2022 16:00	9.6	270.5	-6.0	92.5	224.5	1.0	M	101.6
4/27/2022 17:00	10.2	265.4	-6.0	92.4	212.3	1.0	M	101.5
4/27/2022 18:00	8.1	267.5	-6.0	93.1	130.2	1.0	M	101.6
4/27/2022 19:00	7.3	265.7	-5.7	93.1	114.7	0.0	M	101.6
4/27/2022 20:00	7.7	262.3	-5.9	93.9	41.4	0.0	M	101.6
4/27/2022 21:00	7.9	261.3	-6.0	94.8	6.9	0.0	M	101.6
4/27/2022 22:00	7.2	265.8	-5.7	94.7	0.5	0.0	M	101.6
4/27/2022 23:00	6.8	277.6	-5.9	94.6	0.0	0.0	M	101.6
4/28/2022 0:00	5.9	280.5	-6.7	92.9	0.0	0.0	M	101.6
4/28/2022 1:00	5.3	285.0	-7.4	93.5	0.0	0.0	M	101.7
4/28/2022 2:00	5.8	282.2	-7.9	93.7	0.0	0.0	M	101.7
4/28/2022 3:00	6.4	281.5	-8.2	95.2	0.2	0.0	M	101.7
4/28/2022 4:00	5.9	283.6	-8.3	95.5	3.1	0.0	M	101.7
4/28/2022 5:00	6.2	286.0	-8.4	95.6	17.6	0.0	M	101.7
4/28/2022 6:00	4.3	314.8	-8.7	94.8	38.8	0.0	M	101.7
4/28/2022 7:00	4.4	27.8	-10.1	93.6	80.2	0.0	M	101.8
4/28/2022 8:00	4.8	36.4	-11.0	91.5	216.3	1.0	M	101.8
4/28/2022 9:00	5.1	31.7	-11.8	88.8	237.1	1.0	M	101.8
4/28/2022 10:00	4.4	13.8	-11.9	85.6	376.9	1.0	M	101.9
4/28/2022 11:00	4.6	1.4	-11.7	82.4	475.8	1.0	M	101.9
4/28/2022 12:00	4.7	319.6	-11.2	80.1	542.2	1.0	M	101.9
4/28/2022 13:00	5.7	319.5	-10.9	80.6	638.1	1.0	M	102.0
4/28/2022 14:00	5.7	318.4	-10.4	80.9	613.4	1.0	M	102.0
4/28/2022 15:00	5.7	331.8	-10.2	80.2	546.8	1.0	M	102.1
4/28/2022 16:00	6.2	329.8	-10.4	81.0	484.2	1.0	M	102.1
4/28/2022 17:00	5.7	322.4	-10.4	82.0	390.4	1.0	M	102.1
4/28/2022 18:00	4.7	311.3	-10.5	81.7	290.4	1.0	M	102.2
4/28/2022 19:00	5.0	295.5	-11.4	82.7	184.5	1.0	M	102.2
4/28/2022 20:00	6.9	314.0	-13.0	84.2	90.9	0.0	M	102.2
4/28/2022 21:00	5.2	305.2	-14.4	83.2	24.0	0.0	M	102.2
4/28/2022 22:00	4.5	290.3	-16.1	83.5	1.8	0.0	M	102.3
4/28/2022 23:00	4.0	305.3	-16.8	82.5	0.0	0.0	M	102.3
4/29/2022 0:00	4.1	283.4	-17.9	82.8	0.0	0.0	M	102.4
4/29/2022 1:00	4.1	286.3	-18.8	84.0	0.0	0.0	M	102.4
4/29/2022 2:00	3.4	287.7	-19.4	84.7	0.0	0.0	M	102.5
4/29/2022 3:00	3.6	282.1	-19.9	85.0	1.0	0.0	M	102.5
4/29/2022 4:00	6.1	277.9	-20.1	85.2	15.6	0.0	M	102.5
4/29/2022 5:00	8.8	285.1	-19.5	83.5	65.3	0.0	M	102.5
4/29/2022 6:00	8.7	286.0	-18.8	80.6	183.9	1.0	M	102.6
4/29/2022 7:00	7.8	290.7	-17.9	78.9	220.5	1.0	M	102.6
4/29/2022 8:00	5.3	287.4	-16.6	77.4	283.7	1.0	M	102.6
4/29/2022 9:00	7.4	283.7	-15.9	78.3	439.5	1.0	M	102.7
4/29/2022 10:00	8.5	283.3	-15.0	77.8	542.1	1.0	M	102.6
4/29/2022 11:00	7.6	282.1	-14.2	77.6	590.1	1.0	M	102.7
4/29/2022 12:00	6.9	289.7	-13.7	76.4	625.5	1.0	M	102.7
4/29/2022 13:00	7.0	283.4	-13.5	76.4	639.1	1.0	M	102.8
4/29/2022 14:00	6.8	284.0	-13.1	78.1	611.3	1.0	M	102.8
4/29/2022 15:00	6.0	277.1	-12.9	78.6	557.3	1.0	M	102.8
4/29/2022 16:00	5.4	272.8	-12.7	77.9	484.7	1.0	M	102.8
4/29/2022 17:00	5.0	275.9	-12.6	78.5	393.4	1.0	M	102.9
4/29/2022 18:00	5.5	288.2	-12.7	78.2	291.6	1.0	M	102.8
4/29/2022 19:00	3.9	280.2	-13.1	79.6	187.3	1.0	M	102.8
4/29/2022 20:00	3.3	283.6	-13.6	80.6	95.9	0.0	M	102.8
4/29/2022 21:00	1.8	290.5	-14.2	80.4	27.6	0.0	M	102.9
4/29/2022 22:00	1.5	240.6	-15.0	82.1	2.2	0.0	M	102.9
4/29/2022 23:00	0.4	140.4	-16.4	84.6	0.0	0.0	M	103.0
4/30/2022 0:00	0.4	77.4	-16.9	86.8	0.0	0.0	M	103.0
4/30/2022 1:00	0.8	119.4	-17.4	87.5	0.0	0.0	M	103.0
4/30/2022 2:00	0.9	113.3	-18.0	87.6	0.0	0.0	M	103.0
4/30/2022 3:00	0.6	90.2	-18.8	87.0	1.2	0.0	M	103.0
4/30/2022 4:00	0.6	91.5	-19.0	86.4	10.9	0.0	M	103.0
4/30/2022 5:00	1.0	94.4	-18.2	85.4	77.1	0.0	M	103.0
4/30/2022 6:00	1.0	104.3	-17.0	82.7	168.8	1.0	M	103.0
4/30/2022 7:00	1.4	127.4	-16.3	81.6	222.3	1.0	M	103.0
4/30/2022 8:00	2.2	126.3	-15.5	82.4	328.2	1.0	M	103.0
4/30/2022 9:00	3.1	122.3	-14.4	84.1	445.3	1.0	M	103.0
4/30/2022 10:00	2.9	125.1	-13.2	81.5	534.0	1.0	M	103.0
4/30/2022 11:00	3.1	123.0	-11.3	81.4	592.3	1.0	M	102.9
4/30/2022 12:00	3.2	124.8	-9.5	78.7	629.6	1.0	M	102.9
4/30/2022 13:00	3.7	121.7	-8.6	78.1	636.5	1.0	M	102.9
4/30/2022 14:00	4.5	112.6	-8.0	78.4	613.6	1.0	M	102.8
4/30/2022 15:00	5.1	120.4	-7.9	78.8	564.8	1.0	M	102.8

4/30/2022 16:00	5.3	118.8	-7.8	80.7	492.4	1.0	M	102.8
4/30/2022 17:00	4.9	114.0	-7.1	84.3	400.2	1.0	M	102.8
4/30/2022 18:00	5.5	116.3	-7.6	84.4	295.9	1.0	M	102.7
4/30/2022 19:00	4.8	118.5	-8.1	86.7	190.6	1.0	M	102.7
4/30/2022 20:00	2.7	134.0	-9.7	84.8	96.6	0.0	M	102.7
4/30/2022 21:00	2.0	122.0	-10.8	86.2	29.4	0.0	M	102.7
4/30/2022 22:00	1.5	109.8	-12.5	87.7	2.8	0.0	M	102.6
4/30/2022 23:00	1.4	101.0	-13.5	88.2	0.0	0.0	M	102.6
5/1/2022 0:00	1.3	110.9	-14.3	88.8	0.0	0.0	M	102.6
5/1/2022 1:00	1.0	98.9	-15.6	88.4	0.0	0.0	M	102.6
5/1/2022 2:00	0.9	91.5	-16.3	88.2	0.0	0.0	M	102.6
5/1/2022 3:00	0.6	87.6	-16.9	88.1	1.8	0.0	M	102.6
5/1/2022 4:00	0.8	95.6	-17.2	87.4	20.9	0.0	M	102.6
5/1/2022 5:00	1.4	106.3	-16.6	83.5	78.2	0.0	M	102.5
5/1/2022 6:00	1.3	104.3	-16.0	80.2	161.0	1.0	M	102.5
5/1/2022 7:00	1.9	96.8	-15.8	78.4	220.3	1.0	M	102.4
5/1/2022 8:00	2.3	81.0	-14.9	74.7	332.4	1.0	M	102.5
5/1/2022 9:00	2.9	82.8	-13.7	74.6	459.5	1.0	M	102.4
5/1/2022 10:00	3.0	97.9	-11.7	74.2	541.3	1.0	M	102.4
5/1/2022 11:00	3.7	103.4	-10.2	76.7	599.0	1.0	M	102.4
5/1/2022 12:00	4.5	115.8	-8.8	78.4	637.6	1.0	M	102.3
5/1/2022 13:00	4.8	101.3	-8.1	80.5	642.1	1.0	M	102.3
5/1/2022 14:00	5.1	105.1	-6.8	79.7	619.2	1.0	M	102.3
5/1/2022 15:00	5.3	103.3	-6.1	79.7	566.0	1.0	M	102.3
5/1/2022 16:00	5.0	101.7	-5.6	79.3	490.0	1.0	M	102.3
5/1/2022 17:00	5.3	104.2	-5.4	80.8	398.4	1.0	M	102.2
5/1/2022 18:00	6.1	104.1	-5.6	84.5	295.8	1.0	M	102.2
5/1/2022 19:00	4.0	102.5	-6.4	85.1	193.7	1.0	M	102.2
5/1/2022 20:00	2.4	115.6	-6.9	86.3	101.0	0.0	M	102.2
5/1/2022 21:00	1.9	81.4	-8.4	86.5	32.9	0.0	M	102.2
5/1/2022 22:00	1.7	72.2	-9.8	88.9	3.4	0.0	M	102.1
5/1/2022 23:00	1.0	78.6	-10.5	89.8	0.0	0.0	M	102.1
5/2/2022 0:00	0.8	79.2	-11.1	90.5	0.0	0.0	M	102.1
5/2/2022 1:00	0.8	80.1	-12.2	91.6	0.0	0.0	M	102.1
5/2/2022 2:00	0.7	72.8	-12.8	91.9	0.0	0.0	M	102.1
5/2/2022 3:00	0.2	71.0	-13.0	91.6	2.1	0.0	M	102.1
5/2/2022 4:00	0.4	66.5	-13.2	90.8	22.4	0.0	M	102.1
5/2/2022 5:00	0.9	89.4	-13.2	88.1	78.4	0.0	M	102.1
5/2/2022 6:00	0.8	78.5	-11.7	82.2	159.8	1.0	M	102.1
5/2/2022 7:00	1.3	115.4	-10.5	77.7	215.5	1.0	M	102.1
5/2/2022 8:00	1.5	116.6	-9.7	75.8	332.3	1.0	M	102.1
5/2/2022 9:00	1.6	114.1	-8.2	74.8	464.1	1.0	M	102.1
5/2/2022 10:00	2.4	106.9	-6.5	74.5	545.9	1.0	M	102.1
5/2/2022 11:00	4.0	117.0	-4.8	78.0	606.1	1.0	M	102.0
5/2/2022 12:00	5.8	134.3	-4.2	77.1	644.0	1.0	M	102.0
5/2/2022 13:00	6.9	143.7	-3.3	77.9	649.1	1.0	M	102.0
5/2/2022 14:00	6.8	145.2	-2.2	80.0	625.4	1.0	M	102.0
5/2/2022 15:00	7.8	150.5	-1.5	82.7	575.4	1.0	M	102.0
5/2/2022 16:00	5.5	151.8	-0.9	84.1	500.7	1.0	M	101.9
5/2/2022 17:00	5.2	149.9	-1.0	85.8	406.9	1.0	M	101.9
5/2/2022 18:00	5.9	151.6	-1.3	85.7	303.1	1.0	M	101.9
5/2/2022 19:00	6.0	148.7	-2.0	84.8	198.7	1.0	M	101.9
5/2/2022 20:00	5.3	146.9	-3.4	85.7	106.6	0.0	M	101.9
5/2/2022 21:00	4.0	150.6	-4.6	85.3	35.8	0.0	M	101.9
5/2/2022 22:00	0.8	78.4	-6.1	86.6	3.7	0.0	M	101.9
5/2/2022 23:00	2.5	97.5	-7.6	86.3	0.1	0.0	M	101.8
5/3/2022 0:00	7.1	141.9	-8.5	82.8	0.0	0.0	M	101.9
5/3/2022 1:00	2.7	146.3	-10.0	83.2	0.0	0.0	M	101.9
5/3/2022 2:00	2.3	154.4	-11.0	84.5	0.0	0.0	M	101.9
5/3/2022 3:00	2.1	151.9	-11.9	85.5	2.2	0.0	M	101.9
5/3/2022 4:00	0.8	119.8	-12.0	83.7	31.3	0.0	M	101.9
5/3/2022 5:00	1.3	80.0	-11.4	80.4	95.5	0.0	M	101.8
5/3/2022 6:00	1.3	102.0	-9.9	76.5	173.2	1.0	M	101.8
5/3/2022 7:00	2.2	129.7	-9.5	76.7	219.0	1.0	M	101.8
5/3/2022 8:00	3.1	128.2	-8.7	78.4	332.1	1.0	M	101.7
5/3/2022 9:00	4.6	143.6	-8.0	77.1	476.5	1.0	M	101.7
5/3/2022 10:00	6.8	148.1	-7.1	78.6	558.1	1.0	M	101.7
5/3/2022 11:00	5.3	139.1	-5.5	78.1	616.0	1.0	M	101.7
5/3/2022 12:00	5.6	141.2	-4.1	78.3	652.6	1.0	M	101.6
5/3/2022 13:00	8.0	148.7	-3.3	78.5	659.2	1.0	M	101.6
5/3/2022 14:00	7.1	150.2	-2.5	78.0	635.5	1.0	M	101.5
5/3/2022 15:00	7.6	154.3	-2.2	77.3	584.5	1.0	M	101.5
5/3/2022 16:00	9.4	154.5	-2.5	79.6	509.6	1.0	M	101.4
5/3/2022 17:00	9.1	148.0	-3.1	81.2	415.8	1.0	M	101.4
5/3/2022 18:00	7.9	153.6	-3.5	81.0	310.8	1.0	M	101.4
5/3/2022 19:00	8.4	157.4	-4.3	81.4	205.1	1.0	M	101.3
5/3/2022 20:00	9.9	157.5	-5.3	83.1	111.1	0.0	M	101.3
5/3/2022 21:00	10.5	163.2	-6.1	83.4	40.2	0.0	M	101.2
5/3/2022 22:00	10.6	161.8	-7.2	84.3	4.9	0.0	M	101.2
5/3/2022 23:00	9.9	156.6	-8.5	85.3	0.3	0.0	M	101.2

5/4/2022 0:00	10.4	158.0	-9.4	84.1	0.0	0.0	M	101.2
5/4/2022 1:00	7.9	141.0	-10.4	85.2	0.0	0.0	M	101.2
5/4/2022 2:00	7.4	139.8	-11.1	86.5	0.1	0.0	M	101.2
5/4/2022 3:00	8.8	134.5	-11.7	85.9	3.2	0.0	M	101.2
5/4/2022 4:00	6.9	135.8	-12.1	84.8	28.6	0.0	M	101.1
5/4/2022 5:00	9.3	148.8	-12.1	83.6	94.0	0.0	M	101.0
5/4/2022 6:00	9.5	151.0	-11.8	82.8	180.0	1.0	M	100.9
5/4/2022 7:00	9.2	152.7	-11.2	81.9	227.4	1.0	M	100.9
5/4/2022 8:00	11.7	156.8	-10.6	81.4	325.0	1.0	M	100.8
5/4/2022 9:00	10.2	147.5	-9.6	80.7	477.4	1.0	M	100.9
5/4/2022 10:00	9.3	141.3	-8.3	80.5	556.0	1.0	M	100.8
5/4/2022 11:00	8.4	137.7	-7.0	80.4	611.4	1.0	M	100.9
5/4/2022 12:00	9.1	142.3	-5.8	81.0	645.6	1.0	M	100.8
5/4/2022 13:00	8.8	146.7	-5.0	81.2	652.2	1.0	M	100.8
5/4/2022 14:00	8.8	145.5	-4.4	81.2	630.4	1.0	M	100.8
5/4/2022 15:00	10.4	150.3	-3.5	80.5	581.6	1.0	M	100.7
5/4/2022 16:00	10.4	148.4	-3.2	80.6	510.1	1.0	M	100.7
5/4/2022 17:00	9.8	149.5	-3.3	81.1	394.8	1.0	M	100.6
5/4/2022 18:00	8.7	145.6	-4.2	83.7	182.9	1.0	M	100.6
5/4/2022 19:00	9.5	147.0	-4.8	84.5	207.7	1.0	M	100.6
5/4/2022 20:00	9.9	148.3	-6.1	85.8	74.5	0.0	M	100.5
5/4/2022 21:00	10.6	147.6	-6.8	87.0	26.9	0.0	M	100.5
5/4/2022 22:00	11.0	142.2	-7.3	88.2	5.1	0.0	M	100.4
5/4/2022 23:00	10.4	143.2	-8.0	89.1	0.3	0.0	M	100.4
5/5/2022 0:00	7.9	143.0	-8.3	88.9	0.0	0.0	M	100.3
5/5/2022 1:00	7.7	139.9	-8.6	88.9	0.0	0.0	M	100.3
5/5/2022 2:00	8.7	142.7	-8.7	89.2	0.2	0.0	M	100.3
5/5/2022 3:00	6.6	139.2	-8.5	89.4	3.8	0.0	M	100.2
5/5/2022 4:00	4.2	135.8	-7.5	89.6	28.9	0.0	M	100.2
5/5/2022 5:00	7.8	137.3	-6.6	89.4	55.8	0.0	M	100.1
5/5/2022 6:00	10.6	144.4	-5.8	89.3	98.6	0.0	M	100.0
5/5/2022 7:00	11.0	147.9	-5.4	89.3	155.5	1.0	M	100.0
5/5/2022 8:00	10.6	142.6	-5.0	89.0	218.0	1.0	M	99.9
5/5/2022 9:00	10.6	141.2	-4.6	89.0	246.3	1.0	M	99.8
5/5/2022 10:00	11.1	145.8	-3.7	86.8	533.1	1.0	M	99.8
5/5/2022 11:00	10.1	147.4	-2.9	87.2	475.3	1.0	M	99.8
5/5/2022 12:00	9.6	149.3	-2.2	87.6	416.7	1.0	M	99.7
5/5/2022 13:00	9.2	150.9	-1.0	87.0	543.1	1.0	M	99.8
5/5/2022 14:00	7.0	149.1	0.1	85.6	571.3	1.0	M	99.7
5/5/2022 15:00	5.8	146.4	0.6	85.4	633.5	1.0	M	99.7
5/5/2022 16:00	3.0	141.2	1.5	85.5	464.9	1.0	M	99.7
5/5/2022 17:00	2.3	133.1	1.2	87.8	228.3	1.0	M	99.7
5/5/2022 18:00	3.1	170.4	1.5	88.4	143.6	1.0	M	99.7
5/5/2022 19:00	2.5	147.2	1.0	92.1	67.9	0.0	M	99.7
5/5/2022 20:00	1.4	102.1	1.1	92.1	72.3	0.0	M	99.7
5/5/2022 21:00	0.9	132.8	1.0	92.6	22.7	0.0	M	99.7
5/5/2022 22:00	0.4	121.9	0.9	93.2	3.2	0.0	M	99.7
5/5/2022 23:00	1.4	142.0	0.7	94.3	0.2	0.0	M	99.7
5/6/2022 0:00	3.1	204.5	1.3	94.0	0.0	0.0	M	99.8
5/6/2022 1:00	1.8	225.6	1.5	92.9	0.0	0.0	M	99.8
5/6/2022 2:00	0.8	101.2	1.3	93.5	0.0	0.0	M	99.8
5/6/2022 3:00	2.4	214.3	1.4	93.2	1.6	0.0	M	99.8
5/6/2022 4:00	1.5	171.8	1.4	93.0	14.5	0.0	M	99.8
5/6/2022 5:00	0.7	267.7	1.3	93.8	43.7	0.0	M	99.9
5/6/2022 6:00	3.1	279.1	1.3	94.5	72.3	0.0	M	99.9
5/6/2022 7:00	3.1	281.0	1.0	95.7	118.9	0.0	M	100.0
5/6/2022 8:00	2.4	279.0	1.4	94.9	191.7	1.0	M	100.1
5/6/2022 9:00	1.9	278.3	2.0	92.3	279.8	1.0	M	100.0
5/6/2022 10:00	1.6	244.6	2.1	92.2	270.1	1.0	M	100.1
5/6/2022 11:00	0.6	164.7	4.0	85.9	486.9	1.0	M	100.1
5/6/2022 12:00	1.8	239.6	4.3	81.8	634.4	1.0	M	100.1
5/6/2022 13:00	3.0	278.6	3.9	82.5	648.9	1.0	M	100.2
5/6/2022 14:00	1.4	248.3	4.3	81.0	442.0	1.0	M	100.2
5/6/2022 15:00	2.3	273.7	3.5	84.3	335.5	1.0	M	100.2
5/6/2022 16:00	2.6	280.4	3.1	86.0	297.8	1.0	M	100.3
5/6/2022 17:00	3.3	278.2	2.1	90.5	162.2	1.0	M	100.3
5/6/2022 18:00	3.3	268.8	1.5	93.8	102.4	0.0	M	100.3
5/6/2022 19:00	3.1	270.5	0.9	96.3	70.2	0.0	M	100.4
5/6/2022 20:00	3.0	275.0	0.6	97.7	39.9	0.0	M	100.4
5/6/2022 21:00	1.5	333.1	0.4	98.3	15.5	0.0	M	100.5
5/6/2022 22:00	2.0	26.3	0.2	98.6	2.2	0.0	M	100.6
5/6/2022 23:00	4.5	26.2	-0.6	98.7	0.0	0.0	M	100.6
5/7/2022 0:00	5.0	33.5	-1.3	98.9	0.0	0.0	M	100.6
5/7/2022 1:00	5.5	54.4	-2.2	98.7	0.0	0.0	M	100.7
5/7/2022 2:00	6.0	33.0	-3.3	96.4	0.1	0.0	M	100.7
5/7/2022 3:00	5.9	43.7	-4.0	94.6	2.8	0.0	M	100.8
5/7/2022 4:00	5.7	36.2	-5.1	93.3	18.1	0.0	M	100.9
5/7/2022 5:00	5.9	46.6	-5.7	91.9	43.9	0.0	M	100.9
5/7/2022 6:00	6.2	59.7	-5.8	91.1	81.8	0.0	M	101.0
5/7/2022 7:00	7.5	55.2	-5.8	91.5	116.4	0.0	M	101.0

5/7/2022 8:00	8.4	50.5	-6.1	89.5	208.5	1.0	M	101.1
5/7/2022 9:00	7.7	48.2	-6.0	87.2	395.7	1.0	M	101.1
5/7/2022 10:00	8.1	47.6	-5.9	85.8	505.9	1.0	M	101.1
5/7/2022 11:00	6.9	41.4	-6.0	86.8	357.1	1.0	M	101.1
5/7/2022 12:00	7.7	41.8	-6.4	87.1	411.5	1.0	M	101.2
5/7/2022 13:00	7.1	38.7	-6.0	83.4	665.9	1.0	M	101.2
5/7/2022 14:00	6.7	30.7	-6.2	83.9	566.1	1.0	M	101.2
5/7/2022 15:00	7.4	35.1	-6.8	84.8	481.2	1.0	M	101.3
5/7/2022 16:00	8.6	41.3	-6.9	83.8	496.8	1.0	M	101.3
5/7/2022 17:00	8.9	39.4	-7.3	83.5	400.3	1.0	M	101.3
5/7/2022 18:00	8.6	45.4	-8.2	83.9	325.3	1.0	M	101.4
5/7/2022 19:00	8.1	40.6	-9.2	84.0	236.3	1.0	M	101.5
5/7/2022 20:00	8.5	39.8	-9.8	83.4	149.7	1.0	M	101.5
5/7/2022 21:00	8.8	43.3	-10.7	84.0	59.6	0.0	M	101.6
5/7/2022 22:00	7.6	47.6	-11.7	85.3	12.8	0.0	M	101.6
5/7/2022 23:00	7.1	46.4	-12.5	85.3	2.2	0.0	M	101.7
5/8/2022 0:00	6.2	46.4	-13.2	85.8	0.0	0.0	M	101.7
5/8/2022 1:00	5.8	42.3	-13.8	86.1	0.0	0.0	M	101.8
5/8/2022 2:00	4.3	33.1	-14.4	86.1	1.2	0.0	M	101.8
5/8/2022 3:00	3.3	30.7	-14.9	86.1	7.6	0.0	M	101.8
5/8/2022 4:00	3.6	30.8	-15.0	84.8	44.6	0.0	M	101.8
5/8/2022 5:00	4.6	22.7	-14.8	82.8	113.3	0.0	M	101.8
5/8/2022 6:00	4.0	29.4	-14.3	81.7	199.1	1.0	M	101.9
5/8/2022 7:00	6.1	35.7	-14.4	82.8	261.4	1.0	M	101.9
5/8/2022 8:00	5.5	32.1	-14.3	82.4	342.6	1.0	M	102.0
5/8/2022 9:00	5.8	34.2	-14.4	81.7	504.2	1.0	M	102.0
5/8/2022 10:00	6.6	37.2	-13.9	79.9	584.3	1.0	M	102.0
5/8/2022 11:00	5.8	30.1	-12.5	78.8	641.4	1.0	M	102.0
5/8/2022 12:00	6.6	27.7	-11.6	79.4	674.9	1.0	M	101.9
5/8/2022 13:00	6.6	25.7	-10.7	79.2	676.4	1.0	M	102.0
5/8/2022 14:00	7.0	24.2	-10.4	80.2	657.2	1.0	M	102.0
5/8/2022 15:00	6.6	32.7	-9.5	79.9	605.9	1.0	M	102.0
5/8/2022 16:00	6.5	32.1	-9.0	79.3	533.6	1.0	M	102.0
5/8/2022 17:00	6.7	42.1	-8.7	75.5	441.5	1.0	M	102.0
5/8/2022 18:00	5.8	33.6	-8.6	74.5	338.6	1.0	M	102.0
5/8/2022 19:00	4.7	15.7	-9.0	74.7	233.2	1.0	M	102.0
5/8/2022 20:00	5.1	356.2	-9.6	77.8	137.5	1.0	M	101.9
5/8/2022 21:00	4.2	345.8	-10.3	80.3	61.1	0.0	M	101.9
5/8/2022 22:00	3.8	356.7	-11.5	82.2	11.6	0.0	M	101.9
5/8/2022 23:00	4.4	359.1	-12.4	84.5	1.5	0.0	M	101.9
5/9/2022 0:00	3.9	15.2	-12.7	84.6	0.0	0.0	M	101.9
5/9/2022 1:00	3.7	13.8	-13.3	86.1	0.0	0.0	M	101.8
5/9/2022 2:00	3.7	18.0	-13.9	87.4	1.3	0.0	M	101.8
5/9/2022 3:00	2.4	9.3	-14.2	88.1	8.2	0.0	M	101.8
5/9/2022 4:00	2.3	25.0	-13.4	85.9	45.2	0.0	M	101.8
5/9/2022 5:00	2.1	14.5	-12.9	84.5	114.9	0.0	M	101.8
5/9/2022 6:00	2.3	336.2	-12.5	81.9	204.6	1.0	M	101.8
5/9/2022 7:00	1.7	18.3	-11.9	81.3	256.7	1.0	M	101.8
5/9/2022 8:00	3.0	11.0	-11.6	80.9	344.6	1.0	M	101.8
5/9/2022 9:00	4.3	36.5	-11.0	81.5	532.7	1.0	M	101.7
5/9/2022 10:00	3.4	29.7	-10.3	78.4	497.8	1.0	M	101.7
5/9/2022 11:00	3.9	37.8	-8.5	73.7	647.4	1.0	M	101.7
5/9/2022 12:00	5.9	48.3	-7.8	74.1	687.0	1.0	M	101.6
5/9/2022 13:00	5.9	52.4	-7.2	73.4	692.0	1.0	M	101.6
5/9/2022 14:00	6.9	51.2	-7.1	73.8	660.5	1.0	M	101.6
5/9/2022 15:00	7.0	54.3	-6.9	72.9	612.4	1.0	M	101.6
5/9/2022 16:00	6.8	52.3	-6.8	73.5	519.8	1.0	M	101.6
5/9/2022 17:00	6.8	51.8	-6.4	70.8	401.0	1.0	M	101.5
5/9/2022 18:00	6.2	54.1	-6.1	68.3	325.6	1.0	M	101.5
5/9/2022 19:00	4.6	38.6	-6.4	73.8	193.8	1.0	M	101.5
5/9/2022 20:00	4.8	44.5	-7.3	77.4	95.0	0.0	M	101.5
5/9/2022 21:00	5.3	41.1	-8.7	84.8	40.6	0.0	M	101.5
5/9/2022 22:00	2.1	37.5	-9.7	86.5	9.1	0.0	M	101.5
5/9/2022 23:00	4.4	58.0	-11.0	87.8	1.4	0.0	M	101.5
5/10/2022 0:00	2.9	77.5	-11.8	88.9	0.0	0.0	M	101.5
5/10/2022 1:00	3.8	68.7	-12.7	90.1	0.0	0.0	M	101.5
5/10/2022 2:00	2.7	64.8	-13.2	91.1	1.0	0.0	M	101.5
5/10/2022 3:00	3.3	65.5	-13.5	91.5	6.1	0.0	M	101.4
5/10/2022 4:00	3.1	73.9	-13.4	91.9	21.8	0.0	M	101.5
5/10/2022 5:00	3.8	74.1	-12.9	92.0	50.7	0.0	M	101.4
5/10/2022 6:00	3.3	62.1	-12.5	91.4	164.6	1.0	M	101.4
5/10/2022 7:00	2.9	72.5	-11.7	90.5	292.3	1.0	M	101.4
5/10/2022 8:00	2.7	52.3	-10.8	89.6	304.3	1.0	M	101.4
5/10/2022 9:00	3.4	57.1	-10.1	86.2	457.9	1.0	M	101.4
5/10/2022 10:00	2.9	56.6	-9.5	82.3	532.1	1.0	M	101.4
5/10/2022 11:00	3.3	50.7	-8.4	78.0	505.0	1.0	M	101.4
5/10/2022 12:00	2.6	47.3	-7.6	76.3	445.9	1.0	M	101.4
5/10/2022 13:00	3.8	46.8	-7.9	78.4	350.2	1.0	M	101.4
5/10/2022 14:00	3.4	45.4	-7.4	76.0	510.3	1.0	M	101.4
5/10/2022 15:00	3.8	57.0	-6.8	74.8	597.3	1.0	M	101.4

5/10/2022 16:00	3.4	56.8	-7.0	71.5	536.5	1.0	M	101.4
5/10/2022 17:00	4.2	54.6	-6.8	73.9	444.0	1.0	M	101.4
5/10/2022 18:00	4.2	53.6	-6.7	76.1	340.9	1.0	M	101.4
5/10/2022 19:00	3.9	41.6	-7.0	78.6	237.8	1.0	M	101.4
5/10/2022 20:00	3.1	76.0	-7.5	79.1	144.3	1.0	M	101.4
5/10/2022 21:00	2.3	87.6	-8.4	82.8	62.7	0.0	M	101.4
5/10/2022 22:00	1.9	97.6	-9.7	85.5	9.1	0.0	M	101.5
5/10/2022 23:00	1.9	67.8	-10.5	88.0	1.6	0.0	M	101.5
5/11/2022 0:00	1.1	63.2	-11.2	89.8	0.1	0.0	M	101.4
5/11/2022 1:00	1.5	74.1	-11.8	90.7	0.1	0.0	M	101.5
5/11/2022 2:00	0.9	120.0	-12.5	91.6	1.8	0.0	M	101.5
5/11/2022 3:00	0.3	106.9	-13.1	91.4	11.8	0.0	M	101.5
5/11/2022 4:00	0.4	54.4	-12.9	89.9	48.9	0.0	M	101.5
5/11/2022 5:00	1.0	118.8	-12.7	88.8	109.7	0.0	M	101.5
5/11/2022 6:00	1.5	125.6	-12.7	89.7	165.8	1.0	M	101.6
5/11/2022 7:00	2.0	127.0	-12.2	90.9	232.6	1.0	M	101.6
5/11/2022 8:00	1.5	129.6	-11.4	89.3	299.1	1.0	M	101.6
5/11/2022 9:00	1.1	113.6	-10.0	86.1	469.8	1.0	M	101.6
5/11/2022 10:00	1.7	134.2	-8.0	82.8	599.1	1.0	M	101.6
5/11/2022 11:00	1.8	131.0	-6.0	74.5	642.3	1.0	M	101.6
5/11/2022 12:00	2.9	139.1	-4.9	66.4	681.6	1.0	M	101.6
5/11/2022 13:00	2.7	134.0	-3.8	64.3	687.4	1.0	M	101.6
5/11/2022 14:00	2.3	132.4	-2.6	64.0	664.9	1.0	M	101.6
5/11/2022 15:00	2.2	143.8	-2.0	59.9	598.9	1.0	M	101.6
5/11/2022 16:00	3.1	140.0	-2.1	61.0	514.1	1.0	M	101.6
5/11/2022 17:00	3.7	145.7	-2.1	64.7	447.4	1.0	M	101.6
5/11/2022 18:00	4.2	150.4	-2.5	68.9	242.7	1.0	M	101.6
5/11/2022 19:00	4.0	147.2	-3.0	71.3	126.3	1.0	M	101.5
5/11/2022 20:00	3.6	147.6	-3.6	71.7	78.7	0.0	M	101.5
5/11/2022 21:00	3.0	147.8	-4.2	77.2	27.5	0.0	M	101.6
5/11/2022 22:00	1.6	128.4	-4.1	81.1	7.3	0.0	M	101.5
5/11/2022 23:00	0.8	104.9	-4.2	84.1	1.3	0.0	M	101.6
5/12/2022 0:00	2.4	147.8	-3.9	84.8	0.0	0.0	M	101.5
5/12/2022 1:00	2.7	151.1	-3.9	85.9	0.0	0.0	M	101.5
5/12/2022 2:00	1.2	113.8	-3.9	87.3	1.4	0.0	M	101.5
5/12/2022 3:00	1.3	140.0	-3.7	89.1	7.9	0.0	M	101.5
5/12/2022 4:00	0.8	124.5	-3.7	89.1	41.5	0.0	M	101.5
5/12/2022 5:00	0.8	118.7	-2.8	86.0	118.1	0.0	M	101.5
5/12/2022 6:00	0.6	81.5	-1.8	78.4	210.2	1.0	M	101.5
5/12/2022 7:00	0.8	117.2	-1.2	73.6	263.3	1.0	M	101.5
5/12/2022 8:00	1.0	123.5	-0.8	71.0	336.7	1.0	M	101.5
5/12/2022 9:00	0.6	118.1	0.8	66.0	501.7	1.0	M	101.5
5/12/2022 10:00	0.8	115.4	1.4	59.6	581.1	1.0	M	101.5
5/12/2022 11:00	0.9	125.1	2.0	57.5	637.0	1.0	M	101.6
5/12/2022 12:00	1.3	119.7	1.9	59.7	671.3	1.0	M	101.5
5/12/2022 13:00	1.1	126.1	2.7	56.0	675.6	1.0	M	101.5
5/12/2022 14:00	1.0	184.4	3.7	54.1	653.1	1.0	M	101.5
5/12/2022 15:00	1.4	130.4	3.1	57.3	596.1	1.0	M	101.5
5/12/2022 16:00	1.2	127.0	3.3	55.7	541.8	1.0	M	101.5
5/12/2022 17:00	2.4	157.9	3.4	60.0	317.7	1.0	M	101.5
5/12/2022 18:00	3.1	156.3	2.6	71.7	219.8	1.0	M	101.5
5/12/2022 19:00	3.1	170.7	2.7	72.0	127.3	1.0	M	101.4
5/12/2022 20:00	3.0	173.2	2.3	73.9	54.7	0.0	M	101.4
5/12/2022 21:00	3.1	159.2	1.4	82.5	23.0	0.0	M	101.4
5/12/2022 22:00	1.8	141.8	1.0	86.7	6.5	0.0	M	101.4
5/12/2022 23:00	3.7	156.9	1.0	86.3	2.4	0.0	M	101.4
5/13/2022 0:00	6.0	168.8	0.9	83.9	0.9	0.0	M	101.4
5/13/2022 1:00	4.9	154.0	-0.6	88.2	0.9	0.0	M	101.4
5/13/2022 2:00	5.0	153.0	-1.8	90.2	2.7	0.0	M	101.4
5/13/2022 3:00	5.6	138.6	-2.9	91.7	16.5	0.0	M	101.4
5/13/2022 4:00	5.8	141.4	-3.2	90.5	59.0	0.0	M	101.4
5/13/2022 5:00	2.7	123.8	-2.7	87.9	127.3	1.0	M	101.4
5/13/2022 6:00	2.4	134.6	-1.8	85.7	212.0	1.0	M	101.4
5/13/2022 7:00	1.5	108.1	-0.5	82.6	264.9	1.0	M	101.4
5/13/2022 8:00	2.5	121.5	0.8	81.5	334.3	1.0	M	101.4
5/13/2022 9:00	3.2	156.1	3.1	76.2	482.2	1.0	M	101.3
5/13/2022 10:00	3.3	160.8	4.5	71.0	574.4	1.0	M	101.3
5/13/2022 11:00	3.9	165.8	5.4	68.2	628.3	1.0	M	101.3
5/13/2022 12:00	4.1	191.0	7.0	63.3	664.5	1.0	M	101.3
5/13/2022 13:00	3.5	138.6	6.2	66.9	669.6	1.0	M	101.3
5/13/2022 14:00	3.2	169.8	7.5	62.8	646.8	1.0	M	101.3
5/13/2022 15:00	5.3	185.8	8.0	61.5	598.7	1.0	M	101.3
5/13/2022 16:00	5.7	183.1	8.1	61.1	526.9	1.0	M	101.3
5/13/2022 17:00	6.3	177.5	7.9	62.4	441.3	1.0	M	101.3
5/13/2022 18:00	4.4	154.3	6.1	68.6	303.1	1.0	M	101.3
5/13/2022 19:00	4.5	164.3	5.7	70.4	239.3	1.0	M	101.2
5/13/2022 20:00	6.6	177.5	5.2	70.5	84.5	0.0	M	101.3
5/13/2022 21:00	6.7	161.4	3.4	78.2	40.1	0.0	M	101.2
5/13/2022 22:00	7.3	165.9	2.8	80.1	11.8	0.0	M	101.3
5/13/2022 23:00	3.5	141.5	1.7	85.9	2.9	0.0	M	101.2

5/14/2022 0:00	7.9	177.4	2.2	83.2	0.9	0.0	M	101.2
5/14/2022 1:00	8.3	171.6	1.6	84.9	0.9	0.0	M	101.1
5/14/2022 2:00	8.8	175.4	1.6	84.6	2.5	0.0	M	101.1
5/14/2022 3:00	10.2	172.4	0.7	87.1	6.8	0.0	M	101.1
5/14/2022 4:00	8.9	175.3	0.5	87.2	17.0	0.0	M	101.1
5/14/2022 5:00	5.7	179.6	0.7	85.8	48.8	0.0	M	101.2
5/14/2022 6:00	4.1	141.5	1.1	85.3	181.1	1.0	M	101.2
5/14/2022 7:00	5.4	179.6	3.0	78.2	241.6	1.0	M	101.2
5/14/2022 8:00	5.6	186.8	3.8	75.3	288.5	1.0	M	101.2
5/14/2022 9:00	4.9	205.3	6.2	66.3	509.4	1.0	M	101.2
5/14/2022 10:00	3.1	235.0	7.1	63.2	573.3	1.0	M	101.3
5/14/2022 11:00	5.1	262.7	7.1	63.6	626.1	1.0	M	101.3
5/14/2022 12:00	5.6	267.3	7.0	66.0	661.4	1.0	M	101.3
5/14/2022 13:00	8.8	268.7	5.9	72.1	667.7	1.0	M	101.3
5/14/2022 14:00	8.7	269.2	5.1	76.1	645.1	1.0	M	101.4
5/14/2022 15:00	7.9	273.4	3.6	82.1	596.5	1.0	M	101.5
5/14/2022 16:00	7.0	272.8	3.1	84.1	526.2	1.0	M	101.5
5/14/2022 17:00	7.0	274.1	2.8	85.1	436.2	1.0	M	101.6
5/14/2022 18:00	6.5	280.5	1.9	89.6	228.2	1.0	M	101.7
5/14/2022 19:00	5.1	298.3	0.8	96.7	55.7	0.0	M	101.7
5/14/2022 20:00	5.9	296.6	0.8	97.9	29.5	0.0	M	101.8
5/14/2022 21:00	5.8	294.1	0.0	98.5	21.5	0.0	M	101.8
5/14/2022 22:00	6.7	298.3	0.1	97.5	4.9	0.0	M	101.9
5/14/2022 23:00	6.0	302.5	0.2	96.0	1.4	0.0	M	101.9
5/15/2022 0:00	6.2	307.5	-0.2	96.8	0.0	0.0	M	101.9
5/15/2022 1:00	6.7	321.3	-0.7	98.0	0.0	0.0	M	102.0
5/15/2022 2:00	5.7	321.0	-1.0	97.8	0.7	0.0	M	102.1
5/15/2022 3:00	4.8	319.7	-1.4	98.0	3.9	0.0	M	102.2
5/15/2022 4:00	4.9	322.9	-1.7	97.6	23.0	0.0	M	102.2
5/15/2022 5:00	4.9	341.6	-2.3	96.8	36.9	0.0	M	102.3
5/15/2022 6:00	4.6	1.0	-2.2	94.7	80.5	0.0	M	102.3
5/15/2022 7:00	4.6	357.4	-2.0	93.0	115.3	0.0	M	102.3
5/15/2022 8:00	4.9	351.1	-2.3	91.8	160.5	1.0	M	102.3
5/15/2022 9:00	5.0	359.0	-2.6	90.9	204.4	1.0	M	102.3
5/15/2022 10:00	4.6	359.4	-2.8	91.8	247.1	1.0	M	102.4
5/15/2022 11:00	5.1	334.0	-3.3	92.0	348.5	1.0	M	102.4
5/15/2022 12:00	5.2	346.1	-3.7	90.9	382.2	1.0	M	102.4
5/15/2022 13:00	5.0	350.1	-3.7	89.0	410.8	1.0	M	102.4
5/15/2022 14:00	3.4	314.0	-3.4	85.3	455.3	1.0	M	102.4
5/15/2022 15:00	2.5	324.2	-3.3	83.6	353.4	1.0	M	102.4
5/15/2022 16:00	2.1	337.2	-3.2	83.6	317.8	1.0	M	102.4
5/15/2022 17:00	1.5	353.7	-2.8	81.9	238.7	1.0	M	102.3
5/15/2022 18:00	3.2	284.8	-3.1	86.2	107.8	0.0	M	102.4
5/15/2022 19:00	3.6	278.6	-3.4	88.1	69.2	0.0	M	102.3
5/15/2022 20:00	3.1	288.8	-3.5	89.5	44.2	0.0	M	102.3
5/15/2022 21:00	1.7	279.3	-2.9	88.7	58.6	0.0	M	102.3
5/15/2022 22:00	1.4	284.0	-3.1	90.6	8.7	0.0	M	102.3
5/15/2022 23:00	1.2	120.2	-2.6	89.2	2.0	0.0	M	102.3
5/16/2022 0:00	3.5	79.1	-2.1	85.3	0.6	0.0	M	102.3
5/16/2022 1:00	4.1	67.9	-2.4	85.2	0.6	0.0	M	102.3
5/16/2022 2:00	4.8	78.8	-2.9	88.4	1.4	0.0	M	102.3
5/16/2022 3:00	4.9	86.4	-3.3	88.1	5.2	0.0	M	102.3
5/16/2022 4:00	5.0	96.1	-3.6	89.5	16.9	0.0	M	102.4
5/16/2022 5:00	5.5	91.5	-4.2	89.6	43.8	0.0	M	102.4
5/16/2022 6:00	5.7	82.3	-4.6	88.9	90.4	0.0	M	102.4
5/16/2022 7:00	5.8	86.7	-4.5	88.7	129.4	1.0	M	102.3
5/16/2022 8:00	5.9	95.7	-4.1	89.2	202.0	1.0	M	102.3
5/16/2022 9:00	5.3	103.8	-3.6	88.5	293.8	1.0	M	102.3
5/16/2022 10:00	5.7	108.4	-3.2	85.7	468.8	1.0	M	102.3
5/16/2022 11:00	6.3	119.0	-2.8	81.1	624.9	1.0	M	102.3
5/16/2022 12:00	5.9	125.3	-2.1	78.9	632.9	1.0	M	102.3
5/16/2022 13:00	6.3	133.6	-1.4	76.7	694.2	1.0	M	102.2
5/16/2022 14:00	6.7	132.2	-1.0	74.2	678.1	1.0	M	102.2
5/16/2022 15:00	7.3	133.3	-0.7	73.4	633.7	1.0	M	102.2
5/16/2022 16:00	7.5	136.3	-0.3	72.0	551.1	1.0	M	102.2
5/16/2022 17:00	7.5	136.0	0.0	70.5	462.2	1.0	M	102.2
5/16/2022 18:00	7.1	128.3	0.3	70.4	360.1	1.0	M	102.2
5/16/2022 19:00	7.0	121.9	0.2	70.9	257.0	1.0	M	102.1
5/16/2022 20:00	6.4	118.9	0.1	72.8	163.9	1.0	M	102.1
5/16/2022 21:00	5.9	120.4	-0.3	75.9	88.4	0.0	M	102.1
5/16/2022 22:00	4.1	116.1	-1.1	83.1	30.7	0.0	M	102.1
5/16/2022 23:00	1.9	139.1	-2.4	85.1	5.5	0.0	M	102.1
5/17/2022 0:00	3.5	132.6	-3.2	88.2	2.0	0.0	M	102.2
5/17/2022 1:00	4.1	139.0	-4.0	88.0	2.1	0.0	M	102.1
5/17/2022 2:00	2.9	128.2	-4.1	91.1	4.9	0.0	M	102.1
5/17/2022 3:00	2.0	91.7	-4.9	90.5	27.3	0.0	M	102.1
5/17/2022 4:00	1.8	87.3	-4.7	88.6	75.1	0.0	M	102.2
5/17/2022 5:00	2.1	109.1	-3.7	87.0	144.8	1.0	M	102.1
5/17/2022 6:00	1.8	125.7	-2.1	84.1	233.3	1.0	M	102.1
5/17/2022 7:00	3.4	129.1	-0.2	82.8	293.5	1.0	M	102.1

5/17/2022 8:00	4.2	140.3	1.1	78.5	349.5	1.0	M	102.1
5/17/2022 9:00	5.6	142.8	2.1	74.0	513.7	1.0	M	102.0
5/17/2022 10:00	6.8	139.8	2.7	69.9	603.1	1.0	M	102.0
5/17/2022 11:00	7.0	137.7	3.3	65.6	657.1	1.0	M	102.0
5/17/2022 12:00	7.0	138.2	3.8	63.7	691.9	1.0	M	102.0
5/17/2022 13:00	6.7	136.4	4.0	65.2	696.3	1.0	M	102.0
5/17/2022 14:00	7.0	134.3	4.2	65.9	674.0	1.0	M	101.9
5/17/2022 15:00	7.2	138.7	4.3	64.7	625.9	1.0	M	101.9
5/17/2022 16:00	7.2	145.5	4.4	61.3	555.7	1.0	M	101.9
5/17/2022 17:00	6.5	146.0	4.6	60.5	469.6	1.0	M	101.9
5/17/2022 18:00	5.6	145.5	4.3	62.8	368.6	1.0	M	101.9
5/17/2022 19:00	5.1	148.5	4.1	65.3	266.0	1.0	M	101.9
5/17/2022 20:00	4.3	145.1	3.8	66.9	171.6	1.0	M	101.8
5/17/2022 21:00	4.0	148.3	2.8	71.5	93.4	0.0	M	101.8
5/17/2022 22:00	3.6	146.5	1.0	79.8	31.1	0.0	M	101.8
5/17/2022 23:00	3.1	144.8	-0.2	84.2	5.2	0.0	M	101.8
5/18/2022 0:00	1.5	148.2	-0.9	85.5	1.9	0.0	M	101.8
5/18/2022 1:00	1.6	125.0	-2.1	88.2	1.9	0.0	M	101.8
5/18/2022 2:00	3.3	138.2	-3.5	92.0	5.0	0.0	M	101.8
5/18/2022 3:00	2.7	133.6	-3.4	92.9	33.7	0.0	M	101.8
5/18/2022 4:00	2.0	136.2	-2.7	90.1	89.5	0.0	M	101.8
5/18/2022 5:00	1.9	135.4	-1.8	86.3	159.2	1.0	M	101.8
5/18/2022 6:00	1.9	123.9	-0.7	83.2	237.5	1.0	M	101.8
5/18/2022 7:00	4.0	133.7	0.7	81.5	299.8	1.0	M	101.7
5/18/2022 8:00	3.7	131.7	2.7	77.1	353.1	1.0	M	101.7
5/18/2022 9:00	3.3	135.5	4.2	69.7	515.1	1.0	M	101.7
5/18/2022 10:00	3.8	137.1	4.9	65.4	606.4	1.0	M	101.6
5/18/2022 11:00	3.1	134.6	6.3	58.9	659.1	1.0	M	101.6
5/18/2022 12:00	2.7	139.0	7.5	51.7	694.3	1.0	M	101.6
5/18/2022 13:00	2.8	144.8	8.1	47.5	700.1	1.0	M	101.6
5/18/2022 14:00	3.1	142.5	8.1	44.3	678.7	1.0	M	101.6
5/18/2022 15:00	3.2	138.9	7.8	44.3	630.3	1.0	M	101.6
5/18/2022 16:00	3.2	143.2	8.2	37.9	560.1	1.0	M	101.6
5/18/2022 17:00	3.5	139.8	7.3	40.9	473.1	1.0	M	101.6
5/18/2022 18:00	3.7	139.3	7.1	37.1	369.2	1.0	M	101.6
5/18/2022 19:00	3.4	140.3	6.5	37.8	267.0	1.0	M	101.6
5/18/2022 20:00	3.0	136.9	6.0	41.6	175.0	1.0	M	101.6
5/18/2022 21:00	1.4	116.5	5.3	47.4	98.6	0.0	M	101.6
5/18/2022 22:00	0.6	85.5	4.1	51.9	33.8	0.0	M	101.6
5/18/2022 23:00	0.5	88.5	1.7	63.1	6.8	0.0	M	101.6
5/19/2022 0:00	0.1	134.1	0.3	68.8	3.1	0.0	M	101.7
5/19/2022 1:00	0.1	98.1	-0.5	72.0	2.9	0.0	M	101.7
5/19/2022 2:00	0.1	120.1	-1.7	76.2	6.6	0.0	M	101.8
5/19/2022 3:00	0.4	112.0	-1.7	77.6	35.4	0.0	M	101.8
5/19/2022 4:00	0.1	99.3	-1.1	75.4	82.6	0.0	M	101.8
5/19/2022 5:00	0.6	74.5	-0.3	74.3	151.4	1.0	M	101.8
5/19/2022 6:00	0.1	99.8	2.8	65.6	241.3	1.0	M	101.9
5/19/2022 7:00	0.4	114.6	4.1	58.7	305.6	1.0	M	101.9
5/19/2022 8:00	0.9	100.8	5.6	53.0	355.4	1.0	M	101.9
5/19/2022 9:00	2.6	73.2	6.1	54.2	512.6	1.0	M	101.9
5/19/2022 10:00	4.6	51.8	5.3	61.4	605.6	1.0	M	102.0
5/19/2022 11:00	3.7	72.7	5.4	58.2	658.8	1.0	M	102.0
5/19/2022 12:00	3.5	73.0	5.4	56.4	693.9	1.0	M	102.1
5/19/2022 13:00	4.2	69.8	5.5	57.2	697.7	1.0	M	102.1
5/19/2022 14:00	5.2	72.8	4.3	62.4	670.6	1.0	M	102.1
5/19/2022 15:00	6.5	56.6	3.2	65.3	620.8	1.0	M	102.2
5/19/2022 16:00	6.0	60.1	2.0	68.8	551.2	1.0	M	102.2
5/19/2022 17:00	4.5	67.8	1.9	69.2	463.3	1.0	M	102.3
5/19/2022 18:00	5.1	68.2	1.4	71.3	365.8	1.0	M	102.3
5/19/2022 19:00	6.0	69.3	-0.5	80.4	267.1	1.0	M	102.3
5/19/2022 20:00	6.1	56.1	-1.8	85.9	177.9	1.0	M	102.4
5/19/2022 21:00	5.5	62.8	-2.9	91.3	57.0	0.0	M	102.4
5/19/2022 22:00	5.0	73.7	-3.5	94.9	12.7	0.0	M	102.4
5/19/2022 23:00	4.6	73.5	-4.0	96.6	3.5	0.0	M	102.4
5/20/2022 0:00	4.2	56.5	-4.7	97.3	1.1	0.0	M	102.4
5/20/2022 1:00	4.0	66.6	-5.4	96.9	1.2	0.0	M	102.4
5/20/2022 2:00	4.0	65.4	-6.2	95.8	4.0	0.0	M	102.4
5/20/2022 3:00	4.1	91.4	-6.2	94.3	10.8	0.0	M	102.4
5/20/2022 4:00	4.0	83.7	-6.3	92.9	35.4	0.0	M	102.4
5/20/2022 5:00	3.9	96.0	-6.2	91.2	86.2	0.0	M	102.4
5/20/2022 6:00	3.7	85.0	-6.2	89.5	146.0	1.0	M	102.4
5/20/2022 7:00	4.8	104.4	-5.2	89.4	213.6	1.0	M	102.3
5/20/2022 8:00	4.4	103.0	-4.2	85.4	311.7	1.0	M	102.2
5/20/2022 9:00	4.6	103.4	-3.5	81.2	285.0	1.0	M	102.2
5/20/2022 10:00	5.1	98.1	-3.0	78.6	420.4	1.0	M	102.2
5/20/2022 11:00	4.6	106.8	-2.1	75.8	574.1	1.0	M	102.1
5/20/2022 12:00	5.0	101.3	-1.3	73.1	642.7	1.0	M	102.0
5/20/2022 13:00	5.5	96.1	-0.7	70.9	632.8	1.0	M	102.0
5/20/2022 14:00	6.0	88.6	-0.5	69.7	384.3	1.0	M	101.9
5/20/2022 15:00	6.3	87.4	-0.1	68.5	413.5	1.0	M	101.9

5/20/2022 16:00	7.0	87.1	-0.1	68.0	298.1	1.0	M	101.8
5/20/2022 17:00	7.1	82.5	-1.1	70.3	137.4	1.0	M	101.7
5/20/2022 18:00	7.3	78.9	-2.3	73.8	121.1	1.0	M	101.7
5/20/2022 19:00	7.7	74.9	-3.4	76.1	100.7	0.0	M	101.7
5/20/2022 20:00	7.1	76.6	-4.1	78.2	102.2	0.0	M	101.6
5/20/2022 21:00	6.3	79.6	-4.7	78.0	54.6	0.0	M	101.6
5/20/2022 22:00	6.3	73.5	-5.3	79.3	17.5	0.0	M	101.5
5/20/2022 23:00	6.2	75.1	-5.8	81.6	4.7	0.0	M	101.5
5/21/2022 0:00	6.6	72.9	-6.3	84.5	1.2	0.0	M	101.5
5/21/2022 1:00	6.1	70.6	-6.6	86.9	0.9	0.0	M	101.5
5/21/2022 2:00	6.3	70.2	-6.9	89.7	2.1	0.0	M	101.4
5/21/2022 3:00	5.7	70.1	-7.3	91.5	7.2	0.0	M	101.4
5/21/2022 4:00	6.6	69.3	-7.7	91.1	23.5	0.0	M	101.4
5/21/2022 5:00	7.1	67.5	-8.0	89.6	52.0	0.0	M	101.4
5/21/2022 6:00	7.8	60.4	-8.1	87.5	88.8	0.0	M	101.4
5/21/2022 7:00	7.0	64.6	-8.2	87.1	103.6	0.0	M	101.4
5/21/2022 8:00	6.2	56.5	-8.3	87.3	143.3	1.0	M	101.4
5/21/2022 9:00	6.7	47.3	-8.4	86.0	192.3	1.0	M	101.5
5/21/2022 10:00	7.1	49.8	-8.4	83.9	330.6	1.0	M	101.6
5/21/2022 11:00	7.0	49.4	-8.3	81.0	377.1	1.0	M	101.6
5/21/2022 12:00	6.5	45.8	-7.9	79.7	433.8	1.0	M	101.6
5/21/2022 13:00	6.2	47.2	-8.0	79.0	455.5	1.0	M	101.6
5/21/2022 14:00	6.1	26.5	-7.8	77.6	549.1	1.0	M	101.7
5/21/2022 15:00	5.5	26.4	-7.9	77.2	467.4	1.0	M	101.8
5/21/2022 16:00	5.6	18.2	-8.2	77.3	355.3	1.0	M	101.8
5/21/2022 17:00	5.5	29.1	-8.7	77.6	257.6	1.0	M	101.9
5/21/2022 18:00	5.4	12.4	-8.9	78.4	177.3	1.0	M	101.9
5/21/2022 19:00	6.2	2.2	-9.4	79.1	111.9	0.0	M	101.9
5/21/2022 20:00	5.7	9.8	-9.9	80.7	58.4	0.0	M	101.9
5/21/2022 21:00	5.2	5.0	-10.5	80.0	29.1	0.0	M	102.0
5/21/2022 22:00	5.2	1.8	-10.7	79.6	11.9	0.0	M	102.0
5/21/2022 23:00	4.7	7.7	-10.9	80.3	3.9	0.0	M	102.0
5/22/2022 0:00	4.7	7.3	-10.7	80.8	1.8	0.0	M	102.0
5/22/2022 1:00	4.1	351.4	-10.6	80.2	1.8	0.0	M	102.0
5/22/2022 2:00	3.6	338.8	-10.3	79.1	3.1	0.0	M	101.9
5/22/2022 3:00	4.0	328.4	-10.0	78.0	7.9	0.0	M	101.9
5/22/2022 4:00	4.2	323.1	-9.9	79.4	20.5	0.0	M	101.9
5/22/2022 5:00	4.4	322.1	-10.1	77.7	45.8	0.0	M	101.9
5/22/2022 6:00	4.1	320.6	-10.1	77.3	78.5	0.0	M	101.9
5/22/2022 7:00	4.5	302.0	-10.1	78.0	106.5	0.0	M	101.8
5/22/2022 8:00	4.7	295.9	-9.8	77.2	144.0	1.0	M	101.8
5/22/2022 9:00	4.8	302.4	-9.6	75.3	194.3	1.0	M	101.8
5/22/2022 10:00	5.5	283.6	-9.4	76.1	252.6	1.0	M	101.7
5/22/2022 11:00	6.2	282.0	-9.3	75.2	332.4	1.0	M	101.7
5/22/2022 12:00	7.2	276.5	-9.4	76.4	382.8	1.0	M	101.6
5/22/2022 13:00	6.2	270.9	-8.9	75.4	533.2	1.0	M	101.6
5/22/2022 14:00	6.7	270.1	-8.1	76.2	517.6	1.0	M	101.6
5/22/2022 15:00	8.1	276.6	-7.6	79.1	431.4	1.0	M	101.5
5/22/2022 16:00	8.6	278.3	-7.2	77.2	402.8	1.0	M	101.5
5/22/2022 17:00	8.3	275.8	-7.2	78.6	282.4	1.0	M	101.5
5/22/2022 18:00	7.8	277.8	-7.1	83.6	134.3	1.0	M	101.4
5/22/2022 19:00	5.9	287.4	-7.5	89.5	53.1	0.0	M	101.4
5/22/2022 20:00	3.9	320.3	-8.0	86.9	45.6	0.0	M	101.4
5/22/2022 21:00	4.6	304.2	-8.1	82.3	49.1	0.0	M	101.4
5/22/2022 22:00	4.5	314.6	-9.1	81.1	21.0	0.0	M	101.4
5/22/2022 23:00	4.3	292.0	-9.8	79.9	8.6	0.0	M	101.3
5/23/2022 0:00	4.0	279.4	-9.9	81.2	3.7	0.0	M	101.3
5/23/2022 1:00	5.6	278.4	-9.9	83.2	4.2	0.0	M	101.3
5/23/2022 2:00	6.6	284.2	-9.8	81.9	4.8	0.0	M	101.2
5/23/2022 3:00	5.9	292.2	-9.9	82.5	9.5	0.0	M	101.2
5/23/2022 4:00	8.0	284.5	-10.2	83.9	27.3	0.0	M	101.2
5/23/2022 5:00	8.6	277.6	-10.0	84.2	67.0	0.0	M	101.1
5/23/2022 6:00	8.4	271.4	-9.6	84.6	108.5	0.0	M	101.1
5/23/2022 7:00	7.2	267.6	-9.2	85.3	152.7	1.0	M	101.1
5/23/2022 8:00	7.6	269.2	-8.2	87.9	247.7	1.0	M	101.0
5/23/2022 9:00	8.8	270.6	-7.3	87.4	339.2	1.0	M	101.0
5/23/2022 10:00	10.2	264.5	-6.4	84.7	395.7	1.0	M	100.9
5/23/2022 11:00	10.2	276.0	-6.6	82.8	329.3	1.0	M	100.9
5/23/2022 12:00	10.9	265.6	-7.0	82.9	402.9	1.0	M	100.9
5/23/2022 13:00	10.7	268.0	-7.0	82.9	469.4	1.0	M	100.9
5/23/2022 14:00	10.5	271.1	-6.5	79.6	388.7	1.0	M	100.9
5/23/2022 15:00	10.7	273.7	-6.2	79.9	310.7	1.0	M	100.8
5/23/2022 16:00	11.5	271.9	-6.0	80.0	264.9	1.0	M	100.8
5/23/2022 17:00	10.6	270.0	-6.0	82.3	172.4	1.0	M	100.8
5/23/2022 18:00	10.5	268.8	-5.8	82.7	133.3	1.0	M	100.8
5/23/2022 19:00	10.4	262.5	-5.6	86.5	75.5	0.0	M	100.7
5/23/2022 20:00	10.4	261.7	-5.4	88.2	50.0	0.0	M	100.6
5/23/2022 21:00	9.8	259.4	-5.5	91.3	22.5	0.0	M	100.6
5/23/2022 22:00	10.3	257.3	-5.5	94.8	15.9	0.0	M	100.5
5/23/2022 23:00	9.7	255.3	-5.5	95.1	4.2	0.0	M	100.4

5/24/2022 0:00	10.4	257.7	-5.2	95.6	2.6	0.0	M	100.3
5/24/2022 1:00	11.1	263.1	-4.7	96.1	1.9	0.0	M	100.2
5/24/2022 2:00	10.4	274.6	-4.3	95.6	2.5	0.0	M	100.3
5/24/2022 3:00	9.3	278.9	-4.1	95.4	7.3	0.0	M	100.3
5/24/2022 4:00	8.6	283.1	-4.1	96.0	33.2	0.0	M	100.3
5/24/2022 5:00	7.5	283.7	-4.0	95.2	37.6	0.0	M	100.3
5/24/2022 6:00	6.4	291.5	-4.0	95.0	54.7	0.0	M	100.4
5/24/2022 7:00	6.7	300.9	-3.9	94.1	92.5	0.0	M	100.4
5/24/2022 8:00	5.8	313.8	-3.6	90.1	163.6	1.0	M	100.4
5/24/2022 9:00	5.5	337.6	-4.8	87.1	202.3	1.0	M	100.5
5/24/2022 10:00	5.8	329.9	-5.4	85.5	290.8	1.0	M	100.6
5/24/2022 11:00	5.9	324.5	-5.4	84.3	326.5	1.0	M	100.6
5/24/2022 12:00	6.3	325.6	-5.8	84.3	361.4	1.0	M	100.7
5/24/2022 13:00	5.8	328.2	-5.7	81.8	481.8	1.0	M	100.8
5/24/2022 14:00	5.3	320.9	-5.4	80.7	572.1	1.0	M	100.8
5/24/2022 15:00	5.2	319.9	-4.8	77.4	625.6	1.0	M	100.9
5/24/2022 16:00	4.8	317.3	-4.4	72.5	511.4	1.0	M	100.9
5/24/2022 17:00	4.1	318.9	-3.7	67.1	460.7	1.0	M	100.9
5/24/2022 18:00	3.3	323.6	-3.3	67.1	403.3	1.0	M	101.0
5/24/2022 19:00	4.1	281.4	-3.5	72.0	318.2	1.0	M	101.0
5/24/2022 20:00	3.5	273.2	-3.8	73.9	196.7	1.0	M	101.0
5/24/2022 21:00	3.1	258.3	-4.4	81.3	117.9	0.0	M	101.0
5/24/2022 22:00	2.6	257.4	-5.0	84.1	51.8	0.0	M	101.0
5/24/2022 23:00	2.4	245.8	-5.4	84.1	8.0	0.0	M	101.0
5/25/2022 0:00	1.7	228.9	-4.8	81.9	3.2	0.0	M	101.1
5/25/2022 1:00	0.7	238.0	-4.3	82.8	2.9	0.0	M	101.1
5/25/2022 2:00	4.4	259.4	-2.9	83.4	4.7	0.0	M	101.1
5/25/2022 3:00	4.2	276.6	-2.6	83.8	9.2	0.0	M	101.1
5/25/2022 4:00	3.9	266.2	-2.4	83.2	27.4	0.0	M	101.1
5/25/2022 5:00	3.9	278.2	-2.3	83.3	50.4	0.0	M	101.1
5/25/2022 6:00	4.4	272.5	-2.3	87.1	120.0	1.0	M	101.2
5/25/2022 7:00	4.7	282.6	-2.0	84.0	191.4	1.0	M	101.1
5/25/2022 8:00	4.7	272.0	-1.6	81.3	246.6	1.0	M	101.2
5/25/2022 9:00	5.1	271.7	-1.6	82.1	279.5	1.0	M	101.2
5/25/2022 10:00	5.3	272.9	-1.3	80.4	411.7	1.0	M	101.1
5/25/2022 11:00	5.1	275.4	-0.7	78.6	594.1	1.0	M	101.1
5/25/2022 12:00	4.7	279.0	-0.1	77.8	710.2	1.0	M	101.2
5/25/2022 13:00	4.1	280.3	0.3	77.3	703.0	1.0	M	101.2
5/25/2022 14:00	3.8	282.5	0.9	75.4	680.7	1.0	M	101.2
5/25/2022 15:00	3.3	278.7	1.8	72.4	634.4	1.0	M	101.2
5/25/2022 16:00	4.3	280.4	2.3	70.4	566.4	1.0	M	101.1
5/25/2022 17:00	4.4	280.1	2.6	67.9	481.4	1.0	M	101.1
5/25/2022 18:00	2.9	278.4	2.8	66.6	384.3	1.0	M	101.0
5/25/2022 19:00	2.5	276.5	2.9	65.3	284.4	1.0	M	101.0
5/25/2022 20:00	2.4	285.7	3.2	63.8	190.3	1.0	M	101.0
5/25/2022 21:00	1.6	266.9	2.7	65.3	113.9	0.0	M	101.0
5/25/2022 22:00	0.6	220.1	2.0	67.4	54.3	0.0	M	100.9
5/25/2022 23:00	0.2	160.8	0.5	73.6	9.7	0.0	M	100.9
5/26/2022 0:00	0.7	77.4	-0.3	77.5	5.5	0.0	M	100.9
5/26/2022 1:00	1.2	121.5	-0.9	79.1	5.1	0.0	M	100.9
5/26/2022 2:00	1.3	124.1	-1.6	82.3	10.1	0.0	M	100.8
5/26/2022 3:00	0.9	135.5	-1.6	83.2	40.1	0.0	M	100.8
5/26/2022 4:00	0.3	60.1	-0.4	79.2	96.8	0.0	M	100.8
5/26/2022 5:00	2.8	199.9	3.2	68.7	167.0	1.0	M	100.7
5/26/2022 6:00	5.0	190.5	4.8	61.4	260.5	1.0	M	100.6
5/26/2022 7:00	5.1	181.7	4.8	61.2	296.4	1.0	M	100.5
5/26/2022 8:00	5.1	195.4	6.0	56.1	354.8	1.0	M	100.5
5/26/2022 9:00	5.2	213.2	7.2	51.7	436.4	1.0	M	100.4
5/26/2022 10:00	2.3	261.7	8.7	45.6	557.4	1.0	M	100.4
5/26/2022 11:00	1.3	85.2	9.1	43.2	649.3	1.0	M	100.3
5/26/2022 12:00	1.8	311.2	11.0	37.9	727.8	1.0	M	100.3
5/26/2022 13:00	2.7	274.7	10.9	39.5	534.8	1.0	M	100.3
5/26/2022 14:00	3.5	304.0	10.6	42.1	536.1	1.0	M	100.2
5/26/2022 15:00	3.2	348.4	9.0	49.4	273.1	1.0	M	100.2
5/26/2022 16:00	1.5	60.5	9.8	46.8	333.7	1.0	M	100.2
5/26/2022 17:00	4.6	13.6	9.8	48.7	370.1	1.0	M	100.1
5/26/2022 18:00	4.3	20.6	9.7	49.0	341.0	1.0	M	100.1
5/26/2022 19:00	3.5	76.3	8.3	52.7	161.3	1.0	M	100.1
5/26/2022 20:00	2.1	125.3	7.2	57.6	85.4	0.0	M	100.0
5/26/2022 21:00	1.6	124.2	6.1	65.1	39.7	0.0	M	100.1
5/26/2022 22:00	1.3	121.1	5.2	68.9	12.3	0.0	M	100.1
5/26/2022 23:00	1.0	109.8	4.3	72.4	5.5	0.0	M	100.1
5/27/2022 0:00	0.7	91.0	4.0	73.4	5.1	0.0	M	100.1
5/27/2022 1:00	1.0	70.8	3.5	75.6	7.1	0.0	M	100.0
5/27/2022 2:00	2.0	55.1	2.9	78.6	23.8	0.0	M	100.0
5/27/2022 3:00	1.4	79.4	4.0	73.8	68.3	0.0	M	100.0
5/27/2022 4:00	1.6	74.0	4.0	74.0	112.6	0.0	M	100.0
5/27/2022 5:00	2.8	51.3	4.8	73.1	170.4	1.0	M	100.0
5/27/2022 6:00	1.8	90.4	6.2	66.5	268.2	1.0	M	100.0
5/27/2022 7:00	2.5	105.9	7.1	62.3	285.6	1.0	M	100.0

5/27/2022 8:00	3.5	89.0	7.5	62.7	300.2	1.0	M	100.0
5/27/2022 9:00	3.3	124.7	7.0	65.8	311.4	1.0	M	99.9
5/27/2022 10:00	3.6	110.7	7.1	66.5	498.3	1.0	M	99.9
5/27/2022 11:00	2.8	136.9	8.5	62.6	684.2	1.0	M	100.0
5/27/2022 12:00	2.4	147.1	9.7	57.6	643.8	1.0	M	99.9
5/27/2022 13:00	2.0	157.5	10.6	54.8	669.0	1.0	M	100.0
5/27/2022 14:00	2.3	118.6	10.5	53.6	712.8	1.0	M	100.0
5/27/2022 15:00	3.6	78.6	9.9	55.3	630.5	1.0	M	100.0
5/27/2022 16:00	2.9	88.0	10.2	50.4	571.6	1.0	M	100.0
5/27/2022 17:00	3.9	92.2	9.9	51.3	468.8	1.0	M	100.0
5/27/2022 18:00	5.1	80.3	8.3	60.3	302.0	1.0	M	100.0
5/27/2022 19:00	4.8	91.0	7.4	61.3	299.6	1.0	M	100.0
5/27/2022 20:00	4.3	86.0	7.1	61.5	189.6	1.0	M	100.0
5/27/2022 21:00	2.6	98.5	5.6	67.7	107.6	0.0	M	100.0
5/27/2022 22:00	3.6	70.5	3.0	80.0	29.2	0.0	M	100.1
5/27/2022 23:00	3.4	72.5	0.2	90.0	8.5	0.0	M	100.1
5/28/2022 0:00	4.6	67.8	-1.7	96.3	4.8	0.0	M	100.1
5/28/2022 1:00	3.8	74.4	-2.0	97.2	4.1	0.0	M	100.2
5/28/2022 2:00	4.5	81.2	-1.9	97.9	3.8	0.0	M	100.2
5/28/2022 3:00	6.6	71.4	-2.1	98.0	6.6	0.0	M	100.2
5/28/2022 4:00	7.6	73.7	-2.7	94.8	23.0	0.0	M	100.3
5/28/2022 5:00	8.2	80.1	-3.4	92.2	40.6	0.0	M	100.3
5/28/2022 6:00	8.6	87.9	-3.9	93.7	75.9	0.0	M	100.3
5/28/2022 7:00	8.7	89.8	-4.1	93.6	111.4	0.0	M	100.4
5/28/2022 8:00	7.7	88.4	-3.8	92.6	108.1	0.0	M	100.4
5/28/2022 9:00	7.2	74.5	-4.6	93.6	161.1	1.0	M	100.5
5/28/2022 10:00	8.1	72.4	-5.2	93.8	243.5	1.0	M	100.5
5/28/2022 11:00	8.8	79.1	-5.1	92.6	357.3	1.0	M	100.5
5/28/2022 12:00	8.3	83.7	-4.8	92.3	332.3	1.0	M	100.6
5/28/2022 13:00	8.8	78.7	-4.7	90.8	524.9	1.0	M	100.7
5/28/2022 14:00	8.7	82.1	-4.3	89.9	496.0	1.0	M	100.7
5/28/2022 15:00	8.5	80.1	-4.1	89.7	350.0	1.0	M	100.7
5/28/2022 16:00	9.0	75.8	-4.4	91.4	301.7	1.0	M	100.7
5/28/2022 17:00	7.9	77.4	-4.5	91.7	261.4	1.0	M	100.7
5/28/2022 18:00	7.3	78.1	-4.6	92.9	165.9	1.0	M	100.8
5/28/2022 19:00	7.5	77.7	-4.6	93.9	114.2	0.0	M	100.8
5/28/2022 20:00	8.2	79.3	-4.6	94.0	75.6	0.0	M	100.8
5/28/2022 21:00	8.1	78.3	-4.5	93.7	42.3	0.0	M	100.8
5/28/2022 22:00	7.6	79.4	-4.4	94.5	18.8	0.0	M	100.8
5/28/2022 23:00	7.6	79.3	-4.3	94.5	7.4	0.0	M	100.9
5/29/2022 0:00	7.6	78.3	-4.2	94.3	5.4	0.0	M	100.8
5/29/2022 1:00	7.1	77.5	-4.0	94.5	9.2	0.0	M	100.9
5/29/2022 2:00	6.7	78.3	-4.0	94.4	9.7	0.0	M	100.9
5/29/2022 3:00	6.4	81.8	-3.8	93.7	15.8	0.0	M	100.9
5/29/2022 4:00	7.1	87.3	-3.4	92.7	36.1	0.0	M	100.9
5/29/2022 5:00	7.6	87.2	-3.3	92.7	75.7	0.0	M	100.9
5/29/2022 6:00	7.5	82.4	-3.4	92.2	137.4	1.0	M	101.0
5/29/2022 7:00	7.0	81.5	-3.1	89.5	208.8	1.0	M	101.0
5/29/2022 8:00	7.2	81.7	-2.6	86.7	304.5	1.0	M	101.0
5/29/2022 9:00	6.9	81.2	-2.2	86.4	348.3	1.0	M	101.1
5/29/2022 10:00	6.9	84.2	-1.6	86.3	407.7	1.0	M	101.1
5/29/2022 11:00	7.0	81.4	-1.1	86.1	480.1	1.0	M	101.1
5/29/2022 12:00	7.0	73.7	-0.6	86.8	535.5	1.0	M	101.2
5/29/2022 13:00	7.3	73.2	-0.6	88.7	426.9	1.0	M	101.2
5/29/2022 14:00	7.2	74.0	-0.4	89.4	441.4	1.0	M	101.3
5/29/2022 15:00	7.0	74.0	-0.3	88.1	414.8	1.0	M	101.3
5/29/2022 16:00	6.6	69.9	0.0	84.8	312.3	1.0	M	101.4
5/29/2022 17:00	6.5	63.3	0.0	80.6	225.5	1.0	M	101.4
5/29/2022 18:00	6.5	57.2	-0.3	79.2	145.9	1.0	M	101.5
5/29/2022 19:00	6.8	63.7	-0.8	79.1	95.1	0.0	M	101.5
5/29/2022 20:00	5.6	66.1	-1.2	83.5	62.5	0.0	M	101.6
5/29/2022 21:00	5.1	63.1	-1.5	85.0	32.5	0.0	M	101.6
5/29/2022 22:00	4.1	64.2	-2.0	86.6	19.3	0.0	M	101.7
5/29/2022 23:00	3.4	54.6	-2.3	87.9	9.3	0.0	M	101.7
5/30/2022 0:00	4.0	58.9	-2.7	89.4	5.9	0.0	M	101.7
5/30/2022 1:00	3.3	65.3	-3.3	90.4	5.6	0.0	M	101.8
5/30/2022 2:00	3.4	57.2	-3.7	90.8	12.8	0.0	M	101.8
5/30/2022 3:00	1.9	77.8	-4.1	91.5	30.5	0.0	M	101.9
5/30/2022 4:00	1.2	71.2	-4.1	90.3	76.4	0.0	M	101.9
5/30/2022 5:00	0.9	96.9	-3.9	88.5	122.5	1.0	M	101.9
5/30/2022 6:00	0.7	119.6	-2.4	82.7	268.6	1.0	M	101.9
5/30/2022 7:00	1.2	57.7	-1.4	75.4	362.5	1.0	M	101.9
5/30/2022 8:00	0.9	126.5	-0.1	71.7	367.9	1.0	M	102.0
5/30/2022 9:00	0.9	112.1	1.1	65.3	523.5	1.0	M	102.0
5/30/2022 10:00	1.7	316.2	2.3	58.6	629.4	1.0	M	102.0
5/30/2022 11:00	2.4	294.4	2.5	55.4	683.9	1.0	M	102.0
5/30/2022 12:00	3.0	281.5	2.7	56.3	717.4	1.0	M	102.0
5/30/2022 13:00	3.2	276.6	3.0	49.3	722.1	1.0	M	102.0
5/30/2022 14:00	2.5	312.1	3.6	48.8	700.5	1.0	M	102.0
5/30/2022 15:00	2.3	305.1	4.1	50.8	654.0	1.0	M	102.0

5/30/2022 16:00	1.2	3.4	4.8	51.5	585.5	1.0	M	102.0
5/30/2022 17:00	0.9	3.2	5.8	49.8	496.5	1.0	M	102.0
5/30/2022 18:00	0.9	353.0	6.4	48.3	398.9	1.0	M	102.0
5/30/2022 19:00	1.1	74.6	5.4	52.3	299.6	1.0	M	102.0
5/30/2022 20:00	1.1	114.7	5.9	49.9	205.6	1.0	M	102.0
5/30/2022 21:00	2.0	131.5	5.1	54.4	129.2	1.0	M	102.0
5/30/2022 22:00	2.6	141.3	3.6	63.7	63.9	0.0	M	102.0
5/30/2022 23:00	2.3	142.2	1.8	71.1	9.3	0.0	M	102.0
5/31/2022 0:00	1.8	111.0	0.1	77.2	5.5	0.0	M	102.0
5/31/2022 1:00	1.6	125.2	-1.0	83.2	5.4	0.0	M	102.0
5/31/2022 2:00	1.9	119.0	-1.5	86.5	12.6	0.0	M	101.9
5/31/2022 3:00	1.5	135.8	-1.2	86.2	37.6	0.0	M	101.9
5/31/2022 4:00	4.3	139.8	-0.6	84.4	108.4	0.0	M	101.8
5/31/2022 5:00	6.5	146.5	1.2	79.4	215.5	1.0	M	101.8
5/31/2022 6:00	6.5	140.9	2.6	77.5	152.8	1.0	M	101.7
5/31/2022 7:00	4.9	173.0	4.3	71.0	149.0	1.0	M	101.8
5/31/2022 8:00	4.9	230.8	5.2	69.2	159.6	1.0	M	101.8
5/31/2022 9:00	9.1	263.2	2.1	90.4	120.2	1.0	M	101.7
5/31/2022 10:00	9.3	261.1	1.5	94.5	164.2	1.0	M	101.8
5/31/2022 11:00	8.0	262.0	2.0	94.1	256.3	1.0	M	101.8
5/31/2022 12:00	11.3	271.0	2.9	89.8	608.4	1.0	M	101.8
5/31/2022 13:00	9.4	278.6	2.8	86.5	460.3	1.0	M	101.9
5/31/2022 14:00	9.2	290.3	3.2	81.1	452.1	1.0	M	101.9
5/31/2022 15:00	10.0	300.5	2.7	76.0	455.0	1.0	M	102.0
5/31/2022 16:00	9.1	300.6	2.1	71.8	337.3	1.0	M	102.0
5/31/2022 17:00	7.0	305.8	1.4	73.2	194.8	1.0	M	102.1
5/31/2022 18:00	5.9	312.1	0.9	77.9	143.6	1.0	M	102.1
5/31/2022 19:00	6.0	315.4	0.8	79.5	127.5	1.0	M	102.1
5/31/2022 20:00	6.5	320.4	0.6	71.8	99.7	0.0	M	102.2
5/31/2022 21:00	5.5	322.9	0.4	72.4	67.9	0.0	M	102.2
5/31/2022 22:00	4.8	320.1	0.3	75.4	65.3	0.0	M	102.2
5/31/2022 23:00	4.5	323.3	-0.9	82.3	12.2	0.0	M	102.2
6/1/2022 0:00	4.1	317.2	-1.6	84.1	7.8	0.0	M	102.2
6/1/2022 1:00	2.4	291.5	-2.5	88.2	8.4	0.0	M	102.3
6/1/2022 2:00	3.8	299.7	-2.5	89.6	19.2	0.0	M	102.3
6/1/2022 3:00	2.7	287.3	-2.0	87.1	63.0	0.0	M	102.3
6/1/2022 4:00	2.3	284.0	-1.7	87.0	98.0	0.0	M	102.4
6/1/2022 5:00	1.4	301.2	-0.9	82.9	153.0	1.0	M	102.3
6/1/2022 6:00	1.1	273.4	0.3	75.0	252.5	1.0	M	102.4
6/1/2022 7:00	2.2	292.1	0.8	71.4	364.4	1.0	M	102.4
6/1/2022 8:00	3.1	275.5	1.1	69.9	358.8	1.0	M	102.4
6/1/2022 9:00	2.1	295.6	2.1	62.7	516.4	1.0	M	102.4
6/1/2022 10:00	1.9	275.3	3.1	58.9	631.1	1.0	M	102.3
6/1/2022 11:00	3.5	267.3	3.1	55.8	684.6	1.0	M	102.4
6/1/2022 12:00	1.5	287.6	4.7	40.7	721.4	1.0	M	102.3
6/1/2022 13:00	2.0	290.1	5.1	35.1	728.3	1.0	M	102.3
6/1/2022 14:00	3.2	325.2	4.9	44.9	705.3	1.0	M	102.3
6/1/2022 15:00	3.5	341.9	5.1	42.1	658.0	1.0	M	102.3
6/1/2022 16:00	3.6	333.9	5.2	37.8	590.4	1.0	M	102.3
6/1/2022 17:00	3.4	0.2	5.2	36.1	504.9	1.0	M	102.2
6/1/2022 18:00	2.4	4.2	5.5	38.0	409.0	1.0	M	102.2
6/1/2022 19:00	1.4	27.9	5.5	40.2	311.7	1.0	M	102.2
6/1/2022 20:00	1.6	42.6	5.5	40.9	161.6	1.0	M	102.1
6/1/2022 21:00	2.6	38.5	4.9	48.8	76.4	0.0	M	102.1
6/1/2022 22:00	3.5	99.0	3.1	70.7	36.9	0.0	M	102.1
6/1/2022 23:00	2.9	87.0	1.2	78.7	16.0	0.0	M	102.1
6/2/2022 0:00	2.5	85.8	0.2	82.7	8.2	0.0	M	102.1
6/2/2022 1:00	2.6	83.2	-0.3	83.5	7.7	0.0	M	102.0
6/2/2022 2:00	1.5	85.3	-0.6	84.6	17.8	0.0	M	102.0
6/2/2022 3:00	1.4	77.2	-0.6	84.4	52.2	0.0	M	102.0
6/2/2022 4:00	2.5	67.6	-0.6	84.2	117.1	0.0	M	102.0
6/2/2022 5:00	2.7	85.7	0.5	80.9	186.8	1.0	M	101.9
6/2/2022 6:00	2.4	88.5	2.0	73.6	273.4	1.0	M	101.9
6/2/2022 7:00	2.7	113.9	3.7	67.6	366.3	1.0	M	101.8
6/2/2022 8:00	3.7	103.2	4.7	65.4	357.0	1.0	M	101.8
6/2/2022 9:00	3.5	108.1	6.0	61.4	506.4	1.0	M	101.8
6/2/2022 10:00	3.8	128.8	7.3	59.0	624.6	1.0	M	101.7
6/2/2022 11:00	4.4	138.3	7.8	54.3	680.9	1.0	M	101.6
6/2/2022 12:00	5.3	144.0	8.2	51.3	702.2	1.0	M	101.6
6/2/2022 13:00	6.1	141.2	8.0	50.8	717.0	1.0	M	101.5
6/2/2022 14:00	6.7	143.7	8.0	49.3	694.5	1.0	M	101.5
6/2/2022 15:00	7.0	144.6	7.9	49.1	650.4	1.0	M	101.4
6/2/2022 16:00	7.4	144.1	8.1	50.0	583.8	1.0	M	101.4
6/2/2022 17:00	8.9	134.9	8.3	50.9	502.1	1.0	M	101.3
6/2/2022 18:00	10.6	127.0	8.9	49.1	391.7	1.0	M	101.2
6/2/2022 19:00	10.1	126.2	8.5	51.3	284.8	1.0	M	101.2
6/2/2022 20:00	10.0	121.5	7.7	56.0	177.6	1.0	M	101.2
6/2/2022 21:00	11.1	125.2	6.2	62.6	117.7	0.0	M	101.1
6/2/2022 22:00	10.5	124.9	4.7	67.9	71.1	0.0	M	101.1
6/2/2022 23:00	12.1	119.9	3.8	72.5	16.6	0.0	M	101.0

6/3/2022 0:00	11.1	127.1	3.0	75.3	12.0	0.0	M	101.0
6/3/2022 1:00	10.4	129.9	2.5	75.6	5.5	0.0	M	101.0
6/3/2022 2:00	9.8	129.4	2.3	75.5	8.1	0.0	M	101.0
6/3/2022 3:00	9.2	130.4	2.2	75.1	34.2	0.0	M	101.0
6/3/2022 4:00	8.5	129.4	2.0	73.9	18.9	0.0	M	101.0
6/3/2022 5:00	7.5	131.8	1.7	80.0	20.8	0.0	M	101.0
6/3/2022 6:00	7.9	136.0	1.6	83.4	30.3	0.0	M	101.0
6/3/2022 7:00	6.8	133.1	1.6	86.7	56.8	0.0	M	101.0
6/3/2022 8:00	7.1	134.1	1.9	83.4	88.0	0.0	M	101.0
6/3/2022 9:00	7.7	136.8	2.1	82.2	150.5	1.0	M	101.0
6/3/2022 10:00	6.3	143.3	2.6	80.3	193.2	1.0	M	101.0
6/3/2022 11:00	6.1	148.7	3.4	78.4	239.6	1.0	M	101.0
6/3/2022 12:00	5.5	147.1	4.0	77.4	256.6	1.0	M	101.0
6/3/2022 13:00	5.3	221.1	4.7	79.8	203.4	1.0	M	101.0
6/3/2022 14:00	4.5	287.5	3.1	89.9	255.3	1.0	M	101.0
6/3/2022 15:00	1.1	103.1	5.6	82.1	421.6	1.0	M	101.0
6/3/2022 16:00	1.8	133.6	7.8	72.6	525.0	1.0	M	101.0
6/3/2022 17:00	2.5	266.4	8.7	69.0	417.2	1.0	M	101.0
6/3/2022 18:00	1.6	96.1	9.5	60.1	311.7	1.0	M	100.9
6/3/2022 19:00	3.8	135.0	8.5	60.2	175.6	1.0	M	100.9
6/3/2022 20:00	2.4	140.8	9.1	59.3	47.6	0.0	M	100.9
6/3/2022 21:00	2.4	125.5	8.0	65.4	48.0	0.0	M	100.9
6/3/2022 22:00	2.9	140.9	6.1	70.4	33.0	0.0	M	100.8
6/3/2022 23:00	3.5	150.9	5.6	73.2	16.9	0.0	M	100.9
6/4/2022 0:00	4.6	148.3	5.2	76.2	8.4	0.0	M	100.8
6/4/2022 1:00	5.1	139.9	3.8	81.5	7.6	0.0	M	100.8
6/4/2022 2:00	6.0	140.8	2.9	84.6	20.0	0.0	M	100.8
6/4/2022 3:00	5.5	144.6	3.2	83.1	82.0	0.0	M	100.8
6/4/2022 4:00	6.3	141.7	3.3	83.1	93.4	0.0	M	100.8
6/4/2022 5:00	4.0	140.9	4.3	80.2	155.8	1.0	M	100.8
6/4/2022 6:00	4.1	177.9	4.8	80.2	90.7	0.0	M	100.9
6/4/2022 7:00	5.9	271.2	3.3	90.0	153.5	1.0	M	100.9
6/4/2022 8:00	7.5	261.3	3.3	89.6	180.1	1.0	M	100.9
6/4/2022 9:00	8.9	260.6	2.1	93.3	198.1	1.0	M	101.0
6/4/2022 10:00	8.4	262.4	1.8	94.9	186.2	1.0	M	101.0
6/4/2022 11:00	9.3	262.5	1.4	94.5	135.2	1.0	M	101.1
6/4/2022 12:00	9.7	260.5	0.8	96.2	115.0	0.0	M	101.1
6/4/2022 13:00	8.6	260.8	0.7	94.9	138.0	1.0	M	101.2
6/4/2022 14:00	8.0	269.5	0.9	94.9	102.3	0.0	M	101.3
6/4/2022 15:00	6.6	275.6	1.0	96.2	114.8	0.0	M	101.4
6/4/2022 16:00	6.1	266.5	1.5	92.9	130.1	1.0	M	101.5
6/4/2022 17:00	4.2	263.5	1.3	94.2	82.6	0.0	M	101.5
6/4/2022 18:00	3.2	275.8	1.7	92.1	81.0	0.0	M	101.5
6/4/2022 19:00	2.8	279.0	1.7	89.5	37.1	0.0	M	101.5
6/4/2022 20:00	2.7	274.9	1.7	87.5	26.8	0.0	M	101.6
6/4/2022 21:00	3.0	273.8	2.2	85.1	84.9	0.0	M	101.6
6/4/2022 22:00	3.3	283.9	2.3	84.9	52.4	0.0	M	101.6
6/4/2022 23:00	2.5	329.6	2.3	82.9	16.7	0.0	M	101.6
6/5/2022 0:00	3.8	338.2	1.8	83.5	5.4	0.0	M	101.6
6/5/2022 1:00	3.5	357.7	1.6	85.0	5.2	0.0	M	101.6
6/5/2022 2:00	2.4	11.1	1.4	88.2	4.3	0.0	M	101.6
6/5/2022 3:00	2.0	10.3	1.3	89.3	6.3	0.0	M	101.6
6/5/2022 4:00	1.9	45.8	1.0	92.0	9.8	0.0	M	101.6
6/5/2022 5:00	3.6	77.3	0.8	92.5	26.3	0.0	M	101.6
6/5/2022 6:00	2.9	89.3	1.0	91.2	26.0	0.0	M	101.8
6/5/2022 7:00	3.3	90.7	1.0	93.0	57.6	0.0	M	101.8
6/5/2022 8:00	4.7	84.3	1.2	91.8	114.9	0.0	M	101.7
6/5/2022 9:00	5.7	82.2	1.3	90.4	80.2	0.0	M	101.5
6/5/2022 10:00	5.0	78.9	1.7	88.9	157.2	1.0	M	101.6
6/5/2022 11:00	5.1	76.0	2.0	84.4	201.9	1.0	M	101.6
6/5/2022 12:00	5.5	68.4	2.3	84.4	201.4	1.0	M	101.6
6/5/2022 13:00	5.4	72.6	2.7	83.4	225.6	1.0	M	101.6
6/5/2022 14:00	6.2	71.6	3.3	82.9	354.3	1.0	M	101.4
6/5/2022 15:00	6.8	65.7	4.1	81.3	364.8	1.0	M	101.5
6/5/2022 16:00	7.2	47.1	3.7	83.3	237.8	1.0	M	101.5
6/5/2022 17:00	8.0	64.6	3.6	82.6	212.3	1.0	M	101.4
6/5/2022 18:00	8.6	67.5	3.0	84.8	174.1	1.0	M	101.5
6/5/2022 19:00	7.6	56.7	2.5	86.8	156.6	1.0	M	101.5
6/5/2022 20:00	7.9	65.1	1.8	90.2	78.1	0.0	M	101.4
6/5/2022 21:00	8.1	63.5	1.0	94.0	55.8	0.0	M	101.4
6/5/2022 22:00	5.9	69.4	0.7	95.8	30.8	0.0	M	101.4
6/5/2022 23:00	5.1	72.6	0.4	96.5	12.7	0.0	M	101.4
6/6/2022 0:00	4.1	74.3	0.1	97.6	5.3	0.0	M	101.4
6/6/2022 1:00	4.2	73.4	-0.2	98.6	5.1	0.0	M	101.4
6/6/2022 2:00	4.5	61.6	-0.3	99.0	11.0	0.0	M	101.4
6/6/2022 3:00	5.1	55.5	-0.3	99.2	25.0	0.0	M	101.4
6/6/2022 4:00	4.9	51.5	-0.2	99.3	37.4	0.0	M	101.4
6/6/2022 5:00	3.8	30.2	0.1	99.3	87.3	0.0	M	101.5
6/6/2022 6:00	4.2	32.8	0.3	99.2	65.7	0.0	M	101.5
6/6/2022 7:00	3.8	38.9	0.5	99.1	115.5	0.0	M	101.6

6/6/2022 8:00	2.7	17.3	1.0	98.3	167.5	1.0	M	101.6
6/6/2022 9:00	4.4	14.4	1.3	96.8	202.4	1.0	M	101.5
6/6/2022 10:00	2.8	15.5	1.4	96.1	178.9	1.0	M	101.6
6/6/2022 11:00	4.6	7.8	2.0	94.3	319.0	1.0	M	101.6
6/6/2022 12:00	5.2	5.1	2.3	91.1	364.2	1.0	M	101.6
6/6/2022 13:00	5.1	35.0	2.9	85.5	467.2	1.0	M	101.6
6/6/2022 14:00	5.5	24.2	3.2	84.2	415.0	1.0	M	101.6
6/6/2022 15:00	5.0	40.4	3.7	81.4	422.0	1.0	M	101.7
6/6/2022 16:00	5.0	50.1	3.6	82.4	300.3	1.0	M	101.7
6/6/2022 17:00	5.7	46.0	3.4	83.5	237.5	1.0	M	101.7
6/6/2022 18:00	5.9	56.0	3.1	85.3	86.3	0.0	M	101.6
6/6/2022 19:00	6.2	63.1	3.1	84.8	92.6	0.0	M	101.6
6/6/2022 20:00	6.5	66.9	2.6	83.7	97.6	0.0	M	101.6
6/6/2022 21:00	5.8	65.1	1.9	87.4	41.5	0.0	M	101.6
6/6/2022 22:00	6.6	73.2	1.5	90.4	20.3	0.0	M	101.6
6/6/2022 23:00	5.7	79.2	1.0	92.8	6.7	0.0	M	101.6
6/7/2022 0:00	5.1	87.9	0.6	94.3	7.5	0.0	M	101.6
6/7/2022 1:00	6.0	76.8	0.4	96.0	4.9	0.0	M	101.6
6/7/2022 2:00	5.6	70.4	0.4	96.0	6.7	0.0	M	101.6
6/7/2022 3:00	6.8	74.5	0.4	94.1	8.3	0.0	M	101.6
6/7/2022 4:00	6.5	75.6	0.4	93.3	22.9	0.0	M	101.5
6/7/2022 5:00	6.2	76.1	0.4	92.7	21.1	0.0	M	101.6
6/7/2022 6:00	5.6	60.6	0.5	92.4	21.2	0.0	M	101.6
6/7/2022 7:00	6.9	61.9	0.6	91.2	40.5	0.0	M	101.6
6/7/2022 8:00	7.2	54.6	0.7	90.7	59.5	0.0	M	101.6
6/7/2022 9:00	7.8	53.2	0.8	90.9	96.8	0.0	M	101.6
6/7/2022 10:00	7.6	57.6	1.2	88.9	178.8	1.0	M	101.6
6/7/2022 11:00	6.9	55.3	1.6	86.9	205.6	1.0	M	101.7
6/7/2022 12:00	5.3	44.4	2.1	87.5	180.5	1.0	M	101.7
6/7/2022 13:00	5.3	44.1	2.3	87.0	218.3	1.0	M	101.8
6/7/2022 14:00	4.4	31.7	2.8	85.7	227.7	1.0	M	101.8
6/7/2022 15:00	4.4	20.3	3.0	83.7	232.7	1.0	M	101.8
6/7/2022 16:00	4.5	18.4	3.0	83.5	213.5	1.0	M	101.8
6/7/2022 17:00	4.5	23.4	3.0	79.7	212.4	1.0	M	101.8
6/7/2022 18:00	4.3	27.1	3.1	78.4	169.6	1.0	M	101.9
6/7/2022 19:00	3.9	25.1	3.0	78.4	128.2	1.0	M	101.9
6/7/2022 20:00	4.4	27.7	2.7	79.4	87.2	0.0	M	101.9
6/7/2022 21:00	3.9	20.9	2.2	81.7	75.5	0.0	M	101.9
6/7/2022 22:00	3.5	13.6	1.6	84.4	42.3	0.0	M	101.9
6/7/2022 23:00	3.7	13.0	0.9	86.7	15.8	0.0	M	101.9
6/8/2022 0:00	3.1	23.5	0.5	86.9	6.5	0.0	M	102.0
6/8/2022 1:00	3.2	49.5	-0.5	94.5	8.8	0.0	M	102.0
6/8/2022 2:00	2.8	48.7	-1.1	95.7	17.8	0.0	M	102.0
6/8/2022 3:00	3.7	54.8	-1.5	94.7	17.9	0.0	M	102.0
6/8/2022 4:00	3.1	61.0	-2.1	96.9	56.5	0.0	M	102.0
6/8/2022 5:00	3.7	56.6	-2.0	95.8	95.9	0.0	M	102.0
6/8/2022 6:00	3.8	60.8	-1.7	92.1	170.8	1.0	M	102.0
6/8/2022 7:00	4.5	63.1	-1.2	88.0	241.9	1.0	M	101.9
6/8/2022 8:00	4.6	58.1	-0.8	86.8	281.8	1.0	M	101.9
6/8/2022 9:00	4.5	66.1	-0.4	84.4	280.3	1.0	M	101.9
6/8/2022 10:00	4.2	68.3	0.0	82.7	237.0	1.0	M	101.9
6/8/2022 11:00	3.9	61.6	0.3	79.9	217.4	1.0	M	101.9
6/8/2022 12:00	4.4	67.2	0.5	77.9	226.2	1.0	M	101.8
6/8/2022 13:00	5.1	72.5	0.5	80.1	137.9	1.0	M	101.8
6/8/2022 14:00	5.0	74.2	0.6	77.2	158.6	1.0	M	101.9
6/8/2022 15:00	4.6	82.8	0.2	79.4	117.0	0.0	M	101.8
6/8/2022 16:00	5.2	76.1	-0.4	84.1	160.6	1.0	M	101.8
6/8/2022 17:00	5.6	77.9	-0.2	86.4	143.8	1.0	M	101.8
6/8/2022 18:00	5.7	75.7	-0.4	85.9	60.2	0.0	M	101.7
6/8/2022 19:00	5.5	81.9	-0.5	86.4	35.4	0.0	M	101.7
6/8/2022 20:00	4.7	75.2	-0.6	86.9	27.4	0.0	M	101.7
6/8/2022 21:00	4.9	78.8	-0.7	89.3	12.7	0.0	M	101.6
6/8/2022 22:00	5.2	78.6	-0.9	91.3	10.0	0.0	M	101.5
6/8/2022 23:00	5.3	84.3	-0.9	92.5	5.0	0.0	M	101.6
6/9/2022 0:00	5.7	89.1	-0.8	93.6	3.1	0.0	M	101.5
6/9/2022 1:00	5.5	90.4	-0.8	94.7	2.8	0.0	M	101.5
6/9/2022 2:00	5.0	89.8	-0.8	94.9	3.9	0.0	M	101.5
6/9/2022 3:00	5.0	87.7	-0.7	95.0	6.7	0.0	M	101.4
6/9/2022 4:00	5.2	83.2	-0.6	94.8	12.1	0.0	M	101.4
6/9/2022 5:00	7.2	84.8	-0.5	94.5	30.7	0.0	M	101.3
6/9/2022 6:00	8.5	86.3	-0.3	94.4	46.0	0.0	M	101.2
6/9/2022 7:00	8.0	88.0	-0.1	94.9	54.0	0.0	M	101.2
6/9/2022 8:00	6.5	87.7	0.0	94.9	68.3	0.0	M	101.1
6/9/2022 9:00	8.1	80.1	0.2	95.5	203.3	1.0	M	101.0
6/9/2022 10:00	8.2	82.2	0.8	95.3	200.0	1.0	M	100.9
6/9/2022 11:00	9.2	75.9	1.3	95.0	201.1	1.0	M	100.8
6/9/2022 12:00	7.6	69.1	1.7	94.7	122.7	1.0	M	100.9
6/9/2022 13:00	8.1	67.4	1.8	94.4	150.4	1.0	M	100.7
6/9/2022 14:00	7.9	64.9	2.2	95.3	217.1	1.0	M	100.7
6/9/2022 15:00	7.5	41.3	1.9	95.7	107.2	0.0	M	100.8

6/9/2022 16:00	8.6	44.6	1.4	95.5	91.3	0.0	M	100.7
6/9/2022 17:00	7.6	46.7	1.1	96.0	105.2	0.0	M	100.7
6/9/2022 18:00	6.3	47.7	1.0	96.0	66.2	0.0	M	100.7
6/9/2022 19:00	5.6	54.7	1.1	96.0	38.6	0.0	M	100.8
6/9/2022 20:00	5.7	54.8	0.8	96.5	19.2	0.0	M	100.8
6/9/2022 21:00	5.6	52.4	0.7	96.4	27.8	0.0	M	100.8
6/9/2022 22:00	5.1	36.4	0.7	95.9	24.0	0.0	M	100.8
6/9/2022 23:00	5.1	37.0	0.6	96.5	18.8	0.0	M	100.8
6/10/2022 0:00	4.7	36.5	0.4	96.6	16.1	0.0	M	100.8
6/10/2022 1:00	4.5	44.7	0.2	97.0	6.7	0.0	M	100.8
6/10/2022 2:00	5.0	39.5	0.0	97.5	6.0	0.0	M	100.8
6/10/2022 3:00	5.4	41.0	-0.2	97.5	8.2	0.0	M	100.9
6/10/2022 4:00	5.6	41.8	-0.5	97.3	12.2	0.0	M	100.9
6/10/2022 5:00	6.3	50.8	-0.8	95.9	41.7	0.0	M	100.9
6/10/2022 6:00	6.1	55.6	-0.9	95.0	49.8	0.0	M	100.9
6/10/2022 7:00	6.4	51.7	-1.1	94.6	107.9	0.0	M	100.9
6/10/2022 8:00	6.1	58.6	-0.9	93.3	138.0	1.0	M	101.0
6/10/2022 9:00	6.0	65.4	-0.5	91.1	232.3	1.0	M	100.9
6/10/2022 10:00	6.0	71.2	0.1	88.5	311.5	1.0	M	100.9
6/10/2022 11:00	6.7	64.0	0.6	87.0	326.1	1.0	M	101.0
6/10/2022 12:00	6.8	64.3	1.2	85.2	406.9	1.0	M	100.9
6/10/2022 13:00	6.9	67.7	1.9	82.0	439.2	1.0	M	101.0
6/10/2022 14:00	6.6	60.7	2.3	81.0	345.3	1.0	M	101.0
6/10/2022 15:00	7.0	66.2	2.0	80.0	194.0	1.0	M	100.9
6/10/2022 16:00	7.6	70.6	2.0	79.6	202.8	1.0	M	101.0
6/10/2022 17:00	7.7	77.5	1.8	81.2	173.7	1.0	M	100.9
6/10/2022 18:00	8.7	68.7	1.3	85.0	106.1	0.0	M	100.9
6/10/2022 19:00	7.1	83.9	1.1	86.8	127.7	1.0	M	100.9
6/10/2022 20:00	7.7	77.9	0.9	87.6	218.1	1.0	M	100.9
6/10/2022 21:00	7.3	78.6	0.7	89.4	63.9	0.0	M	100.9
6/10/2022 22:00	6.8	81.0	0.4	91.7	30.7	0.0	M	100.9
6/10/2022 23:00	6.4	79.8	0.3	92.8	10.3	0.0	M	100.9
6/11/2022 0:00	6.7	81.3	0.3	93.8	5.7	0.0	M	100.9
6/11/2022 1:00	7.2	80.5	0.0	95.6	4.6	0.0	M	100.8
6/11/2022 2:00	7.2	82.7	-0.1	97.2	6.9	0.0	M	100.8
6/11/2022 3:00	6.8	82.2	-0.2	98.0	22.5	0.0	M	100.8
6/11/2022 4:00	7.5	83.5	-0.3	98.2	82.0	0.0	M	100.8
6/11/2022 5:00	7.8	80.9	0.0	97.3	85.0	0.0	M	100.7
6/11/2022 6:00	8.7	87.7	0.3	96.3	66.9	0.0	M	100.7
6/11/2022 7:00	7.3	85.1	0.7	96.4	83.9	0.0	M	100.6
6/11/2022 8:00	8.4	85.5	1.2	96.6	222.0	1.0	M	100.6
6/11/2022 9:00	8.3	87.5	2.1	94.0	394.9	1.0	M	100.6
6/11/2022 10:00	8.5	85.0	2.8	92.9	449.5	1.0	M	100.5
6/11/2022 11:00	9.7	92.7	3.6	89.7	564.5	1.0	M	100.4
6/11/2022 12:00	9.7	93.8	4.5	86.1	656.1	1.0	M	100.3
6/11/2022 13:00	9.0	86.8	5.1	85.0	601.4	1.0	M	100.3
6/11/2022 14:00	9.4	74.6	4.8	85.7	576.2	1.0	M	100.3
6/11/2022 15:00	9.9	72.8	5.4	84.1	625.7	1.0	M	100.2
6/11/2022 16:00	9.3	77.1	5.5	83.7	348.5	1.0	M	100.1
6/11/2022 17:00	9.3	71.4	5.9	81.9	503.3	1.0	M	100.2
6/11/2022 18:00	9.0	69.5	5.1	83.2	399.8	1.0	M	100.1
6/11/2022 19:00	8.9	70.7	3.9	87.6	256.7	1.0	M	100.1
6/11/2022 20:00	6.5	87.2	3.9	88.1	200.3	1.0	M	100.1
6/11/2022 21:00	6.2	84.6	4.3	86.2	120.1	1.0	M	100.1
6/11/2022 22:00	5.2	84.3	3.6	88.8	33.7	0.0	M	100.0
6/11/2022 23:00	3.8	84.7	3.1	90.8	13.0	0.0	M	100.0
6/12/2022 0:00	4.1	95.2	2.8	91.8	6.8	0.0	M	100.0
6/12/2022 1:00	4.4	83.7	2.6	92.3	6.5	0.0	M	100.0
6/12/2022 2:00	4.4	84.1	2.4	93.2	16.4	0.0	M	99.9
6/12/2022 3:00	4.4	84.6	2.4	93.5	21.5	0.0	M	99.9
6/12/2022 4:00	4.0	90.7	2.8	93.4	38.9	0.0	M	99.9
6/12/2022 5:00	4.9	84.8	2.9	92.9	70.6	0.0	M	99.9
6/12/2022 6:00	5.0	90.3	3.2	91.2	193.8	1.0	M	99.9
6/12/2022 7:00	4.8	82.9	4.1	89.0	277.9	1.0	M	99.9
6/12/2022 8:00	5.6	74.7	6.2	82.9	379.4	1.0	M	99.9
6/12/2022 9:00	6.7	72.6	6.8	79.7	481.1	1.0	M	99.9
6/12/2022 10:00	7.3	85.3	8.0	79.1	606.9	1.0	M	99.9
6/12/2022 11:00	6.5	79.3	9.4	75.3	657.3	1.0	M	99.9
6/12/2022 12:00	7.6	84.2	10.4	73.8	691.9	1.0	M	99.8
6/12/2022 13:00	8.0	85.0	11.5	72.2	700.2	1.0	M	99.8
6/12/2022 14:00	7.2	84.7	11.4	70.9	677.9	1.0	M	99.8
6/12/2022 15:00	6.3	76.5	11.0	69.6	631.8	1.0	M	99.8
6/12/2022 16:00	7.4	64.9	10.3	69.7	564.2	1.0	M	99.8
6/12/2022 17:00	8.2	66.0	8.7	73.0	492.3	1.0	M	99.8
6/12/2022 18:00	8.1	63.5	7.7	75.6	403.0	1.0	M	99.8
6/12/2022 19:00	6.9	66.2	7.2	78.0	306.3	1.0	M	99.9
6/12/2022 20:00	5.6	67.3	7.0	79.2	216.0	1.0	M	99.9
6/12/2022 21:00	4.8	71.0	6.2	82.4	135.2	1.0	M	99.9
6/12/2022 22:00	4.4	70.3	5.3	85.3	72.0	0.0	M	99.9
6/12/2022 23:00	4.3	78.0	4.4	88.7	16.3	0.0	M	100.0

6/13/2022 0:00	3.7	78.8	3.2	91.4	10.4	0.0	M	99.9
6/13/2022 1:00	2.9	81.2	2.5	92.8	10.0	0.0	M	99.9
6/13/2022 2:00	1.8	88.1	2.4	93.4	27.0	0.0	M	99.9
6/13/2022 3:00	2.3	87.1	2.5	93.0	63.5	0.0	M	99.9
6/13/2022 4:00	2.8	92.8	3.0	91.7	116.0	0.0	M	100.0
6/13/2022 5:00	2.8	91.0	4.0	88.0	183.8	1.0	M	100.0
6/13/2022 6:00	2.6	84.2	5.6	82.1	267.9	1.0	M	100.0
6/13/2022 7:00	2.8	80.9	8.0	74.8	359.7	1.0	M	100.0
6/13/2022 8:00	2.3	77.7	10.8	67.6	381.5	1.0	M	100.0
6/13/2022 9:00	3.2	57.6	12.9	62.5	488.4	1.0	M	100.0
6/13/2022 10:00	3.2	69.0	15.1	57.1	615.4	1.0	M	100.0
6/13/2022 11:00	3.4	45.3	16.9	52.7	666.0	1.0	M	100.0
6/13/2022 12:00	3.4	52.0	17.6	50.8	700.5	1.0	M	100.0
6/13/2022 13:00	4.0	84.2	17.6	49.8	708.1	1.0	M	100.0
6/13/2022 14:00	3.2	72.0	18.7	48.1	691.8	1.0	M	100.0
6/13/2022 15:00	3.9	41.3	19.7	45.7	649.2	1.0	M	100.0
6/13/2022 16:00	4.2	33.1	19.6	46.2	583.1	1.0	M	100.0
6/13/2022 17:00	4.5	44.6	17.9	51.1	500.2	1.0	M	100.0
6/13/2022 18:00	4.1	66.4	16.2	56.0	406.7	1.0	M	100.0
6/13/2022 19:00	5.2	65.0	15.2	58.5	310.2	1.0	M	100.1
6/13/2022 20:00	3.9	61.2	14.0	60.9	218.6	1.0	M	100.0
6/13/2022 21:00	2.3	71.5	13.4	64.6	141.5	1.0	M	100.1
6/13/2022 22:00	2.8	91.7	11.2	70.9	81.6	0.0	M	100.1
6/13/2022 23:00	1.7	95.9	9.1	78.7	17.6	0.0	M	100.2
6/14/2022 0:00	0.6	97.2	7.5	83.7	10.9	0.0	M	100.2
6/14/2022 1:00	0.5	105.2	6.1	87.7	10.9	0.0	M	100.2
6/14/2022 2:00	0.3	232.2	6.0	89.9	28.7	0.0	M	100.2
6/14/2022 3:00	1.8	259.1	6.1	86.9	75.8	0.0	M	100.2
6/14/2022 4:00	4.8	282.9	4.8	87.8	109.9	0.0	M	100.3
6/14/2022 5:00	5.7	282.5	4.3	89.2	176.3	1.0	M	100.3
6/14/2022 6:00	5.8	284.8	4.0	88.4	270.4	1.0	M	100.4
6/14/2022 7:00	6.2	276.7	4.3	88.0	171.2	1.0	M	100.4
6/14/2022 8:00	5.7	278.0	4.6	87.1	272.6	1.0	M	100.4
6/14/2022 9:00	5.7	276.3	5.7	82.7	478.4	1.0	M	100.5
6/14/2022 10:00	7.1	277.0	4.3	88.5	339.0	1.0	M	100.5
6/14/2022 11:00	6.9	279.0	4.3	88.9	346.7	1.0	M	100.6
6/14/2022 12:00	5.7	282.8	4.9	85.8	365.1	1.0	M	100.7
6/14/2022 13:00	4.4	291.1	5.9	82.8	254.7	1.0	M	100.7
6/14/2022 14:00	4.3	289.6	5.9	87.4	197.5	1.0	M	100.8
6/14/2022 15:00	4.4	314.0	6.1	87.3	209.3	1.0	M	100.9
6/14/2022 16:00	5.8	11.2	6.0	80.3	167.5	1.0	M	100.9
6/14/2022 17:00	6.0	9.7	5.6	81.8	154.8	1.0	M	101.0
6/14/2022 18:00	5.6	14.1	5.2	84.5	103.2	0.0	M	101.1
6/14/2022 19:00	4.7	7.0	4.6	86.7	44.9	0.0	M	101.2
6/14/2022 20:00	4.3	0.7	4.0	90.9	46.2	0.0	M	101.2
6/14/2022 21:00	4.2	353.9	3.5	90.5	14.8	0.0	M	101.3
6/14/2022 22:00	4.6	9.9	2.9	86.6	24.7	0.0	M	101.4
6/14/2022 23:00	5.3	8.5	2.2	87.3	44.1	0.0	M	101.4
6/15/2022 0:00	4.9	9.5	1.3	86.8	32.1	0.0	M	101.5
6/15/2022 1:00	4.8	3.8	0.7	88.9	10.3	0.0	M	101.5
6/15/2022 2:00	5.3	0.8	0.3	90.6	7.5	0.0	M	101.6
6/15/2022 3:00	4.7	6.7	0.6	87.2	20.7	0.0	M	101.6
6/15/2022 4:00	4.2	356.0	0.8	83.9	45.6	0.0	M	101.7
6/15/2022 5:00	4.0	4.4	0.7	83.3	89.1	0.0	M	101.8
6/15/2022 6:00	4.8	17.0	0.9	84.1	265.3	1.0	M	101.8
6/15/2022 7:00	4.5	12.6	1.1	79.0	253.3	1.0	M	101.8
6/15/2022 8:00	5.7	16.1	2.0	72.5	366.1	1.0	M	101.9
6/15/2022 9:00	6.1	25.9	2.4	69.2	387.8	1.0	M	102.0
6/15/2022 10:00	5.1	15.3	2.7	69.4	370.3	1.0	M	101.9
6/15/2022 11:00	5.2	332.0	3.0	68.3	406.4	1.0	M	102.0
6/15/2022 12:00	5.0	338.9	3.4	67.2	432.4	1.0	M	102.0
6/15/2022 13:00	5.3	3.8	3.7	67.5	428.6	1.0	M	102.0
6/15/2022 14:00	6.0	330.7	3.6	68.2	477.7	1.0	M	102.1
6/15/2022 15:00	5.2	6.6	4.1	66.9	604.2	1.0	M	102.1
6/15/2022 16:00	4.8	1.2	4.3	66.2	570.8	1.0	M	102.1
6/15/2022 17:00	4.4	9.8	4.4	65.6	499.1	1.0	M	102.2
6/15/2022 18:00	4.1	31.4	4.3	65.9	455.3	1.0	M	102.2
6/15/2022 19:00	4.0	19.8	4.0	68.0	315.4	1.0	M	102.2
6/15/2022 20:00	4.4	10.7	3.9	68.2	244.4	1.0	M	102.2
6/15/2022 21:00	4.3	19.4	3.5	70.0	161.1	1.0	M	102.2
6/15/2022 22:00	3.9	25.3	2.6	73.9	100.1	0.0	M	102.3
6/15/2022 23:00	3.0	16.8	1.5	78.9	18.2	0.0	M	102.3
6/16/2022 0:00	2.6	6.9	1.0	81.0	11.3	0.0	M	102.3
6/16/2022 1:00	1.8	1.9	0.3	84.1	12.4	0.0	M	102.4
6/16/2022 2:00	1.3	25.4	-0.5	87.4	20.7	0.0	M	102.4
6/16/2022 3:00	2.5	14.5	0.1	87.2	31.5	0.0	M	102.3
6/16/2022 4:00	1.9	19.1	0.3	85.8	65.2	0.0	M	102.4
6/16/2022 5:00	1.3	303.8	0.9	82.8	153.9	1.0	M	102.4
6/16/2022 6:00	1.7	296.8	2.1	76.9	286.1	1.0	M	102.3
6/16/2022 7:00	2.5	308.5	2.6	76.0	391.2	1.0	M	102.3

6/16/2022 8:00	3.4	280.3	3.0	75.7	394.4	1.0	M	102.3
6/16/2022 9:00	3.8	285.6	3.5	74.4	499.0	1.0	M	102.3
6/16/2022 10:00	4.4	276.3	3.7	74.6	642.0	1.0	M	102.3
6/16/2022 11:00	4.4	280.7	4.7	71.1	692.7	1.0	M	102.2
6/16/2022 12:00	4.1	277.5	5.2	68.1	726.7	1.0	M	102.2
6/16/2022 13:00	4.2	280.3	6.2	63.4	734.1	1.0	M	102.2
6/16/2022 14:00	5.3	279.5	6.4	60.5	716.7	1.0	M	102.1
6/16/2022 15:00	5.5	275.3	6.9	56.7	673.3	1.0	M	102.1
6/16/2022 16:00	5.5	275.0	7.2	57.4	605.0	1.0	M	102.1
6/16/2022 17:00	5.0	274.9	7.7	55.4	529.8	1.0	M	102.1
6/16/2022 18:00	4.7	284.0	7.6	57.1	434.8	1.0	M	102.0
6/16/2022 19:00	4.7	283.4	7.1	58.5	334.8	1.0	M	102.0
6/16/2022 20:00	5.0	286.1	6.0	61.0	233.2	1.0	M	102.0
6/16/2022 21:00	4.3	286.8	5.3	63.4	156.0	1.0	M	102.0
6/16/2022 22:00	3.5	286.5	5.0	63.1	95.5	0.0	M	101.9
6/16/2022 23:00	3.6	286.9	4.5	64.2	18.7	0.0	M	101.9
6/17/2022 0:00	2.8	293.5	4.3	64.5	11.8	0.0	M	101.9
6/17/2022 1:00	0.5	297.0	4.2	71.5	11.1	0.0	M	101.9
6/17/2022 2:00	0.7	9.0	4.2	72.7	42.6	0.0	M	101.9
6/17/2022 3:00	0.2	249.0	3.8	72.5	76.2	0.0	M	101.9
6/17/2022 4:00	0.1	128.4	3.6	72.9	127.0	1.0	M	101.9
6/17/2022 5:00	0.1	76.6	5.0	69.3	196.8	1.0	M	101.9
6/17/2022 6:00	0.2	89.6	6.9	62.8	283.2	1.0	M	101.8
6/17/2022 7:00	0.7	139.8	7.9	60.2	377.1	1.0	M	101.8
6/17/2022 8:00	1.7	278.0	8.7	55.0	396.0	1.0	M	101.8
6/17/2022 9:00	2.2	291.1	9.2	53.7	507.0	1.0	M	101.8
6/17/2022 10:00	1.9	300.2	10.0	49.7	634.2	1.0	M	101.7
6/17/2022 11:00	1.7	330.0	10.7	42.7	688.0	1.0	M	101.7
6/17/2022 12:00	1.5	349.8	11.7	33.4	732.4	1.0	M	101.6
6/17/2022 13:00	1.2	82.1	12.2	31.0	744.2	1.0	M	101.6
6/17/2022 14:00	1.8	46.3	12.9	30.3	729.8	1.0	M	101.6
6/17/2022 15:00	3.5	358.1	13.2	30.3	667.5	1.0	M	101.5
6/17/2022 16:00	3.9	348.6	13.5	30.3	602.0	1.0	M	101.5
6/17/2022 17:00	5.1	21.0	13.7	36.8	518.6	1.0	M	101.4
6/17/2022 18:00	5.5	21.6	13.6	41.0	425.0	1.0	M	101.4
6/17/2022 19:00	6.7	51.6	12.3	46.7	327.8	1.0	M	101.4
6/17/2022 20:00	6.7	77.7	10.8	53.2	245.7	1.0	M	101.4
6/17/2022 21:00	5.8	79.2	9.7	55.5	175.4	1.0	M	101.3
6/17/2022 22:00	4.2	96.8	8.5	61.4	89.1	0.0	M	101.3
6/17/2022 23:00	3.0	107.9	7.2	60.7	19.6	0.0	M	101.3
6/18/2022 0:00	4.0	89.7	6.7	59.3	11.8	0.0	M	101.3
6/18/2022 1:00	2.8	109.7	5.7	65.1	11.5	0.0	M	101.3
6/18/2022 2:00	2.2	127.1	5.6	66.1	46.1	0.0	M	101.2
6/18/2022 3:00	1.3	100.5	5.6	66.3	89.5	0.0	M	101.2
6/18/2022 4:00	1.6	62.8	6.5	64.9	113.6	0.0	M	101.2
6/18/2022 5:00	2.7	111.5	6.5	68.0	219.4	1.0	M	101.2
6/18/2022 6:00	1.8	91.8	8.3	64.9	177.6	1.0	M	101.1
6/18/2022 7:00	2.8	100.2	9.8	61.0	280.6	1.0	M	101.1
6/18/2022 8:00	4.9	88.0	10.2	58.7	324.4	1.0	M	101.1
6/18/2022 9:00	6.4	106.8	11.1	55.2	502.9	1.0	M	101.0
6/18/2022 10:00	7.2	110.8	12.1	51.9	513.5	1.0	M	101.0
6/18/2022 11:00	7.2	117.3	12.6	50.4	547.6	1.0	M	101.0
6/18/2022 12:00	6.6	122.8	12.9	45.9	714.1	1.0	M	101.0
6/18/2022 13:00	4.8	117.3	13.8	40.7	617.1	1.0	M	101.0
6/18/2022 14:00	4.8	133.3	14.1	37.4	480.7	1.0	M	101.0
6/18/2022 15:00	5.5	108.2	13.7	40.7	284.9	1.0	M	100.9
6/18/2022 16:00	5.8	138.3	13.0	45.3	420.6	1.0	M	100.9
6/18/2022 17:00	6.5	122.9	12.5	48.4	281.6	1.0	M	101.0
6/18/2022 18:00	6.7	133.8	11.3	53.0	422.2	1.0	M	101.0
6/18/2022 19:00	6.4	131.6	10.7	54.2	322.3	1.0	M	101.0
6/18/2022 20:00	6.0	134.6	10.3	58.4	230.5	1.0	M	101.0
6/18/2022 21:00	3.8	134.6	10.7	60.4	152.0	1.0	M	101.0
6/18/2022 22:00	3.7	116.4	10.8	60.3	101.8	0.0	M	101.0
6/18/2022 23:00	3.2	89.7	9.5	65.4	20.6	0.0	M	101.0
6/19/2022 0:00	1.8	81.1	8.7	68.7	18.6	0.0	M	101.0
6/19/2022 1:00	2.4	77.8	7.4	72.3	13.6	0.0	M	101.0
6/19/2022 2:00	2.1	66.4	6.7	73.4	17.2	0.0	M	101.0
6/19/2022 3:00	2.4	81.5	6.3	70.6	50.3	0.0	M	101.1
6/19/2022 4:00	2.9	94.4	6.0	67.4	91.0	0.0	M	101.1
6/19/2022 5:00	2.2	81.8	6.0	67.9	81.0	0.0	M	101.1
6/19/2022 6:00	2.6	81.4	6.4	68.7	159.4	1.0	M	101.1
6/19/2022 7:00	1.9	84.7	7.2	67.8	187.5	1.0	M	101.1
6/19/2022 8:00	3.7	75.1	9.3	63.7	391.1	1.0	M	101.1
6/19/2022 9:00	4.8	60.4	10.6	61.7	499.1	1.0	M	101.0
6/19/2022 10:00	4.7	62.8	12.0	56.8	625.0	1.0	M	101.0
6/19/2022 11:00	5.3	58.1	13.1	52.8	676.7	1.0	M	101.0
6/19/2022 12:00	5.3	36.4	13.9	49.5	682.2	1.0	M	100.9
6/19/2022 13:00	6.8	46.8	13.4	49.6	724.7	1.0	M	100.9
6/19/2022 14:00	6.8	49.1	13.1	55.2	715.1	1.0	M	100.9
6/19/2022 15:00	6.9	43.6	12.9	55.6	674.8	1.0	M	100.9

6/19/2022 16:00	6.8	35.6	13.1	55.6	550.7	1.0	M	100.9
6/19/2022 17:00	5.6	20.6	13.5	56.4	510.1	1.0	M	100.9
6/19/2022 18:00	5.1	21.2	13.2	59.3	414.6	1.0	M	100.9
6/19/2022 19:00	4.1	43.0	12.8	61.4	320.0	1.0	M	100.8
6/19/2022 20:00	4.1	48.4	12.2	63.7	229.5	1.0	M	100.9
6/19/2022 21:00	3.1	81.8	10.9	67.1	151.5	1.0	M	100.9
6/19/2022 22:00	2.3	78.5	9.7	70.2	89.4	0.0	M	100.9
6/19/2022 23:00	1.2	71.5	9.2	72.8	22.4	0.0	M	100.9
6/20/2022 0:00	1.2	62.9	8.7	75.0	14.3	0.0	M	101.0
6/20/2022 1:00	1.7	60.6	8.3	77.4	13.6	0.0	M	101.0
6/20/2022 2:00	1.6	123.3	7.7	83.0	36.8	0.0	M	101.0
6/20/2022 3:00	2.7	118.1	7.3	88.8	67.9	0.0	M	101.1
6/20/2022 4:00	5.0	142.7	7.8	88.1	116.1	0.0	M	101.1
6/20/2022 5:00	5.3	131.0	7.9	86.9	184.4	1.0	M	101.1
6/20/2022 6:00	6.6	127.2	8.1	83.3	271.7	1.0	M	101.1
6/20/2022 7:00	6.5	125.1	8.5	79.5	367.3	1.0	M	101.2
6/20/2022 8:00	8.3	109.4	10.2	74.7	385.8	1.0	M	101.2
6/20/2022 9:00	8.3	112.8	10.7	68.6	494.6	1.0	M	101.2
6/20/2022 10:00	9.8	123.7	10.1	70.4	618.5	1.0	M	101.2
6/20/2022 11:00	9.6	127.6	10.3	68.4	670.4	1.0	M	101.2
6/20/2022 12:00	10.9	122.3	11.1	64.1	709.5	1.0	M	101.3
6/20/2022 13:00	9.4	122.9	11.1	62.7	695.3	1.0	M	101.3
6/20/2022 14:00	9.5	126.6	11.2	61.7	691.8	1.0	M	101.3
6/20/2022 15:00	9.5	118.3	11.7	58.9	641.6	1.0	M	101.2
6/20/2022 16:00	9.1	125.4	11.5	58.1	599.7	1.0	M	101.3
6/20/2022 17:00	8.9	122.9	11.2	59.4	523.8	1.0	M	101.2
6/20/2022 18:00	8.8	126.0	10.7	60.6	414.2	1.0	M	101.3
6/20/2022 19:00	9.1	124.8	11.0	59.4	318.4	1.0	M	101.3
6/20/2022 20:00	7.1	127.6	9.6	64.0	231.8	1.0	M	101.3
6/20/2022 21:00	6.2	125.1	9.1	67.6	145.8	1.0	M	101.4
6/20/2022 22:00	3.8	128.1	8.6	69.9	90.5	0.0	M	101.4
6/20/2022 23:00	2.9	127.3	8.1	73.7	19.5	0.0	M	101.4
6/21/2022 0:00	2.9	118.3	7.1	78.5	11.8	0.0	M	101.4
6/21/2022 1:00	4.7	118.3	6.4	83.3	11.0	0.0	M	101.4
6/21/2022 2:00	3.4	151.4	6.4	84.9	36.5	0.0	M	101.5
6/21/2022 3:00	4.7	132.3	6.6	84.2	68.5	0.0	M	101.4
6/21/2022 4:00	2.9	140.3	6.6	84.5	116.6	0.0	M	101.4
6/21/2022 5:00	1.8	109.2	7.6	81.6	184.9	1.0	M	101.4
6/21/2022 6:00	2.8	136.2	9.2	76.0	269.4	1.0	M	101.4
6/21/2022 7:00	3.4	136.3	10.5	69.3	364.7	1.0	M	101.4
6/21/2022 8:00	3.3	136.4	11.9	62.3	386.5	1.0	M	101.4
6/21/2022 9:00	3.3	130.6	12.4	58.0	497.2	1.0	M	101.4
6/21/2022 10:00	3.6	109.6	13.4	53.0	622.1	1.0	M	101.4
6/21/2022 11:00	3.0	125.6	14.6	49.1	671.9	1.0	M	101.4
6/21/2022 12:00	3.2	102.1	15.0	48.9	675.8	1.0	M	101.3
6/21/2022 13:00	3.8	78.0	15.8	46.9	717.3	1.0	M	101.3
6/21/2022 14:00	3.3	88.3	16.3	42.1	696.7	1.0	M	101.3
6/21/2022 15:00	3.6	94.7	16.3	40.0	654.2	1.0	M	101.2
6/21/2022 16:00	3.4	87.0	16.6	38.9	586.1	1.0	M	101.2
6/21/2022 17:00	4.0	82.0	16.4	42.2	501.5	1.0	M	101.2
6/21/2022 18:00	4.5	67.3	16.4	39.0	414.1	1.0	M	101.2
6/21/2022 19:00	4.6	64.4	15.4	42.7	318.2	1.0	M	101.2
6/21/2022 20:00	4.0	67.1	14.2	49.3	223.8	1.0	M	101.2
6/21/2022 21:00	3.7	77.7	13.7	54.9	147.0	1.0	M	101.2
6/21/2022 22:00	3.2	74.0	12.1	57.6	88.3	0.0	M	101.1
6/21/2022 23:00	1.5	88.2	10.7	63.2	23.3	0.0	M	101.2
6/22/2022 0:00	0.8	79.2	10.5	64.2	14.1	0.0	M	101.2
6/22/2022 1:00	1.1	76.1	9.4	67.3	12.5	0.0	M	101.2
6/22/2022 2:00	1.6	68.3	8.1	71.5	33.9	0.0	M	101.1
6/22/2022 3:00	1.2	74.9	7.4	74.2	63.8	0.0	M	101.1
6/22/2022 4:00	0.8	109.7	7.1	74.7	115.9	0.0	M	101.1
6/22/2022 5:00	0.7	108.2	8.9	70.5	184.8	1.0	M	101.1
6/22/2022 6:00	0.8	133.4	10.5	66.1	271.6	1.0	M	101.1
6/22/2022 7:00	1.8	232.8	12.8	59.8	364.0	1.0	M	101.1
6/22/2022 8:00	7.0	284.2	10.1	62.9	386.3	1.0	M	101.1
6/22/2022 9:00	8.0	283.6	8.9	71.2	496.2	1.0	M	101.1
6/22/2022 10:00	8.4	279.9	8.0	76.6	625.0	1.0	M	101.1
6/22/2022 11:00	9.2	279.1	7.9	77.8	720.4	1.0	M	101.1
6/22/2022 12:00	9.3	282.0	6.5	80.9	626.8	1.0	M	101.2
6/22/2022 13:00	9.3	282.4	5.6	83.1	554.5	1.0	M	101.2
6/22/2022 14:00	9.7	272.5	5.3	84.5	354.0	1.0	M	101.0
6/22/2022 15:00	10.5	263.2	5.7	83.9	266.7	1.0	M	101.2
6/22/2022 16:00	8.6	264.2	6.1	81.6	451.4	1.0	M	101.2
6/22/2022 17:00	8.7	265.6	6.5	81.9	456.5	1.0	M	101.2
6/22/2022 18:00	7.9	262.3	6.8	81.6	323.6	1.0	M	101.2
6/22/2022 19:00	6.4	266.4	6.2	81.6	181.8	1.0	M	101.2
6/22/2022 20:00	7.2	270.1	6.0	82.2	67.2	0.0	M	101.2
6/22/2022 21:00	5.2	278.6	5.5	84.9	30.9	0.0	M	101.2
6/22/2022 22:00	6.6	268.0	5.3	85.8	28.8	0.0	M	101.2
6/22/2022 23:00	5.8	278.8	4.8	91.4	6.3	0.0	M	101.2

6/23/2022 0:00	5.1	279.7	3.7	94.0	4.6	0.0	M	101.2
6/23/2022 1:00	5.8	285.7	4.5	91.6	5.7	0.0	M	101.2
6/23/2022 2:00	5.4	282.8	4.4	90.1	11.2	0.0	M	101.2
6/23/2022 3:00	5.0	283.6	4.0	90.3	17.5	0.0	M	101.2
6/23/2022 4:00	5.1	285.1	3.6	91.2	33.9	0.0	M	101.2
6/23/2022 5:00	5.1	283.4	3.4	91.3	43.4	0.0	M	101.2
6/23/2022 6:00	5.5	277.7	3.3	92.2	75.5	0.0	M	101.2
6/23/2022 7:00	5.6	280.8	4.1	90.6	159.9	1.0	M	101.2
6/23/2022 8:00	6.6	278.1	4.6	88.4	221.9	1.0	M	101.2
6/23/2022 9:00	6.1	277.9	4.6	87.6	239.8	1.0	M	101.2
6/23/2022 10:00	5.1	277.6	4.6	85.1	151.6	1.0	M	101.2
6/23/2022 11:00	4.6	280.9	4.1	85.8	72.0	0.0	M	101.2
6/23/2022 12:00	5.6	278.6	4.4	84.9	133.1	1.0	M	101.2
6/23/2022 13:00	6.2	285.4	4.7	83.7	173.6	1.0	M	101.2
6/23/2022 14:00	6.2	285.9	4.6	85.4	108.0	0.0	M	101.3
6/23/2022 15:00	5.6	283.8	5.4	83.3	203.5	1.0	M	101.3
6/23/2022 16:00	5.9	288.5	7.3	78.5	367.2	1.0	M	101.3
6/23/2022 17:00	5.9	275.8	7.9	77.2	362.8	1.0	M	101.3
6/23/2022 18:00	5.0	293.8	8.4	77.6	191.6	1.0	M	101.3
6/23/2022 19:00	6.1	318.5	8.0	80.5	99.8	0.0	M	101.3
6/23/2022 20:00	5.6	305.8	7.2	83.1	96.9	0.0	M	101.4
6/23/2022 21:00	5.4	308.8	7.0	84.4	55.6	0.0	M	101.4
6/23/2022 22:00	4.4	301.0	6.5	86.2	39.5	0.0	M	101.4
6/23/2022 23:00	4.0	309.1	6.6	86.4	17.1	0.0	M	101.4
6/24/2022 0:00	4.8	320.4	6.2	87.9	5.4	0.0	M	101.5
6/24/2022 1:00	3.7	309.3	5.2	91.2	3.9	0.0	M	101.5
6/24/2022 2:00	3.7	317.2	4.7	93.5	12.4	0.0	M	101.5
6/24/2022 3:00	4.1	316.1	4.2	94.3	23.1	0.0	M	101.5
6/24/2022 4:00	3.8	315.5	4.4	93.7	89.0	0.0	M	101.5
6/24/2022 5:00	4.0	320.3	4.8	90.9	115.0	0.0	M	101.5
6/24/2022 6:00	4.6	317.7	4.8	88.2	173.3	1.0	M	101.5
6/24/2022 7:00	4.8	318.0	5.3	81.7	208.9	1.0	M	101.5
6/24/2022 8:00	5.2	291.6	6.3	76.2	382.3	1.0	M	101.5
6/24/2022 9:00	4.8	284.5	7.3	67.9	500.9	1.0	M	101.5
6/24/2022 10:00	5.1	276.6	7.8	66.4	626.8	1.0	M	101.5
6/24/2022 11:00	5.0	267.2	8.3	63.3	683.1	1.0	M	101.5
6/24/2022 12:00	5.4	270.8	8.7	59.8	720.7	1.0	M	101.5
6/24/2022 13:00	6.2	274.6	9.5	57.2	731.7	1.0	M	101.5
6/24/2022 14:00	6.6	269.0	9.9	57.7	705.4	1.0	M	101.5
6/24/2022 15:00	6.8	262.6	9.9	61.1	671.5	1.0	M	101.5
6/24/2022 16:00	6.9	277.7	9.6	61.1	607.3	1.0	M	101.4
6/24/2022 17:00	7.2	281.0	8.9	65.8	519.8	1.0	M	101.4
6/24/2022 18:00	7.1	283.1	8.4	68.7	423.4	1.0	M	101.4
6/24/2022 19:00	6.5	283.7	8.0	69.9	281.2	1.0	M	101.4
6/24/2022 20:00	5.7	281.2	8.3	67.7	241.2	1.0	M	101.5
6/24/2022 21:00	5.1	290.5	7.2	72.5	150.9	1.0	M	101.5
6/24/2022 22:00	4.4	276.2	5.8	78.6	85.5	0.0	M	101.5
6/24/2022 23:00	3.0	269.6	4.6	83.8	20.2	0.0	M	101.4
6/25/2022 0:00	1.7	302.6	4.9	83.5	12.3	0.0	M	101.4
6/25/2022 1:00	1.7	318.0	4.7	84.2	11.7	0.0	M	101.5
6/25/2022 2:00	1.6	293.2	4.7	83.7	41.3	0.0	M	101.5
6/25/2022 3:00	0.9	271.3	4.3	84.8	76.0	0.0	M	101.5
6/25/2022 4:00	1.0	289.0	5.1	83.1	122.5	1.0	M	101.5
6/25/2022 5:00	2.3	277.8	5.4	82.3	191.2	1.0	M	101.5
6/25/2022 6:00	2.9	294.5	6.0	79.9	280.6	1.0	M	101.5
6/25/2022 7:00	3.7	313.4	6.6	76.1	375.6	1.0	M	101.5
6/25/2022 8:00	2.7	331.2	7.8	70.8	415.2	1.0	M	101.5
6/25/2022 9:00	3.2	322.7	8.5	63.5	485.1	1.0	M	101.4
6/25/2022 10:00	3.8	334.2	9.6	54.7	580.8	1.0	M	101.4
6/25/2022 11:00	3.9	307.8	10.2	55.3	637.7	1.0	M	101.4
6/25/2022 12:00	4.0	331.7	11.1	55.1	569.1	1.0	M	101.4
6/25/2022 13:00	4.1	305.1	10.5	58.0	369.9	1.0	M	101.4
6/25/2022 14:00	3.4	287.7	11.5	55.7	547.6	1.0	M	101.4
6/25/2022 15:00	3.0	299.6	13.3	52.7	597.4	1.0	M	101.4
6/25/2022 16:00	3.6	309.1	13.2	53.2	502.6	1.0	M	101.4
6/25/2022 17:00	3.3	295.0	13.8	51.4	515.3	1.0	M	101.4
6/25/2022 18:00	3.6	297.8	13.6	52.4	355.0	1.0	M	101.4
6/25/2022 19:00	5.6	321.3	11.9	61.5	83.2	0.0	M	101.4
6/25/2022 20:00	5.1	302.9	10.4	70.5	57.1	0.0	M	101.4
6/25/2022 21:00	3.7	277.0	8.4	84.3	36.2	0.0	M	101.4
6/25/2022 22:00	4.4	278.6	7.2	85.8	49.0	0.0	M	101.4
6/25/2022 23:00	5.0	285.7	6.7	86.6	22.4	0.0	M	101.4
6/26/2022 0:00	5.0	300.0	6.4	87.8	14.6	0.0	M	101.4
6/26/2022 1:00	5.1	326.4	7.4	78.0	12.5	0.0	M	101.4
6/26/2022 2:00	3.6	353.5	6.8	76.6	33.3	0.0	M	101.4
6/26/2022 3:00	3.7	330.2	7.3	75.6	63.0	0.0	M	101.4
6/26/2022 4:00	4.6	320.3	7.0	76.7	43.2	0.0	M	101.5
6/26/2022 5:00	3.8	319.4	7.2	75.2	80.1	0.0	M	101.4
6/26/2022 6:00	3.9	286.8	6.6	80.1	145.6	1.0	M	101.4
6/26/2022 7:00	5.5	279.5	6.2	83.6	226.3	1.0	M	101.5

6/26/2022 8:00	5.9	275.3	5.3	87.9	212.1	1.0	M	101.5
6/26/2022 9:00	5.0	278.1	5.8	88.0	269.7	1.0	M	101.4
6/26/2022 10:00	5.4	279.9	7.0	82.0	373.7	1.0	M	101.4
6/26/2022 11:00	5.2	286.1	6.1	82.5	200.4	1.0	M	101.4
6/26/2022 12:00	5.7	285.9	6.1	81.5	342.9	1.0	M	101.4
6/26/2022 13:00	6.3	279.9	7.2	76.8	502.7	1.0	M	101.4
6/26/2022 14:00	6.7	302.2	9.2	66.6	558.1	1.0	M	101.4
6/26/2022 15:00	8.0	313.9	10.4	60.0	644.9	1.0	M	101.4
6/26/2022 16:00	4.9	329.5	9.7	62.0	383.8	1.0	M	101.4
6/26/2022 17:00	4.7	333.9	9.7	61.8	335.9	1.0	M	101.4
6/26/2022 18:00	4.9	358.7	9.2	63.6	133.9	1.0	M	101.5
6/26/2022 19:00	5.2	11.6	8.3	65.0	107.0	0.0	M	101.5
6/26/2022 20:00	4.6	13.9	7.4	67.5	38.8	0.0	M	101.5
6/26/2022 21:00	3.6	12.4	7.0	69.2	18.9	0.0	M	101.5
6/26/2022 22:00	2.5	331.1	6.6	70.9	16.2	0.0	M	101.5
6/26/2022 23:00	2.3	276.4	5.4	76.5	9.7	0.0	M	101.5
6/27/2022 0:00	2.7	296.5	5.2	78.2	4.0	0.0	M	101.5
6/27/2022 1:00	2.9	329.8	5.1	76.2	3.8	0.0	M	101.5
6/27/2022 2:00	2.3	295.2	4.4	79.2	6.2	0.0	M	101.5
6/27/2022 3:00	2.5	307.9	4.4	79.4	17.1	0.0	M	101.5
6/27/2022 4:00	3.5	348.0	4.7	78.5	40.3	0.0	M	101.5
6/27/2022 5:00	4.5	352.3	4.3	79.7	52.9	0.0	M	101.5
6/27/2022 6:00	4.2	323.7	4.4	78.1	105.5	0.0	M	101.5
6/27/2022 7:00	5.5	305.5	5.5	72.3	251.0	1.0	M	101.5
6/27/2022 8:00	4.7	280.5	5.4	74.7	233.3	1.0	M	101.5
6/27/2022 9:00	5.0	278.0	5.2	76.5	297.1	1.0	M	101.4
6/27/2022 10:00	5.3	276.6	6.5	71.3	486.1	1.0	M	101.4
6/27/2022 11:00	6.8	272.5	7.0	69.6	571.8	1.0	M	101.3
6/27/2022 12:00	6.4	267.2	7.1	69.1	392.7	1.0	M	101.3
6/27/2022 13:00	7.1	261.9	7.7	67.5	556.5	1.0	M	101.2
6/27/2022 14:00	8.5	258.5	7.4	71.0	474.4	1.0	M	101.1
6/27/2022 15:00	9.3	258.8	7.4	73.0	451.2	1.0	M	101.0
6/27/2022 16:00	9.5	258.3	7.3	72.4	383.2	1.0	M	101.0
6/27/2022 17:00	10.1	258.6	7.1	74.0	375.0	1.0	M	101.0
6/27/2022 18:00	10.1	259.6	6.9	75.2	187.8	1.0	M	100.9
6/27/2022 19:00	9.8	260.8	6.1	77.8	94.5	0.0	M	100.8
6/27/2022 20:00	6.5	277.0	5.3	82.0	19.5	0.0	M	100.8
6/27/2022 21:00	3.8	287.7	3.9	88.5	10.0	0.0	M	100.8
6/27/2022 22:00	3.0	296.9	3.8	90.9	4.9	0.0	M	100.7
6/27/2022 23:00	2.4	283.2	4.3	91.8	4.3	0.0	M	100.7
6/28/2022 0:00	4.9	320.8	5.3	89.4	4.5	0.0	M	100.7
6/28/2022 1:00	6.0	323.6	4.7	91.1	2.5	0.0	M	100.6
6/28/2022 2:00	6.1	328.6	4.0	90.7	6.1	0.0	M	100.6
6/28/2022 3:00	5.8	324.9	3.0	91.9	9.5	0.0	M	100.6
6/28/2022 4:00	6.4	322.6	2.8	91.3	19.6	0.0	M	100.6
6/28/2022 5:00	5.1	336.8	2.6	90.9	62.9	0.0	M	100.7
6/28/2022 6:00	5.4	328.5	2.8	84.4	107.9	0.0	M	100.7
6/28/2022 7:00	4.7	326.5	3.1	82.4	158.2	1.0	M	100.7
6/28/2022 8:00	5.8	329.8	3.9	78.0	312.8	1.0	M	100.7
6/28/2022 9:00	6.8	330.7	4.1	76.7	260.4	1.0	M	100.7
6/28/2022 10:00	7.7	329.0	4.4	74.8	440.2	1.0	M	100.7
6/28/2022 11:00	7.0	324.7	4.0	77.7	274.8	1.0	M	100.7
6/28/2022 12:00	7.2	326.9	4.2	75.3	368.5	1.0	M	100.7
6/28/2022 13:00	8.8	359.0	4.5	75.5	352.8	1.0	M	100.8
6/28/2022 14:00	7.6	352.1	4.9	74.7	356.3	1.0	M	100.8
6/28/2022 15:00	8.4	5.3	5.1	79.8	571.9	1.0	M	100.8
6/28/2022 16:00	8.6	359.2	6.0	69.1	398.9	1.0	M	100.8
6/28/2022 17:00	9.6	2.5	6.3	66.1	358.8	1.0	M	100.8
6/28/2022 18:00	8.4	359.6	5.9	69.4	209.1	1.0	M	100.9
6/28/2022 19:00	6.9	333.6	5.9	69.4	238.3	1.0	M	100.8
6/28/2022 20:00	6.9	317.2	5.4	74.4	178.9	1.0	M	100.9
6/28/2022 21:00	6.4	337.4	5.9	74.6	136.2	1.0	M	100.9
6/28/2022 22:00	6.7	313.4	4.8	79.1	86.8	0.0	M	100.9
6/28/2022 23:00	6.9	324.5	4.1	82.2	27.0	0.0	M	100.9
6/29/2022 0:00	6.7	325.7	3.6	82.9	9.5	0.0	M	100.9
6/29/2022 1:00	6.7	327.2	3.0	84.2	9.3	0.0	M	100.9
6/29/2022 2:00	8.1	319.6	2.6	86.0	37.9	0.0	M	100.9
6/29/2022 3:00	8.7	318.4	2.7	85.9	72.4	0.0	M	100.9
6/29/2022 4:00	8.7	318.4	3.0	85.0	77.4	0.0	M	100.9
6/29/2022 5:00	7.6	316.3	3.2	85.3	89.1	0.0	M	100.9
6/29/2022 6:00	6.9	316.7	3.8	83.2	108.5	0.0	M	100.9
6/29/2022 7:00	7.4	317.3	4.2	77.7	196.1	1.0	M	100.9
6/29/2022 8:00	7.1	319.3	5.1	72.2	237.2	1.0	M	100.9
6/29/2022 9:00	7.0	321.8	6.0	69.7	322.7	1.0	M	100.9
6/29/2022 10:00	7.9	320.2	7.0	66.3	433.3	1.0	M	100.9
6/29/2022 11:00	7.4	321.0	7.1	66.7	332.7	1.0	M	100.9
6/29/2022 12:00	7.4	323.6	7.3	64.4	571.1	1.0	M	100.8
6/29/2022 13:00	7.5	324.7	9.0	58.7	805.0	1.0	M	100.9
6/29/2022 14:00	7.1	323.8	9.5	55.8	717.4	1.0	M	100.9
6/29/2022 15:00	6.1	332.1	10.3	54.1	671.8	1.0	M	100.9

6/29/2022 16:00	6.7	5.0	10.9	54.1	599.8	1.0	M	100.9
6/29/2022 17:00	7.9	13.6	10.8	56.0	518.9	1.0	M	100.9
6/29/2022 18:00	6.5	18.7	11.0	56.2	426.0	1.0	M	100.9
6/29/2022 19:00	6.3	33.1	10.9	56.3	327.6	1.0	M	101.0
6/29/2022 20:00	5.0	35.7	10.9	56.7	232.7	1.0	M	101.0
6/29/2022 21:00	3.4	23.3	10.7	56.9	154.4	1.0	M	101.0
6/29/2022 22:00	1.8	335.1	10.6	57.1	94.0	0.0	M	101.0
6/29/2022 23:00	1.4	324.2	9.0	61.6	18.8	0.0	M	101.1
6/30/2022 0:00	3.0	288.1	6.1	73.2	10.0	0.0	M	101.1
6/30/2022 1:00	3.5	284.3	5.9	74.9	9.4	0.0	M	101.1
6/30/2022 2:00	4.3	291.7	6.1	74.7	37.4	0.0	M	101.2
6/30/2022 3:00	4.2	290.7	5.5	77.1	63.6	0.0	M	101.2
6/30/2022 4:00	3.9	289.5	5.8	75.4	97.5	0.0	M	101.2
6/30/2022 5:00	5.3	277.3	7.2	70.6	124.5	1.0	M	101.2
6/30/2022 6:00	4.9	270.6	8.8	62.9	244.1	1.0	M	101.1
6/30/2022 7:00	6.8	262.2	9.0	61.3	203.2	1.0	M	101.1
6/30/2022 8:00	7.5	267.1	10.1	58.4	433.6	1.0	M	101.1
6/30/2022 9:00	7.6	268.2	10.6	57.6	491.4	1.0	M	101.1
6/30/2022 10:00	8.2	267.2	10.8	57.6	618.2	1.0	M	101.1
6/30/2022 11:00	7.9	268.1	11.7	56.1	671.5	1.0	M	101.1
6/30/2022 12:00	7.3	273.9	12.6	53.2	701.1	1.0	M	101.1
6/30/2022 13:00	6.8	278.1	13.7	51.9	726.1	1.0	M	101.1
6/30/2022 14:00	5.9	285.5	14.1	52.5	694.4	1.0	M	101.1
6/30/2022 15:00	5.6	280.2	15.1	52.7	628.1	1.0	M	101.1
6/30/2022 16:00	5.5	283.1	14.8	55.0	578.0	1.0	M	101.1
6/30/2022 17:00	5.2	280.9	13.9	58.1	425.4	1.0	M	101.1
6/30/2022 18:00	5.5	280.4	12.7	63.1	241.9	1.0	M	101.1
6/30/2022 19:00	5.3	278.5	11.5	66.9	142.3	1.0	M	101.1
6/30/2022 20:00	4.7	288.7	10.7	69.0	83.9	0.0	M	101.0
6/30/2022 21:00	5.4	289.2	10.6	69.9	46.8	0.0	M	101.0
6/30/2022 22:00	6.0	285.6	9.8	73.3	24.6	0.0	M	101.0
6/30/2022 23:00	6.4	285.9	8.9	75.5	10.0	0.0	M	101.0
7/1/2022 0:00	5.9	284.2	8.9	76.5	5.2	0.0	M	101.0
7/1/2022 1:00	4.4	284.5	8.6	78.2	4.7	0.0	M	101.0
7/1/2022 2:00	4.0	280.1	8.4	82.5	4.1	0.0	M	101.0
7/1/2022 3:00	3.8	265.9	9.4	82.2	6.0	0.0	M	100.9
7/1/2022 4:00	6.4	278.3	8.7	85.9	12.8	0.0	M	100.9
7/1/2022 5:00	9.0	263.0	7.6	93.1	8.6	0.0	M	100.8
7/1/2022 6:00	9.8	258.0	6.2	94.3	32.9	0.0	M	100.7
7/1/2022 7:00	9.0	265.5	4.6	95.1	34.2	0.0	M	100.7
7/1/2022 8:00	8.6	269.5	3.7	96.2	42.2	0.0	M	100.7
7/1/2022 9:00	7.0	270.0	4.2	97.0	108.8	0.0	M	100.7
7/1/2022 10:00	8.2	273.0	5.0	96.7	223.1	1.0	M	100.7
7/1/2022 11:00	7.5	276.2	5.3	96.7	213.6	1.0	M	100.7
7/1/2022 12:00	7.0	281.6	5.5	96.8	246.3	1.0	M	100.8
7/1/2022 13:00	5.2	290.7	6.1	97.0	241.1	1.0	M	100.8
7/1/2022 14:00	5.3	288.5	6.8	97.1	314.8	1.0	M	100.9
7/1/2022 15:00	5.3	287.4	7.2	97.0	260.7	1.0	M	100.9
7/1/2022 16:00	5.0	292.1	7.3	97.0	266.5	1.0	M	100.9
7/1/2022 17:00	3.6	330.8	9.6	95.7	205.6	1.0	M	100.9
7/1/2022 18:00	3.4	330.2	9.9	92.2	186.4	1.0	M	100.9
7/1/2022 19:00	4.5	344.2	9.6	88.8	191.6	1.0	M	100.9
7/1/2022 20:00	5.6	352.8	9.9	83.5	151.3	1.0	M	101.0
7/1/2022 21:00	3.8	341.6	9.1	84.1	73.3	0.0	M	101.0
7/1/2022 22:00	2.8	341.9	8.3	86.7	24.0	0.0	M	101.1
7/1/2022 23:00	4.3	3.1	7.7	92.1	6.6	0.0	M	101.1
7/2/2022 0:00	4.7	352.0	7.5	93.2	7.0	0.0	M	101.2
7/2/2022 1:00	4.7	346.4	7.1	93.5	5.3	0.0	M	101.2
7/2/2022 2:00	2.8	311.8	6.8	94.4	4.1	0.0	M	101.3
7/2/2022 3:00	3.1	323.8	6.1	96.2	8.6	0.0	M	101.3
7/2/2022 4:00	4.5	350.5	6.1	96.1	23.4	0.0	M	101.3
7/2/2022 5:00	3.6	358.9	6.3	96.1	51.9	0.0	M	101.4
7/2/2022 6:00	3.7	354.9	6.7	93.7	68.9	0.0	M	101.5
7/2/2022 7:00	4.6	6.6	6.8	91.7	108.4	0.0	M	101.5
7/2/2022 8:00	3.8	13.2	7.6	87.9	231.4	1.0	M	101.5
7/2/2022 9:00	4.2	17.7	8.5	82.7	298.8	1.0	M	101.5
7/2/2022 10:00	4.6	16.3	8.6	84.1	339.4	1.0	M	101.6
7/2/2022 11:00	4.5	13.9	9.2	80.5	382.3	1.0	M	101.6
7/2/2022 12:00	4.3	7.3	9.3	77.9	307.8	1.0	M	101.6
7/2/2022 13:00	4.9	11.8	8.9	79.5	270.7	1.0	M	101.7
7/2/2022 14:00	4.9	19.4	8.9	78.5	305.4	1.0	M	101.7
7/2/2022 15:00	5.2	18.1	9.0	79.1	277.3	1.0	M	101.7
7/2/2022 16:00	4.5	18.6	9.2	77.7	250.5	1.0	M	101.7
7/2/2022 17:00	4.0	3.1	9.5	76.7	212.9	1.0	M	101.7
7/2/2022 18:00	3.1	349.8	9.6	75.1	222.5	1.0	M	101.7
7/2/2022 19:00	3.1	343.2	9.8	74.4	189.7	1.0	M	101.8
7/2/2022 20:00	3.7	30.4	9.7	74.9	67.1	0.0	M	101.8
7/2/2022 21:00	2.5	50.6	9.3	77.6	24.1	0.0	M	101.8
7/2/2022 22:00	2.1	9.6	9.3	77.6	11.9	0.0	M	101.8
7/2/2022 23:00	1.7	15.5	9.1	78.1	6.3	0.0	M	101.9

7/3/2022 0:00	0.6	261.2	8.8	79.4	4.6	0.0	M	101.9
7/3/2022 1:00	1.2	265.4	8.6	80.4	4.4	0.0	M	101.9
7/3/2022 2:00	0.9	253.8	8.5	80.5	5.6	0.0	M	101.9
7/3/2022 3:00	1.0	280.9	8.3	81.6	12.7	0.0	M	101.9
7/3/2022 4:00	0.8	290.0	8.2	81.1	26.3	0.0	M	101.9
7/3/2022 5:00	1.3	254.2	8.1	80.8	44.0	0.0	M	102.0
7/3/2022 6:00	1.0	264.0	8.4	80.3	69.6	0.0	M	102.0
7/3/2022 7:00	0.4	110.3	8.8	78.5	98.0	0.0	M	102.0
7/3/2022 8:00	0.6	96.4	9.2	75.7	144.8	1.0	M	102.0
7/3/2022 9:00	0.9	102.2	9.9	71.9	202.3	1.0	M	102.0
7/3/2022 10:00	1.0	74.0	10.4	69.0	312.2	1.0	M	101.9
7/3/2022 11:00	1.0	22.2	11.8	65.4	538.8	1.0	M	101.9
7/3/2022 12:00	2.0	10.0	12.3	64.0	678.7	1.0	M	101.9
7/3/2022 13:00	2.1	81.3	13.3	59.1	685.1	1.0	M	101.9
7/3/2022 14:00	3.3	346.8	13.3	61.0	657.6	1.0	M	101.9
7/3/2022 15:00	2.5	3.5	14.1	58.1	587.8	1.0	M	101.8
7/3/2022 16:00	2.9	356.7	13.7	59.3	406.8	1.0	M	101.8
7/3/2022 17:00	2.8	358.5	14.8	55.6	518.7	1.0	M	101.8
7/3/2022 18:00	3.2	7.9	15.2	55.2	436.3	1.0	M	101.8
7/3/2022 19:00	3.6	27.9	15.0	56.3	347.8	1.0	M	101.7
7/3/2022 20:00	4.7	37.5	14.5	58.9	156.9	1.0	M	101.7
7/3/2022 21:00	6.2	70.7	13.1	66.0	59.3	0.0	M	101.7
7/3/2022 22:00	3.5	83.5	12.1	70.4	42.5	0.0	M	101.8
7/3/2022 23:00	1.4	105.3	11.8	71.8	26.1	0.0	M	101.8
7/4/2022 0:00	1.9	108.3	10.9	74.9	11.0	0.0	M	101.7
7/4/2022 1:00	1.4	107.8	10.3	76.1	10.6	0.0	M	101.8
7/4/2022 2:00	1.5	82.7	9.8	76.0	15.4	0.0	M	101.8
7/4/2022 3:00	1.1	75.8	9.3	79.7	24.9	0.0	M	101.7
7/4/2022 4:00	0.8	115.8	9.9	79.9	40.3	0.0	M	101.7
7/4/2022 5:00	1.2	110.6	10.2	80.4	59.9	0.0	M	101.7
7/4/2022 6:00	1.5	93.1	11.0	79.3	90.9	0.0	M	101.7
7/4/2022 7:00	2.0	107.2	11.9	75.8	144.6	1.0	M	101.7
7/4/2022 8:00	3.5	127.6	12.4	72.6	252.3	1.0	M	101.6
7/4/2022 9:00	2.6	134.1	14.2	63.3	449.1	1.0	M	101.6
7/4/2022 10:00	2.7	113.9	15.9	55.8	586.3	1.0	M	101.6
7/4/2022 11:00	2.6	133.2	17.1	53.5	644.0	1.0	M	101.5
7/4/2022 12:00	2.7	115.0	17.4	52.4	678.2	1.0	M	101.5
7/4/2022 13:00	3.2	139.1	18.1	50.6	670.0	1.0	M	101.5
7/4/2022 14:00	2.9	140.7	18.6	49.4	659.2	1.0	M	101.5
7/4/2022 15:00	3.6	147.8	19.1	46.8	601.4	1.0	M	101.4
7/4/2022 16:00	2.6	116.9	18.9	45.4	448.0	1.0	M	101.4
7/4/2022 17:00	3.3	107.7	18.7	46.9	390.5	1.0	M	101.4
7/4/2022 18:00	3.0	125.0	18.3	49.4	251.0	1.0	M	101.3
7/4/2022 19:00	4.2	109.6	17.6	54.7	161.1	1.0	M	101.3
7/4/2022 20:00	5.8	98.8	16.9	62.4	122.0	1.0	M	101.3
7/4/2022 21:00	6.3	108.4	15.7	66.6	119.8	0.0	M	101.3
7/4/2022 22:00	3.3	127.0	14.6	71.0	48.5	0.0	M	101.3
7/4/2022 23:00	1.3	106.3	14.5	72.1	21.5	0.0	M	101.2
7/5/2022 0:00	1.5	89.4	13.9	75.3	13.6	0.0	M	101.3
7/5/2022 1:00	1.5	96.7	12.9	78.6	13.1	0.0	M	101.2
7/5/2022 2:00	1.1	78.8	11.5	83.4	24.7	0.0	M	101.2
7/5/2022 3:00	0.9	56.6	11.1	86.0	49.1	0.0	M	101.2
7/5/2022 4:00	0.7	48.4	11.9	83.6	90.9	0.0	M	101.2
7/5/2022 5:00	0.3	71.9	13.3	78.5	138.0	1.0	M	101.2
7/5/2022 6:00	1.2	119.0	13.8	76.1	190.3	1.0	M	101.1
7/5/2022 7:00	1.4	123.0	15.5	69.3	293.3	1.0	M	101.1
7/5/2022 8:00	1.3	137.3	17.3	63.2	355.6	1.0	M	101.1
7/5/2022 9:00	1.2	139.0	19.1	56.3	434.6	1.0	M	101.1
7/5/2022 10:00	1.5	134.0	20.4	49.2	573.0	1.0	M	101.0
7/5/2022 11:00	1.6	142.8	21.9	41.0	638.5	1.0	M	101.0
7/5/2022 12:00	2.1	270.8	22.7	41.9	667.1	1.0	M	101.0
7/5/2022 13:00	3.2	276.9	22.7	42.7	666.6	1.0	M	101.0
7/5/2022 14:00	3.9	284.3	22.4	44.2	659.8	1.0	M	101.0
7/5/2022 15:00	3.6	288.9	22.5	42.7	614.2	1.0	M	101.0
7/5/2022 16:00	2.9	324.4	23.1	38.7	551.1	1.0	M	100.9
7/5/2022 17:00	2.1	348.0	23.3	38.6	467.4	1.0	M	100.9
7/5/2022 18:00	3.6	57.6	22.3	43.1	364.0	1.0	M	100.9
7/5/2022 19:00	7.5	84.4	19.7	52.2	264.1	1.0	M	100.9
7/5/2022 20:00	6.7	93.7	18.3	56.0	178.6	1.0	M	100.9
7/5/2022 21:00	6.2	88.4	17.6	57.4	97.6	0.0	M	100.9
7/5/2022 22:00	4.8	86.4	16.3	61.9	50.6	0.0	M	100.9
7/5/2022 23:00	3.9	90.4	14.9	69.7	23.0	0.0	M	101.0
7/6/2022 0:00	4.6	84.6	13.3	77.9	11.4	0.0	M	101.0
7/6/2022 1:00	2.9	86.2	12.2	81.6	9.6	0.0	M	101.0
7/6/2022 2:00	2.3	81.4	11.7	81.9	14.2	0.0	M	101.0
7/6/2022 3:00	3.1	99.1	11.6	81.6	34.3	0.0	M	101.0
7/6/2022 4:00	3.1	83.5	11.7	80.7	76.8	0.0	M	101.0
7/6/2022 5:00	4.2	72.6	11.7	78.5	146.3	1.0	M	101.0
7/6/2022 6:00	5.0	66.7	12.6	73.7	228.7	1.0	M	101.0
7/6/2022 7:00	4.7	66.5	13.6	70.3	308.4	1.0	M	101.0

7/6/2022 8:00	4.7	74.0	14.9	66.1	352.7	1.0	M	101.0
7/6/2022 9:00	4.4	61.8	16.4	61.4	428.2	1.0	M	101.0
7/6/2022 10:00	4.6	64.2	17.2	57.7	557.4	1.0	M	101.0
7/6/2022 11:00	4.8	62.7	17.9	53.6	601.8	1.0	M	101.0
7/6/2022 12:00	4.1	80.3	18.4	50.2	653.2	1.0	M	101.0
7/6/2022 13:00	4.0	79.5	19.0	47.1	659.2	1.0	M	101.0
7/6/2022 14:00	3.5	72.3	19.7	42.1	641.9	1.0	M	101.0
7/6/2022 15:00	3.7	68.2	20.2	34.4	621.0	1.0	M	101.0
7/6/2022 16:00	3.9	67.8	20.4	29.6	554.3	1.0	M	101.0
7/6/2022 17:00	4.3	62.5	20.3	26.6	473.3	1.0	M	101.0
7/6/2022 18:00	4.5	64.4	19.8	26.1	372.7	1.0	M	100.9
7/6/2022 19:00	4.9	63.7	18.6	29.5	252.1	1.0	M	100.9
7/6/2022 20:00	4.5	77.0	17.4	31.6	158.3	1.0	M	100.9
7/6/2022 21:00	3.6	75.2	15.7	40.4	97.3	0.0	M	100.9
7/6/2022 22:00	2.6	86.3	14.4	46.0	52.1	0.0	M	100.9
7/6/2022 23:00	2.1	90.7	12.9	53.9	23.8	0.0	M	101.0
7/7/2022 0:00	1.8	71.6	11.6	57.6	11.8	0.0	M	101.0
7/7/2022 1:00	2.1	76.9	10.9	60.4	9.0	0.0	M	101.0
7/7/2022 2:00	1.4	68.2	10.0	69.5	14.1	0.0	M	101.0
7/7/2022 3:00	0.8	74.2	9.9	73.4	29.8	0.0	M	101.0
7/7/2022 4:00	0.7	105.0	10.2	76.9	62.0	0.0	M	101.0
7/7/2022 5:00	1.1	109.8	10.4	74.4	122.0	1.0	M	101.0
7/7/2022 6:00	1.2	128.8	11.6	70.6	206.1	1.0	M	100.9
7/7/2022 7:00	1.5	134.6	13.3	65.0	307.7	1.0	M	100.9
7/7/2022 8:00	1.5	140.8	15.6	58.5	347.7	1.0	M	100.9
7/7/2022 9:00	1.6	134.5	17.7	55.1	413.3	1.0	M	100.9
7/7/2022 10:00	2.5	131.4	19.5	51.3	564.0	1.0	M	100.8
7/7/2022 11:00	2.4	125.9	21.2	44.3	607.2	1.0	M	100.8
7/7/2022 12:00	2.8	119.1	22.0	39.0	637.9	1.0	M	100.8
7/7/2022 13:00	2.2	121.4	23.1	36.7	604.6	1.0	M	100.8
7/7/2022 14:00	1.9	119.4	23.9	33.9	581.3	1.0	M	100.8
7/7/2022 15:00	1.9	121.6	24.7	31.8	595.8	1.0	M	100.7
7/7/2022 16:00	2.0	118.4	25.1	30.8	546.7	1.0	M	100.7
7/7/2022 17:00	1.7	117.4	25.7	28.8	457.0	1.0	M	100.7
7/7/2022 18:00	1.5	136.7	26.0	28.3	367.3	1.0	M	100.6
7/7/2022 19:00	2.0	131.7	24.9	33.2	268.7	1.0	M	100.6
7/7/2022 20:00	2.1	130.7	23.8	38.4	159.4	1.0	M	100.6
7/7/2022 21:00	1.6	137.7	22.4	45.1	38.4	0.0	M	100.7
7/7/2022 22:00	0.5	130.1	20.7	51.5	22.8	0.0	M	100.7
7/7/2022 23:00	0.7	117.2	18.5	62.1	16.2	0.0	M	100.7
7/8/2022 0:00	1.1	126.6	16.8	70.1	7.9	0.0	M	100.7
7/8/2022 1:00	0.9	96.0	15.8	74.8	7.8	0.0	M	100.7
7/8/2022 2:00	1.1	115.6	15.4	73.9	8.8	0.0	M	100.7
7/8/2022 3:00	1.0	120.9	15.2	75.8	28.5	0.0	M	100.7
7/8/2022 4:00	0.8	100.7	15.2	78.7	51.4	0.0	M	100.7
7/8/2022 5:00	1.0	100.9	15.7	79.5	107.5	0.0	M	100.7
7/8/2022 6:00	0.6	100.1	17.2	74.3	181.6	1.0	M	100.7
7/8/2022 7:00	0.7	103.1	18.3	69.7	220.7	1.0	M	100.6
7/8/2022 8:00	1.4	130.5	20.4	61.6	297.7	1.0	M	100.6
7/8/2022 9:00	1.1	123.4	22.6	53.4	368.3	1.0	M	100.6
7/8/2022 10:00	0.6	119.2	25.3	43.8	487.7	1.0	M	100.6
7/8/2022 11:00	1.8	132.3	25.4	41.9	530.5	1.0	M	100.5
7/8/2022 12:00	2.4	234.9	26.2	40.9	552.5	1.0	M	100.6
7/8/2022 13:00	2.7	285.0	26.0	41.1	583.2	1.0	M	100.6
7/8/2022 14:00	2.7	293.3	26.5	36.8	593.6	1.0	M	100.5
7/8/2022 15:00	3.9	299.2	25.9	37.4	527.4	1.0	M	100.5
7/8/2022 16:00	2.7	301.7	26.4	35.8	466.1	1.0	M	100.5
7/8/2022 17:00	2.2	308.1	26.2	36.5	380.7	1.0	M	100.5
7/8/2022 18:00	2.2	299.4	25.9	37.3	311.6	1.0	M	100.5
7/8/2022 19:00	1.7	297.4	25.3	38.5	229.5	1.0	M	100.5
7/8/2022 20:00	0.8	314.3	24.8	40.5	151.6	1.0	M	100.5
7/8/2022 21:00	1.5	290.4	22.8	47.4	86.0	0.0	M	100.5
7/8/2022 22:00	2.9	281.4	19.9	56.1	42.0	0.0	M	100.5
7/8/2022 23:00	2.4	289.6	18.6	57.9	18.6	0.0	M	100.5
7/9/2022 0:00	4.1	286.6	17.0	63.4	9.7	0.0	M	100.5
7/9/2022 1:00	3.4	286.2	16.4	66.7	7.9	0.0	M	100.5
7/9/2022 2:00	2.3	288.3	15.7	71.6	13.2	0.0	M	100.5
7/9/2022 3:00	2.3	289.9	15.8	72.6	27.6	0.0	M	100.5
7/9/2022 4:00	3.2	279.8	14.9	76.8	62.3	0.0	M	100.5
7/9/2022 5:00	2.7	278.2	15.4	77.5	117.8	0.0	M	100.5
7/9/2022 6:00	2.3	284.9	15.8	77.6	197.1	1.0	M	100.5
7/9/2022 7:00	1.2	294.3	17.7	69.9	276.6	1.0	M	100.5
7/9/2022 8:00	2.4	289.1	18.2	64.2	321.2	1.0	M	100.5
7/9/2022 9:00	1.9	286.0	19.4	56.9	402.3	1.0	M	100.5
7/9/2022 10:00	1.2	325.8	21.0	52.3	543.4	1.0	M	100.5
7/9/2022 11:00	2.3	329.0	21.6	52.0	599.9	1.0	M	100.5
7/9/2022 12:00	2.0	38.2	22.6	49.7	634.4	1.0	M	100.4
7/9/2022 13:00	3.9	2.1	22.9	49.7	639.4	1.0	M	100.4
7/9/2022 14:00	4.2	5.2	23.6	49.0	616.9	1.0	M	100.4
7/9/2022 15:00	3.8	19.9	24.9	45.4	574.9	1.0	M	100.4

7/9/2022 16:00	3.9	27.1	24.8	45.4	515.1	1.0	M	100.4
7/9/2022 17:00	4.7	46.3	24.0	46.8	438.0	1.0	M	100.4
7/9/2022 18:00	5.7	74.0	22.4	49.5	348.2	1.0	M	100.4
7/9/2022 19:00	4.7	74.3	20.9	54.5	247.5	1.0	M	100.5
7/9/2022 20:00	4.7	74.9	19.3	61.0	160.5	1.0	M	100.5
7/9/2022 21:00	3.9	71.1	17.8	68.9	93.1	0.0	M	100.5
7/9/2022 22:00	4.2	72.0	16.6	73.3	47.2	0.0	M	100.5
7/9/2022 23:00	4.8	74.7	15.2	80.8	16.3	0.0	M	100.5
7/10/2022 0:00	3.8	70.4	14.7	78.2	7.7	0.0	M	100.5
7/10/2022 1:00	3.3	78.3	14.1	76.9	6.7	0.0	M	100.5
7/10/2022 2:00	3.4	70.0	13.3	80.9	12.2	0.0	M	100.5
7/10/2022 3:00	3.9	61.4	13.0	83.5	29.2	0.0	M	100.5
7/10/2022 4:00	4.0	53.1	12.8	85.9	64.5	0.0	M	100.6
7/10/2022 5:00	3.2	78.6	13.1	86.5	120.2	1.0	M	100.6
7/10/2022 6:00	4.7	63.7	13.5	84.4	195.5	1.0	M	100.6
7/10/2022 7:00	4.5	71.1	14.7	78.5	283.0	1.0	M	100.6
7/10/2022 8:00	4.5	63.0	15.7	74.6	330.4	1.0	M	100.6
7/10/2022 9:00	4.7	63.9	16.5	69.9	404.4	1.0	M	100.7
7/10/2022 10:00	4.4	67.6	17.7	67.0	528.5	1.0	M	100.6
7/10/2022 11:00	4.8	61.4	19.2	60.5	585.1	1.0	M	100.6
7/10/2022 12:00	4.8	65.7	20.2	52.5	622.0	1.0	M	100.6
7/10/2022 13:00	5.0	62.0	20.9	51.8	632.8	1.0	M	100.6
7/10/2022 14:00	5.4	62.0	21.5	47.8	613.6	1.0	M	100.6
7/10/2022 15:00	5.4	63.2	21.8	47.3	568.7	1.0	M	100.6
7/10/2022 16:00	5.1	69.7	22.0	45.7	510.6	1.0	M	100.6
7/10/2022 17:00	5.1	66.9	21.8	47.7	435.3	1.0	M	100.6
7/10/2022 18:00	5.1	73.7	21.1	52.0	347.7	1.0	M	100.6
7/10/2022 19:00	5.5	77.3	20.5	55.7	265.9	1.0	M	100.6
7/10/2022 20:00	4.4	86.5	19.4	55.7	164.5	1.0	M	100.6
7/10/2022 21:00	3.8	90.0	18.5	56.5	87.8	0.0	M	100.6
7/10/2022 22:00	2.9	87.1	17.3	64.5	51.8	0.0	M	100.6
7/10/2022 23:00	2.0	94.4	16.0	71.9	19.9	0.0	M	100.6
7/11/2022 0:00	2.1	86.4	15.0	78.6	8.9	0.0	M	100.6
7/11/2022 1:00	2.0	71.0	14.0	83.8	6.8	0.0	M	100.6
7/11/2022 2:00	2.1	75.7	13.8	86.1	12.2	0.0	M	100.6
7/11/2022 3:00	2.2	72.8	13.5	87.6	29.8	0.0	M	100.6
7/11/2022 4:00	2.2	89.1	13.7	86.8	66.5	0.0	M	100.6
7/11/2022 5:00	2.1	106.5	14.1	84.0	123.9	1.0	M	100.6
7/11/2022 6:00	2.0	93.4	15.3	80.0	201.0	1.0	M	100.6
7/11/2022 7:00	1.5	108.9	16.9	75.1	287.7	1.0	M	100.5
7/11/2022 8:00	2.4	103.8	18.5	70.5	328.0	1.0	M	100.5
7/11/2022 9:00	2.3	117.2	20.3	65.3	408.0	1.0	M	100.5
7/11/2022 10:00	2.5	132.8	21.9	59.4	538.8	1.0	M	100.4
7/11/2022 11:00	2.4	132.6	23.5	52.8	595.9	1.0	M	100.4
7/11/2022 12:00	1.6	127.0	25.1	44.9	634.2	1.0	M	100.4
7/11/2022 13:00	1.3	86.0	26.3	40.0	641.1	1.0	M	100.3
7/11/2022 14:00	2.4	42.7	26.6	42.3	613.7	1.0	M	100.3
7/11/2022 15:00	3.8	340.8	26.3	43.4	575.8	1.0	M	100.3
7/11/2022 16:00	4.0	353.5	25.8	43.8	520.8	1.0	M	100.2
7/11/2022 17:00	3.8	357.2	25.9	42.6	442.4	1.0	M	100.2
7/11/2022 18:00	3.8	2.1	25.8	42.1	353.9	1.0	M	100.2
7/11/2022 19:00	3.7	40.3	25.1	44.8	257.1	1.0	M	100.2
7/11/2022 20:00	3.6	62.0	23.5	47.0	169.3	1.0	M	100.2
7/11/2022 21:00	2.3	70.1	22.3	51.7	95.8	0.0	M	100.2
7/11/2022 22:00	2.3	63.5	20.9	57.2	48.9	0.0	M	100.1
7/11/2022 23:00	1.4	55.3	19.8	58.0	17.6	0.0	M	100.2
7/12/2022 0:00	1.2	56.2	18.8	60.3	7.3	0.0	M	100.2
7/12/2022 1:00	1.9	57.3	17.8	67.4	7.2	0.0	M	100.2
7/12/2022 2:00	1.6	61.2	17.1	71.1	15.9	0.0	M	100.1
7/12/2022 3:00	1.1	61.2	17.2	68.0	36.8	0.0	M	100.1
7/12/2022 4:00	1.2	89.4	17.3	70.5	75.5	0.0	M	100.1
7/12/2022 5:00	1.2	103.7	17.5	71.7	129.1	1.0	M	100.1
7/12/2022 6:00	1.3	106.1	17.9	72.0	194.2	1.0	M	100.1
7/12/2022 7:00	2.3	74.8	19.8	61.2	278.1	1.0	M	100.1
7/12/2022 8:00	3.8	86.9	20.9	55.2	314.0	1.0	M	100.1
7/12/2022 9:00	4.5	96.7	21.9	51.6	411.2	1.0	M	100.0
7/12/2022 10:00	5.6	106.8	22.8	48.6	536.9	1.0	M	100.0
7/12/2022 11:00	6.2	102.3	23.6	45.9	586.4	1.0	M	99.9
7/12/2022 12:00	6.0	94.3	24.8	44.8	627.0	1.0	M	99.9
7/12/2022 13:00	5.3	98.9	25.5	41.8	641.1	1.0	M	99.8
7/12/2022 14:00	6.0	84.5	26.9	37.4	625.1	1.0	M	99.8
7/12/2022 15:00	7.2	75.0	27.3	37.5	581.6	1.0	M	99.7
7/12/2022 16:00	8.7	71.3	27.1	39.4	516.8	1.0	M	99.7
7/12/2022 17:00	9.0	76.6	26.3	41.4	439.5	1.0	M	99.7
7/12/2022 18:00	9.0	81.1	25.1	43.2	329.0	1.0	M	99.6
7/12/2022 19:00	8.8	79.1	24.5	44.6	254.3	1.0	M	99.6
7/12/2022 20:00	8.5	77.5	23.5	49.1	166.2	1.0	M	99.6
7/12/2022 21:00	6.9	75.6	22.0	56.0	92.2	0.0	M	99.6
7/12/2022 22:00	6.5	73.2	20.9	61.3	54.4	0.0	M	99.5
7/12/2022 23:00	4.7	70.6	19.5	65.7	14.8	0.0	M	99.5

7/13/2022 0:00	2.5	66.7	18.5	69.1	10.4	0.0	M	99.5
7/13/2022 1:00	2.9	64.9	18.1	73.4	5.8	0.0	M	99.5
7/13/2022 2:00	2.9	64.1	17.4	78.7	9.6	0.0	M	99.4
7/13/2022 3:00	1.9	92.6	17.8	79.9	19.8	0.0	M	99.4
7/13/2022 4:00	6.3	171.5	19.9	67.7	44.7	0.0	M	99.3
7/13/2022 5:00	5.0	142.6	18.9	69.7	31.1	0.0	M	99.3
7/13/2022 6:00	6.0	153.5	18.7	73.3	99.6	0.0	M	99.3
7/13/2022 7:00	5.9	165.4	19.2	74.0	238.9	1.0	M	99.3
7/13/2022 8:00	6.8	172.6	20.3	65.9	323.6	1.0	M	99.3
7/13/2022 9:00	5.5	175.0	21.3	59.7	431.4	1.0	M	99.3
7/13/2022 10:00	5.9	174.6	22.2	53.7	567.7	1.0	M	99.3
7/13/2022 11:00	6.2	169.1	23.3	48.4	621.2	1.0	M	99.3
7/13/2022 12:00	6.8	172.6	24.1	42.8	654.9	1.0	M	99.3
7/13/2022 13:00	6.1	180.1	24.8	41.4	596.3	1.0	M	99.3
7/13/2022 14:00	6.6	185.4	25.4	39.3	634.7	1.0	M	99.3
7/13/2022 15:00	5.9	181.3	24.9	42.1	489.2	1.0	M	99.2
7/13/2022 16:00	4.8	188.6	25.6	35.0	583.9	1.0	M	99.2
7/13/2022 17:00	4.6	186.0	26.0	28.2	515.9	1.0	M	99.2
7/13/2022 18:00	4.1	187.7	26.1	27.0	464.6	1.0	M	99.2
7/13/2022 19:00	3.9	176.9	25.5	28.5	301.4	1.0	M	99.2
7/13/2022 20:00	3.9	153.6	23.0	40.8	86.7	0.0	M	99.1
7/13/2022 21:00	4.7	155.9	22.0	51.4	54.4	0.0	M	99.1
7/13/2022 22:00	3.7	151.2	20.3	63.9	42.8	0.0	M	99.1
7/13/2022 23:00	2.8	148.5	19.1	69.4	16.3	0.0	M	99.1
7/14/2022 0:00	1.9	148.5	19.2	69.8	4.8	0.0	M	99.0
7/14/2022 1:00	2.5	134.5	18.3	78.1	2.0	0.0	M	99.0
7/14/2022 2:00	3.3	147.1	17.7	82.9	2.1	0.0	M	99.0
7/14/2022 3:00	1.5	131.3	17.2	85.9	5.8	0.0	M	98.9
7/14/2022 4:00	1.7	105.8	17.2	87.9	23.8	0.0	M	98.9
7/14/2022 5:00	1.9	60.9	17.3	89.3	41.8	0.0	M	98.8
7/14/2022 6:00	3.0	54.2	17.8	87.8	104.4	0.0	M	98.7
7/14/2022 7:00	3.0	42.4	17.6	87.2	56.5	0.0	M	98.7
7/14/2022 8:00	4.5	57.8	17.2	85.9	132.1	1.0	M	98.6
7/14/2022 9:00	5.9	54.4	16.9	86.3	212.6	1.0	M	98.6
7/14/2022 10:00	4.6	76.3	17.2	86.5	137.5	1.0	M	98.6
7/14/2022 11:00	4.8	86.6	17.8	87.1	89.8	0.0	M	98.5
7/14/2022 12:00	5.2	82.4	17.4	92.3	80.9	0.0	M	98.5
7/14/2022 13:00	4.7	78.6	17.6	92.6	113.7	0.0	M	98.4
7/14/2022 14:00	4.6	64.6	17.9	89.9	126.9	1.0	M	98.4
7/14/2022 15:00	4.0	37.3	17.7	90.1	86.3	0.0	M	98.4
7/14/2022 16:00	7.1	60.2	16.9	92.2	82.2	0.0	M	98.4
7/14/2022 17:00	7.1	67.0	16.4	93.4	47.6	0.0	M	98.4
7/14/2022 18:00	5.6	104.5	15.7	91.1	141.1	1.0	M	98.5
7/14/2022 19:00	2.0	83.7	16.2	86.9	117.4	0.0	M	98.5
7/14/2022 20:00	2.7	44.4	16.6	89.2	132.0	1.0	M	98.6
7/14/2022 21:00	2.0	46.8	17.5	84.9	103.5	0.0	M	98.6
7/14/2022 22:00	5.0	298.7	14.0	88.8	27.6	0.0	M	98.7
7/14/2022 23:00	6.5	285.4	10.9	94.6	6.2	0.0	M	98.8
7/15/2022 0:00	6.5	285.1	10.0	95.5	3.5	0.0	M	98.8
7/15/2022 1:00	6.5	280.4	9.9	96.9	1.9	0.0	M	98.9
7/15/2022 2:00	8.9	260.3	10.0	97.5	2.2	0.0	M	98.9
7/15/2022 3:00	12.3	261.6	8.1	97.6	4.3	0.0	M	99.0
7/15/2022 4:00	12.6	268.9	7.2	97.3	14.6	0.0	M	99.1
7/15/2022 5:00	13.6	270.4	6.8	96.4	48.3	0.0	M	99.2
7/15/2022 6:00	13.4	270.5	6.7	95.6	96.5	0.0	M	99.2
7/15/2022 7:00	12.1	268.4	6.3	94.9	128.1	1.0	M	99.3
7/15/2022 8:00	10.8	269.0	6.0	93.9	157.7	1.0	M	99.4
7/15/2022 9:00	13.9	268.9	5.5	93.9	133.4	1.0	M	99.3
7/15/2022 10:00	13.2	268.9	5.9	92.1	133.9	1.0	M	99.7
7/15/2022 11:00	13.1	267.9	6.3	90.6	195.7	1.0	M	99.8
7/15/2022 12:00	12.6	263.2	5.7	90.2	168.2	1.0	M	99.8
7/15/2022 13:00	12.7	259.2	5.3	90.2	174.9	1.0	M	100.0
7/15/2022 14:00	11.1	264.6	5.8	87.5	138.2	1.0	M	100.0
7/15/2022 15:00	11.9	261.4	6.3	82.9	161.4	1.0	M	99.9
7/15/2022 16:00	12.9	260.8	6.6	79.9	190.7	1.0	M	100.0
7/15/2022 17:00	13.4	260.8	7.9	75.3	546.5	1.0	M	100.0
7/15/2022 18:00	12.9	262.4	7.6	74.1	403.6	1.0	M	100.1
7/15/2022 19:00	11.4	260.4	7.0	75.6	292.4	1.0	M	100.2
7/15/2022 20:00	12.7	265.7	6.1	76.7	110.0	0.0	M	100.2
7/15/2022 21:00	10.1	258.6	6.3	76.4	158.1	1.0	M	100.3
7/15/2022 22:00	10.0	263.3	5.9	78.2	25.5	0.0	M	100.3
7/15/2022 23:00	9.5	266.4	5.7	81.2	14.6	0.0	M	100.4
7/16/2022 0:00	8.2	266.8	5.1	83.7	6.5	0.0	M	100.5
7/16/2022 1:00	9.4	271.4	5.0	84.7	5.3	0.0	M	100.5
7/16/2022 2:00	8.9	272.0	5.0	84.3	9.6	0.0	M	100.6
7/16/2022 3:00	8.3	280.9	4.6	82.7	32.2	0.0	M	100.6
7/16/2022 4:00	7.1	282.5	4.6	84.2	89.7	0.0	M	100.6
7/16/2022 5:00	6.9	280.5	4.9	84.6	155.5	1.0	M	100.7
7/16/2022 6:00	6.2	278.7	5.4	83.6	241.0	1.0	M	100.8
7/16/2022 7:00	5.1	270.6	6.1	81.7	335.1	1.0	M	100.8

7/16/2022 8:00	6.3	271.1	6.3	81.1	324.9	1.0	M	100.8
7/16/2022 9:00	5.5	268.6	7.0	78.2	501.8	1.0	M	100.8
7/16/2022 10:00	6.0	271.8	7.4	73.6	536.0	1.0	M	100.8
7/16/2022 11:00	6.6	270.4	7.9	68.9	658.6	1.0	M	100.9
7/16/2022 12:00	6.2	266.7	8.2	68.0	665.2	1.0	M	100.8
7/16/2022 13:00	5.5	274.4	8.8	65.8	696.2	1.0	M	100.9
7/16/2022 14:00	4.7	278.6	9.6	65.3	757.5	1.0	M	100.9
7/16/2022 15:00	3.6	288.8	10.1	62.4	624.4	1.0	M	100.9
7/16/2022 16:00	2.3	285.5	10.7	59.9	579.6	1.0	M	101.0
7/16/2022 17:00	2.4	342.4	11.0	56.0	488.6	1.0	M	100.9
7/16/2022 18:00	2.6	10.6	11.1	54.8	395.1	1.0	M	100.9
7/16/2022 19:00	2.8	20.2	11.0	55.1	299.2	1.0	M	100.9
7/16/2022 20:00	2.5	32.6	10.9	55.2	206.8	1.0	M	100.9
7/16/2022 21:00	2.3	38.1	10.7	55.5	129.3	1.0	M	100.9
7/16/2022 22:00	2.2	83.9	10.4	60.6	68.8	0.0	M	100.9
7/16/2022 23:00	3.8	116.0	9.2	70.0	13.5	0.0	M	100.9
7/17/2022 0:00	3.2	139.1	8.2	76.6	5.8	0.0	M	100.9
7/17/2022 1:00	1.8	153.8	7.3	81.4	5.3	0.0	M	100.9
7/17/2022 2:00	2.5	147.6	7.1	82.4	8.1	0.0	M	101.0
7/17/2022 3:00	3.1	151.4	7.6	80.2	44.8	0.0	M	101.0
7/17/2022 4:00	3.8	131.5	7.9	78.7	89.9	0.0	M	100.9
7/17/2022 5:00	4.5	119.9	8.5	77.4	155.7	1.0	M	101.0
7/17/2022 6:00	4.9	133.4	9.2	73.0	237.6	1.0	M	100.9
7/17/2022 7:00	5.4	128.9	9.9	68.7	329.7	1.0	M	100.9
7/17/2022 8:00	6.5	117.0	10.4	64.6	317.6	1.0	M	100.8
7/17/2022 9:00	6.0	112.8	11.1	61.5	464.3	1.0	M	100.8
7/17/2022 10:00	5.7	123.7	12.0	57.0	588.6	1.0	M	100.7
7/17/2022 11:00	5.4	106.8	12.6	54.9	630.8	1.0	M	100.7
7/17/2022 12:00	4.9	107.7	13.3	51.4	676.3	1.0	M	100.6
7/17/2022 13:00	4.2	110.8	13.9	49.1	643.3	1.0	M	100.6
7/17/2022 14:00	4.7	106.5	14.3	48.8	510.5	1.0	M	100.6
7/17/2022 15:00	6.3	82.9	14.1	50.2	420.6	1.0	M	100.5
7/17/2022 16:00	10.0	74.5	13.0	58.7	312.1	1.0	M	100.5
7/17/2022 17:00	10.3	74.1	11.9	61.4	270.6	1.0	M	100.5
7/17/2022 18:00	10.1	80.8	11.2	63.7	311.3	1.0	M	100.5
7/17/2022 19:00	10.0	79.2	10.5	66.0	295.2	1.0	M	100.4
7/17/2022 20:00	9.5	77.5	9.6	68.4	102.4	0.0	M	100.4
7/17/2022 21:00	9.2	80.1	8.6	71.8	56.6	0.0	M	100.4
7/17/2022 22:00	8.2	85.0	7.8	75.1	21.0	0.0	M	100.4
7/17/2022 23:00	8.6	85.2	7.2	77.9	7.4	0.0	M	100.3
7/18/2022 0:00	9.3	85.4	6.8	79.2	5.8	0.0	M	100.3
7/18/2022 1:00	9.5	81.9	5.9	80.8	9.3	0.0	M	100.3
7/18/2022 2:00	9.9	82.1	5.2	81.6	10.4	0.0	M	100.3
7/18/2022 3:00	8.6	83.9	4.9	81.1	29.3	0.0	M	100.3
7/18/2022 4:00	9.1	88.0	4.7	81.4	39.3	0.0	M	100.3
7/18/2022 5:00	10.0	90.6	4.6	81.5	39.4	0.0	M	100.2
7/18/2022 6:00	9.7	92.8	5.1	80.2	122.8	1.0	M	100.2
7/18/2022 7:00	9.1	87.6	5.9	75.5	173.9	1.0	M	100.2
7/18/2022 8:00	8.2	84.5	6.3	74.1	100.5	0.0	M	100.2
7/18/2022 9:00	8.4	80.3	6.3	76.1	89.5	0.0	M	100.1
7/18/2022 10:00	8.2	82.9	6.2	78.4	118.8	0.0	M	100.1
7/18/2022 11:00	8.0	76.0	5.8	80.1	122.5	1.0	M	100.1
7/18/2022 12:00	7.9	72.4	5.4	82.4	146.6	1.0	M	100.1
7/18/2022 13:00	7.1	71.6	5.5	82.4	160.0	1.0	M	100.1
7/18/2022 14:00	6.8	74.5	5.9	80.3	212.6	1.0	M	100.1
7/18/2022 15:00	7.1	71.0	6.1	78.2	197.8	1.0	M	100.1
7/18/2022 16:00	6.2	78.5	6.4	76.9	290.2	1.0	M	100.1
7/18/2022 17:00	7.8	72.0	6.7	74.9	195.8	1.0	M	100.1
7/18/2022 18:00	6.7	71.7	6.7	74.3	122.9	1.0	M	100.1
7/18/2022 19:00	6.3	76.6	6.3	76.5	59.8	0.0	M	100.1
7/18/2022 20:00	7.0	75.8	5.8	79.1	59.3	0.0	M	100.1
7/18/2022 21:00	6.5	74.8	5.2	79.9	68.3	0.0	M	100.1
7/18/2022 22:00	6.5	76.0	5.1	80.2	80.8	0.0	M	100.1
7/18/2022 23:00	5.7	73.4	4.4	84.9	15.2	0.0	M	100.2
7/19/2022 0:00	6.8	74.4	3.4	89.9	6.2	0.0	M	100.1
7/19/2022 1:00	6.4	73.2	2.5	94.0	5.8	0.0	M	100.2
7/19/2022 2:00	6.5	74.1	2.0	94.3	7.3	0.0	M	100.2
7/19/2022 3:00	6.2	74.1	1.9	95.4	17.0	0.0	M	100.2
7/19/2022 4:00	5.4	70.3	2.0	94.4	63.2	0.0	M	100.2
7/19/2022 5:00	6.1	75.9	2.2	92.3	142.0	1.0	M	100.2
7/19/2022 6:00	6.1	78.6	2.5	92.8	142.9	1.0	M	100.2
7/19/2022 7:00	6.3	77.9	3.1	92.1	159.3	1.0	M	100.2
7/19/2022 8:00	5.8	77.5	3.9	89.3	203.3	1.0	M	100.2
7/19/2022 9:00	5.8	78.0	4.8	84.7	265.5	1.0	M	100.2
7/19/2022 10:00	5.5	80.6	6.0	79.5	324.4	1.0	M	100.2
7/19/2022 11:00	4.8	88.9	8.2	70.2	677.0	1.0	M	100.2
7/19/2022 12:00	4.2	80.9	9.3	63.3	716.2	1.0	M	100.2
7/19/2022 13:00	3.7	76.1	10.3	60.6	687.0	1.0	M	100.2
7/19/2022 14:00	3.0	70.1	11.0	58.1	646.7	1.0	M	100.2
7/19/2022 15:00	4.4	63.6	11.3	57.9	645.7	1.0	M	100.2

7/19/2022 16:00	5.0	70.2	11.3	57.9	461.9	1.0	M	100.2
7/19/2022 17:00	5.4	73.5	10.7	58.4	226.0	1.0	M	100.2
7/19/2022 18:00	5.7	65.8	10.1	60.5	148.5	1.0	M	100.2
7/19/2022 19:00	5.9	71.5	9.4	66.0	173.4	1.0	M	100.3
7/19/2022 20:00	5.3	75.6	9.0	71.1	200.5	1.0	M	100.3
7/19/2022 21:00	4.7	74.1	8.6	73.7	103.1	0.0	M	100.3
7/19/2022 22:00	3.4	57.9	7.9	77.5	51.8	0.0	M	100.3
7/19/2022 23:00	2.6	23.6	6.9	79.9	10.2	0.0	M	100.3
7/20/2022 0:00	2.7	6.5	6.7	79.7	4.5	0.0	M	100.3
7/20/2022 1:00	2.5	18.1	7.1	79.0	3.2	0.0	M	100.3
7/20/2022 2:00	3.2	4.8	6.3	82.5	6.2	0.0	M	100.3
7/20/2022 3:00	2.7	26.3	5.9	84.9	13.5	0.0	M	100.3
7/20/2022 4:00	0.8	359.3	6.4	83.3	24.0	0.0	M	100.4
7/20/2022 5:00	1.8	341.7	7.6	79.5	57.0	0.0	M	100.3
7/20/2022 6:00	2.0	317.6	7.9	78.7	99.0	0.0	M	100.4
7/20/2022 7:00	3.0	275.4	8.4	78.7	153.7	1.0	M	100.4
7/20/2022 8:00	3.7	280.7	8.6	81.7	271.9	1.0	M	100.4
7/20/2022 9:00	4.3	279.0	9.5	78.9	402.2	1.0	M	100.4
7/20/2022 10:00	4.9	276.5	10.1	76.3	510.1	1.0	M	100.4
7/20/2022 11:00	4.5	272.8	11.0	72.3	567.0	1.0	M	100.4
7/20/2022 12:00	4.9	273.7	11.8	68.6	691.9	1.0	M	100.4
7/20/2022 13:00	4.7	269.8	12.8	65.4	692.8	1.0	M	100.4
7/20/2022 14:00	4.9	278.2	13.3	63.9	536.5	1.0	M	100.4
7/20/2022 15:00	3.5	328.9	14.2	61.0	582.7	1.0	M	100.4
7/20/2022 16:00	3.3	16.5	14.4	60.3	272.0	1.0	M	100.5
7/20/2022 17:00	5.9	46.7	14.2	59.5	227.6	1.0	M	100.5
7/20/2022 18:00	5.7	42.0	14.2	59.1	232.4	1.0	M	100.5
7/20/2022 19:00	6.3	37.9	14.0	55.9	223.9	1.0	M	100.5
7/20/2022 20:00	6.4	39.0	13.5	57.7	189.4	1.0	M	100.5
7/20/2022 21:00	6.1	52.6	12.4	63.1	91.9	0.0	M	100.6
7/20/2022 22:00	3.5	59.3	11.3	68.9	35.5	0.0	M	100.6
7/20/2022 23:00	2.9	58.4	10.2	75.2	10.3	0.0	M	100.6
7/21/2022 0:00	2.9	56.0	9.5	77.8	5.0	0.0	M	100.6
7/21/2022 1:00	2.5	71.0	9.0	81.4	3.9	0.0	M	100.7
7/21/2022 2:00	0.9	24.9	8.2	81.7	6.6	0.0	M	100.7
7/21/2022 3:00	1.0	26.4	8.2	82.7	38.0	0.0	M	100.7
7/21/2022 4:00	0.1	186.9	8.9	80.6	79.3	0.0	M	100.7
7/21/2022 5:00	0.3	103.4	10.6	76.7	152.1	1.0	M	100.7
7/21/2022 6:00	1.0	137.2	10.6	75.3	219.4	1.0	M	100.7
7/21/2022 7:00	2.2	169.7	11.4	63.3	315.3	1.0	M	100.8
7/21/2022 8:00	2.0	173.0	12.7	60.1	288.2	1.0	M	100.7
7/21/2022 9:00	1.5	173.4	14.1	54.7	465.3	1.0	M	100.7
7/21/2022 10:00	3.3	266.7	14.3	54.6	617.7	1.0	M	100.7
7/21/2022 11:00	3.2	307.6	14.4	54.7	634.5	1.0	M	100.7
7/21/2022 12:00	2.6	282.7	15.2	52.2	670.9	1.0	M	100.7
7/21/2022 13:00	2.8	299.2	15.5	49.2	686.5	1.0	M	100.7
7/21/2022 14:00	2.8	269.4	16.1	45.6	655.8	1.0	M	100.7
7/21/2022 15:00	2.8	284.4	16.6	41.7	634.7	1.0	M	100.7
7/21/2022 16:00	2.7	349.7	16.6	40.6	592.0	1.0	M	100.7
7/21/2022 17:00	2.2	319.0	16.8	38.8	452.5	1.0	M	100.7
7/21/2022 18:00	2.5	13.3	16.6	37.8	382.8	1.0	M	100.7
7/21/2022 19:00	2.3	11.4	16.3	37.0	282.8	1.0	M	100.7
7/21/2022 20:00	2.7	6.5	16.1	37.7	188.0	1.0	M	100.7
7/21/2022 21:00	2.1	40.7	15.3	44.8	113.1	0.0	M	100.7
7/21/2022 22:00	1.2	67.1	13.9	56.5	53.7	0.0	M	100.7
7/21/2022 23:00	0.5	114.8	12.8	62.8	8.6	0.0	M	100.7
7/22/2022 0:00	2.6	142.0	11.6	71.5	4.7	0.0	M	100.7
7/22/2022 1:00	2.8	144.4	10.9	76.1	4.4	0.0	M	100.7
7/22/2022 2:00	2.5	147.4	10.0	79.6	5.5	0.0	M	100.7
7/22/2022 3:00	2.7	138.2	9.7	81.3	28.8	0.0	M	100.7
7/22/2022 4:00	3.3	135.7	10.3	79.8	74.5	0.0	M	100.7
7/22/2022 5:00	5.5	139.9	11.0	77.2	137.3	1.0	M	100.7
7/22/2022 6:00	6.3	146.9	11.6	75.5	219.8	1.0	M	100.6
7/22/2022 7:00	6.6	148.8	12.7	72.3	313.9	1.0	M	100.6
7/22/2022 8:00	7.0	145.2	14.2	67.1	308.0	1.0	M	100.6
7/22/2022 9:00	6.3	146.5	15.6	62.6	452.8	1.0	M	100.6
7/22/2022 10:00	6.5	145.8	16.9	57.1	583.8	1.0	M	100.5
7/22/2022 11:00	6.0	148.7	17.9	53.4	567.6	1.0	M	100.5
7/22/2022 12:00	4.4	180.8	20.2	41.6	540.2	1.0	M	100.6
7/22/2022 13:00	4.1	246.5	21.0	38.1	625.3	1.0	M	100.6
7/22/2022 14:00	3.5	282.8	20.1	41.5	477.3	1.0	M	100.6
7/22/2022 15:00	2.7	271.1	21.7	37.9	607.4	1.0	M	100.6
7/22/2022 16:00	3.6	279.2	21.5	42.8	535.8	1.0	M	100.6
7/22/2022 17:00	4.5	272.7	21.5	44.3	454.3	1.0	M	100.6
7/22/2022 18:00	3.6	259.8	21.1	46.1	349.7	1.0	M	100.6
7/22/2022 19:00	2.8	252.7	21.1	44.2	278.0	1.0	M	100.6
7/22/2022 20:00	1.0	246.3	21.8	42.7	188.5	1.0	M	100.6
7/22/2022 21:00	0.4	130.9	20.5	45.9	66.5	0.0	M	100.6
7/22/2022 22:00	0.4	117.9	18.3	55.1	39.2	0.0	M	100.6
7/22/2022 23:00	0.6	98.1	16.2	66.2	8.6	0.0	M	100.6

7/23/2022 0:00	1.6	137.7	15.0	69.7	4.2	0.0	M	100.7
7/23/2022 1:00	3.3	162.4	15.3	67.0	2.7	0.0	M	100.6
7/23/2022 2:00	2.4	90.0	13.6	75.8	4.7	0.0	M	100.7
7/23/2022 3:00	1.3	134.0	12.7	78.6	17.6	0.0	M	100.7
7/23/2022 4:00	0.8	121.2	12.9	80.0	61.2	0.0	M	100.7
7/23/2022 5:00	0.3	116.2	14.7	73.2	130.7	1.0	M	100.8
7/23/2022 6:00	1.2	74.0	16.5	64.1	209.9	1.0	M	100.7
7/23/2022 7:00	5.3	170.6	19.2	48.9	302.8	1.0	M	100.7
7/23/2022 8:00	4.9	180.0	20.7	45.0	300.3	1.0	M	100.7
7/23/2022 9:00	5.3	194.3	22.4	39.4	441.5	1.0	M	100.7
7/23/2022 10:00	5.7	177.8	22.7	38.3	558.7	1.0	M	100.7
7/23/2022 11:00	6.2	202.9	23.6	33.8	616.3	1.0	M	100.7
7/23/2022 12:00	6.8	209.7	24.1	30.7	649.8	1.0	M	100.7
7/23/2022 13:00	6.7	204.5	24.4	27.8	665.7	1.0	M	100.7
7/23/2022 14:00	6.6	198.0	24.7	25.9	657.6	1.0	M	100.7
7/23/2022 15:00	6.9	194.1	25.0	25.3	610.4	1.0	M	100.7
7/23/2022 16:00	6.0	195.8	25.0	26.4	535.0	1.0	M	100.6
7/23/2022 17:00	5.8	208.0	25.1	26.9	471.4	1.0	M	100.6
7/23/2022 18:00	5.1	186.4	24.9	27.0	386.8	1.0	M	100.6
7/23/2022 19:00	3.9	185.8	24.3	27.9	251.8	1.0	M	100.6
7/23/2022 20:00	3.8	175.5	23.4	32.1	179.7	1.0	M	100.6
7/23/2022 21:00	3.8	180.0	21.4	38.0	61.0	0.0	M	100.6
7/23/2022 22:00	2.5	160.1	17.5	57.1	15.7	0.0	M	100.6
7/23/2022 23:00	2.4	149.6	16.8	60.6	3.4	0.0	M	100.6
7/24/2022 0:00	3.3	161.3	16.7	63.0	1.8	0.0	M	100.5
7/24/2022 1:00	5.6	168.9	18.0	56.7	2.0	0.0	M	100.5
7/24/2022 2:00	6.1	169.6	17.4	60.1	3.7	0.0	M	100.5
7/24/2022 3:00	6.0	169.2	16.4	65.6	8.7	0.0	M	100.5
7/24/2022 4:00	5.1	173.5	16.3	66.2	22.5	0.0	M	100.5
7/24/2022 5:00	4.3	166.3	16.1	69.4	47.3	0.0	M	100.5
7/24/2022 6:00	4.7	156.9	15.7	75.7	85.4	0.0	M	100.5
7/24/2022 7:00	4.9	150.1	15.9	76.8	125.8	1.0	M	100.5
7/24/2022 8:00	4.9	158.2	17.5	69.4	204.1	1.0	M	100.5
7/24/2022 9:00	4.5	166.4	20.1	57.6	318.7	1.0	M	100.4
7/24/2022 10:00	5.2	157.5	20.8	53.4	372.0	1.0	M	100.4
7/24/2022 11:00	5.6	166.5	22.9	41.6	512.6	1.0	M	100.4
7/24/2022 12:00	5.8	180.5	24.8	31.7	553.8	1.0	M	100.4
7/24/2022 13:00	6.1	179.1	24.8	30.2	480.5	1.0	M	100.3
7/24/2022 14:00	6.5	153.3	23.2	35.2	476.2	1.0	M	100.3
7/24/2022 15:00	5.0	145.0	22.1	39.1	329.9	1.0	M	100.3
7/24/2022 16:00	5.1	171.9	24.9	28.0	435.6	1.0	M	100.3
7/24/2022 17:00	4.1	172.0	24.7	30.2	326.5	1.0	M	100.3
7/24/2022 18:00	5.0	176.6	23.9	33.1	225.4	1.0	M	100.3
7/24/2022 19:00	2.4	170.3	23.3	35.0	127.4	1.0	M	100.3
7/24/2022 20:00	2.2	146.5	21.7	43.9	90.1	0.0	M	100.3
7/24/2022 21:00	1.5	145.0	21.0	47.1	39.7	0.0	M	100.2
7/24/2022 22:00	2.0	130.0	19.6	52.3	17.5	0.0	M	100.2
7/24/2022 23:00	3.0	128.9	19.1	49.9	3.5	0.0	M	100.2
7/25/2022 0:00	3.0	140.5	18.0	53.6	1.0	0.0	M	100.2
7/25/2022 1:00	2.1	141.2	17.0	58.9	1.0	0.0	M	100.2
7/25/2022 2:00	0.7	96.3	15.4	67.0	3.2	0.0	M	100.2
7/25/2022 3:00	0.9	91.4	13.8	76.0	12.4	0.0	M	100.2
7/25/2022 4:00	2.7	338.9	14.2	76.0	74.2	0.0	M	100.2
7/25/2022 5:00	9.3	280.8	12.4	81.1	169.8	1.0	M	100.2
7/25/2022 6:00	9.8	279.8	10.7	85.1	201.9	1.0	M	100.2
7/25/2022 7:00	9.8	279.3	10.0	87.1	187.7	1.0	M	100.2
7/25/2022 8:00	10.3	279.7	10.0	87.2	245.0	1.0	M	100.3
7/25/2022 9:00	10.7	279.8	9.7	87.3	304.2	1.0	M	100.3
7/25/2022 10:00	9.4	278.3	10.3	85.1	428.5	1.0	M	100.4
7/25/2022 11:00	8.3	272.2	11.3	82.1	432.3	1.0	M	100.4
7/25/2022 12:00	9.7	264.9	11.6	83.5	231.5	1.0	M	100.4
7/25/2022 13:00	10.1	266.2	11.4	85.1	207.9	1.0	M	100.4
7/25/2022 14:00	9.9	264.3	12.7	81.9	332.4	1.0	M	100.4
7/25/2022 15:00	9.9	265.2	13.2	80.0	346.4	1.0	M	100.4
7/25/2022 16:00	11.5	261.7	12.5	81.6	224.5	1.0	M	100.5
7/25/2022 17:00	9.7	264.4	11.6	84.6	175.3	1.0	M	100.7
7/25/2022 18:00	11.2	260.9	11.1	83.2	283.2	1.0	M	100.7
7/25/2022 19:00	10.7	263.4	10.8	82.1	284.9	1.0	M	100.6
7/25/2022 20:00	9.7	262.5	9.8	83.6	61.7	0.0	M	100.6
7/25/2022 21:00	8.6	265.2	9.3	84.7	50.3	0.0	M	100.7
7/25/2022 22:00	9.0	263.4	9.0	84.4	12.9	0.0	M	100.7
7/25/2022 23:00	7.7	267.9	8.9	84.0	5.4	0.0	M	100.8
7/26/2022 0:00	6.1	272.5	8.6	84.0	1.9	0.0	M	100.8
7/26/2022 1:00	8.2	282.1	8.5	84.0	0.9	0.0	M	100.8
7/26/2022 2:00	7.9	282.0	8.5	84.2	1.6	0.0	M	100.8
7/26/2022 3:00	7.8	279.5	8.6	84.1	4.3	0.0	M	100.8
7/26/2022 4:00	7.6	279.4	8.5	84.3	11.8	0.0	M	100.8
7/26/2022 5:00	5.2	278.1	8.7	83.5	45.3	0.0	M	100.9
7/26/2022 6:00	5.6	275.5	9.8	78.0	244.6	1.0	M	100.9
7/26/2022 7:00	4.5	268.9	10.3	76.0	340.3	1.0	M	100.9

7/26/2022 8:00	5.1	260.7	10.7	73.8	309.3	1.0	M	100.9
7/26/2022 9:00	4.7	258.9	11.5	72.8	449.0	1.0	M	100.9
7/26/2022 10:00	4.3	267.5	12.6	67.8	563.0	1.0	M	100.9
7/26/2022 11:00	4.5	275.2	13.4	63.2	618.4	1.0	M	100.9
7/26/2022 12:00	5.4	280.2	13.9	56.9	655.4	1.0	M	100.9
7/26/2022 13:00	5.0	280.5	14.8	57.0	662.5	1.0	M	100.9
7/26/2022 14:00	3.4	280.2	15.8	56.2	645.2	1.0	M	100.9
7/26/2022 15:00	2.2	270.4	17.1	51.8	601.6	1.0	M	100.9
7/26/2022 16:00	1.7	68.6	17.6	49.4	536.4	1.0	M	100.9
7/26/2022 17:00	1.5	88.2	18.0	46.3	454.9	1.0	M	100.8
7/26/2022 18:00	0.9	92.0	18.6	42.6	360.4	1.0	M	100.8
7/26/2022 19:00	1.1	106.0	18.5	42.2	263.7	1.0	M	100.8
7/26/2022 20:00	1.6	140.2	18.3	44.9	174.6	1.0	M	100.7
7/26/2022 21:00	2.6	171.6	17.6	44.4	116.1	0.0	M	100.7
7/26/2022 22:00	0.6	133.5	16.2	51.5	49.3	0.0	M	100.7
7/26/2022 23:00	0.3	109.0	14.7	58.2	6.6	0.0	M	100.7
7/27/2022 0:00	0.7	111.8	13.0	71.5	2.6	0.0	M	100.6
7/27/2022 1:00	0.9	114.1	12.1	73.5	1.8	0.0	M	100.6
7/27/2022 2:00	2.2	135.9	11.9	73.3	4.1	0.0	M	100.5
7/27/2022 3:00	2.8	148.4	11.7	77.0	21.2	0.0	M	100.5
7/27/2022 4:00	3.0	138.5	11.8	80.6	56.6	0.0	M	100.5
7/27/2022 5:00	2.1	163.7	13.3	78.3	49.9	0.0	M	100.4
7/27/2022 6:00	5.7	174.3	15.2	71.2	101.2	0.0	M	100.3
7/27/2022 7:00	6.0	171.1	16.6	67.3	142.9	1.0	M	100.2
7/27/2022 8:00	6.4	172.6	17.6	64.0	133.2	1.0	M	100.1
7/27/2022 9:00	5.5	191.0	18.3	62.7	129.2	1.0	M	100.1
7/27/2022 10:00	5.3	209.1	17.1	72.5	101.5	0.0	M	100.1
7/27/2022 11:00	5.4	264.1	14.9	81.3	114.7	0.0	M	100.1
7/27/2022 12:00	9.7	256.5	12.2	91.3	57.5	0.0	M	100.2
7/27/2022 13:00	11.0	254.7	10.4	93.3	134.5	1.0	M	100.2
7/27/2022 14:00	11.5	255.2	11.3	87.3	277.0	1.0	M	100.2
7/27/2022 15:00	11.5	255.2	12.9	79.0	558.0	1.0	M	100.2
7/27/2022 16:00	11.9	255.9	14.2	69.8	533.9	1.0	M	100.3
7/27/2022 17:00	11.9	256.5	13.9	69.1	451.0	1.0	M	100.3
7/27/2022 18:00	12.2	257.2	13.8	68.0	358.5	1.0	M	100.3
7/27/2022 19:00	11.7	256.9	12.9	73.2	258.7	1.0	M	100.3
7/27/2022 20:00	10.1	259.2	12.4	73.1	166.6	1.0	M	100.4
7/27/2022 21:00	10.4	258.9	11.8	73.6	91.8	0.0	M	100.4
7/27/2022 22:00	9.1	258.8	11.4	75.9	33.7	0.0	M	100.4
7/27/2022 23:00	9.2	256.8	10.7	77.3	5.1	0.0	M	100.4
7/28/2022 0:00	9.4	259.9	10.4	77.4	1.6	0.0	M	100.4
7/28/2022 1:00	10.0	260.1	10.5	77.3	0.9	0.0	M	100.4
7/28/2022 2:00	9.7	260.2	10.4	75.9	2.0	0.0	M	100.4
7/28/2022 3:00	7.8	260.4	10.3	76.5	8.9	0.0	M	100.4
7/28/2022 4:00	8.2	258.0	10.7	74.0	15.7	0.0	M	100.4
7/28/2022 5:00	8.6	255.8	10.4	76.3	39.0	0.0	M	100.4
7/28/2022 6:00	8.4	255.8	10.6	76.6	76.0	0.0	M	100.3
7/28/2022 7:00	9.2	255.6	11.3	73.9	144.9	1.0	M	100.2
7/28/2022 8:00	10.1	255.0	12.1	69.7	212.0	1.0	M	100.2
7/28/2022 9:00	11.1	255.0	11.9	70.6	210.3	1.0	M	100.1
7/28/2022 10:00	10.3	248.6	12.1	67.0	246.1	1.0	M	100.0
7/28/2022 11:00	11.3	249.3	12.7	61.1	338.7	1.0	M	99.9
7/28/2022 12:00	13.5	253.2	13.2	60.3	538.0	1.0	M	99.8
7/28/2022 13:00	15.4	253.3	12.9	59.9	618.8	1.0	M	99.8
7/28/2022 14:00	15.3	251.8	11.9	65.2	328.3	1.0	M	99.8
7/28/2022 15:00	13.3	264.8	10.0	79.4	99.9	0.0	M	99.9
7/28/2022 16:00	14.2	266.8	8.7	90.3	116.2	0.0	M	99.8
7/28/2022 17:00	14.2	266.8	8.9	87.9	164.3	1.0	M	99.7
7/28/2022 18:00	14.7	265.7	8.6	90.0	63.2	0.0	M	99.8
7/28/2022 19:00	13.8	271.9	8.7	93.2	56.9	0.0	M	99.7
7/28/2022 20:00	10.3	285.6	9.0	93.2	19.4	0.0	M	99.7
7/28/2022 21:00	9.1	293.8	9.1	93.6	9.3	0.0	M	99.8
7/28/2022 22:00	9.2	294.6	8.9	94.5	4.0	0.0	M	99.9
7/28/2022 23:00	9.6	299.3	9.0	95.0	0.6	0.0	M	99.9
7/29/2022 0:00	9.7	299.5	9.0	92.7	0.0	0.0	M	100.0
7/29/2022 1:00	8.4	317.2	8.7	92.9	0.0	0.0	M	100.0
7/29/2022 2:00	8.3	318.5	8.7	91.3	0.6	0.0	M	100.0
7/29/2022 3:00	7.0	316.2	8.8	90.2	2.0	0.0	M	100.1
7/29/2022 4:00	7.6	313.2	8.9	90.0	16.0	0.0	M	100.1
7/29/2022 5:00	8.7	321.0	8.7	88.6	21.3	0.0	M	100.2
7/29/2022 6:00	9.7	325.1	8.6	86.9	85.4	0.0	M	100.3
7/29/2022 7:00	9.5	326.0	8.6	86.3	169.0	1.0	M	100.4
7/29/2022 8:00	8.5	322.1	8.2	87.0	119.1	0.0	M	100.4
7/29/2022 9:00	9.6	323.3	8.0	86.3	181.7	1.0	M	100.4
7/29/2022 10:00	9.4	321.3	8.5	85.0	297.5	1.0	M	100.5
7/29/2022 11:00	7.8	319.0	9.0	81.9	270.3	1.0	M	100.6
7/29/2022 12:00	7.0	319.0	9.8	79.2	339.1	1.0	M	100.6
7/29/2022 13:00	6.3	323.3	10.7	75.2	346.6	1.0	M	100.6
7/29/2022 14:00	6.2	326.0	11.9	71.0	463.1	1.0	M	100.7
7/29/2022 15:00	6.1	323.2	12.0	70.6	258.0	1.0	M	100.7

7/29/2022 16:00	5.5	314.6	12.4	70.0	215.3	1.0	M	100.7
7/29/2022 17:00	5.9	296.8	12.5	70.4	161.5	1.0	M	100.7
7/29/2022 18:00	5.7	304.5	12.5	67.9	171.1	1.0	M	100.8
7/29/2022 19:00	6.2	289.4	11.8	73.7	71.7	0.0	M	100.7
7/29/2022 20:00	5.1	296.6	11.3	77.2	53.6	0.0	M	100.8
7/29/2022 21:00	4.3	314.9	11.0	77.0	29.8	0.0	M	100.8
7/29/2022 22:00	3.9	285.5	10.4	80.7	7.0	0.0	M	100.8
7/29/2022 23:00	4.6	306.9	10.3	81.7	1.5	0.0	M	100.8
7/30/2022 0:00	4.6	311.6	10.0	84.3	0.7	0.0	M	100.8
7/30/2022 1:00	5.2	295.7	9.6	86.8	0.0	0.0	M	100.8
7/30/2022 2:00	5.1	303.8	9.3	89.4	0.3	0.0	M	100.8
7/30/2022 3:00	4.8	321.9	8.8	92.9	3.8	0.0	M	100.9
7/30/2022 4:00	3.3	321.7	8.8	93.3	8.7	0.0	M	100.9
7/30/2022 5:00	2.6	317.1	8.7	93.2	17.9	0.0	M	100.9
7/30/2022 6:00	3.7	326.1	8.7	92.7	42.9	0.0	M	100.9
7/30/2022 7:00	3.1	343.2	8.0	94.9	72.9	0.0	M	100.8
7/30/2022 8:00	4.6	304.3	8.3	94.4	103.3	0.0	M	100.8
7/30/2022 9:00	7.0	310.4	8.6	89.2	181.6	1.0	M	100.8
7/30/2022 10:00	7.0	309.0	8.4	87.6	197.1	1.0	M	100.9
7/30/2022 11:00	8.5	297.2	8.6	80.0	249.8	1.0	M	100.8
7/30/2022 12:00	8.4	296.5	8.7	76.4	214.3	1.0	M	100.8
7/30/2022 13:00	8.6	295.4	8.5	75.6	180.4	1.0	M	100.8
7/30/2022 14:00	8.5	293.6	9.0	73.1	242.7	1.0	M	100.8
7/30/2022 15:00	8.6	294.5	8.9	73.3	147.2	1.0	M	100.8
7/30/2022 16:00	9.0	294.9	8.6	75.4	148.1	1.0	M	100.9
7/30/2022 17:00	8.4	293.9	8.1	79.5	106.0	0.0	M	100.8
7/30/2022 18:00	8.2	288.1	8.1	77.2	65.4	0.0	M	100.8
7/30/2022 19:00	7.9	292.8	7.8	81.4	31.4	0.0	M	100.8
7/30/2022 20:00	7.1	286.0	7.8	83.3	22.4	0.0	M	100.7
7/30/2022 21:00	6.7	285.6	8.1	81.9	9.3	0.0	M	100.7
7/30/2022 22:00	8.1	280.9	8.2	82.5	7.8	0.0	M	100.7
7/30/2022 23:00	8.2	282.5	8.3	82.8	1.5	0.0	M	100.7
7/31/2022 0:00	6.8	289.3	8.3	84.7	0.2	0.0	M	100.7
7/31/2022 1:00	7.2	290.9	8.3	85.4	0.2	0.0	M	100.7
7/31/2022 2:00	7.3	318.3	7.3	83.0	1.2	0.0	M	100.7
7/31/2022 3:00	7.2	319.3	6.9	81.9	3.8	0.0	M	100.7
7/31/2022 4:00	7.0	321.1	7.1	80.3	11.8	0.0	M	100.7
7/31/2022 5:00	5.1	311.2	7.4	81.6	49.0	0.0	M	100.7
7/31/2022 6:00	6.1	315.9	7.6	82.6	47.2	0.0	M	100.7
7/31/2022 7:00	7.5	327.7	7.0	82.3	77.9	0.0	M	100.7
7/31/2022 8:00	7.2	328.7	6.5	84.8	73.6	0.0	M	100.7
7/31/2022 9:00	7.9	322.0	6.0	84.9	80.3	0.0	M	100.7
7/31/2022 10:00	7.0	319.9	6.2	84.2	114.2	0.0	M	100.7
7/31/2022 11:00	7.0	320.4	6.7	82.3	170.6	1.0	M	100.7
7/31/2022 12:00	7.3	318.2	6.6	84.9	192.8	1.0	M	100.8
7/31/2022 13:00	7.0	315.9	7.2	83.5	275.5	1.0	M	100.8
7/31/2022 14:00	6.7	309.6	8.2	78.5	414.3	1.0	M	100.8
7/31/2022 15:00	7.2	307.0	8.8	75.8	396.2	1.0	M	100.8
7/31/2022 16:00	7.6	290.0	9.4	72.9	482.8	1.0	M	100.7
7/31/2022 17:00	7.8	292.4	10.1	70.4	440.0	1.0	M	100.7
7/31/2022 18:00	6.7	279.3	10.2	74.7	342.7	1.0	M	100.7
7/31/2022 19:00	5.5	278.4	10.7	72.6	244.1	1.0	M	100.6
7/31/2022 20:00	6.5	299.6	11.6	64.8	149.1	1.0	M	100.6
7/31/2022 21:00	5.6	289.5	10.5	75.0	39.9	0.0	M	100.6
7/31/2022 22:00	6.2	281.4	9.3	82.5	26.1	0.0	M	100.6
7/31/2022 23:00	5.2	284.7	8.6	86.1	3.1	0.0	M	100.6
8/1/2022 0:00	6.4	314.9	8.7	83.3	0.9	0.0	M	100.5
8/1/2022 1:00	8.0	322.8	8.5	78.6	0.9	0.0	M	100.5
8/1/2022 2:00	7.9	322.9	7.5	80.3	1.1	0.0	M	100.4
8/1/2022 3:00	8.2	321.0	6.9	80.8	4.7	0.0	M	100.4
8/1/2022 4:00	8.1	317.9	7.0	81.2	41.3	0.0	M	100.4
8/1/2022 5:00	8.3	316.6	7.2	80.3	106.4	0.0	M	100.4
8/1/2022 6:00	9.5	319.2	7.3	80.8	159.5	1.0	M	100.3
8/1/2022 7:00	8.6	309.9	8.1	78.1	276.1	1.0	M	100.3
8/1/2022 8:00	9.1	312.9	9.2	75.9	289.2	1.0	M	100.3
8/1/2022 9:00	9.2	321.3	9.9	73.6	328.0	1.0	M	100.3
8/1/2022 10:00	9.3	322.5	10.2	72.7	258.7	1.0	M	100.3
8/1/2022 11:00	9.1	325.2	10.5	73.5	253.3	1.0	M	100.3
8/1/2022 12:00	8.7	324.7	9.8	76.9	131.6	1.0	M	100.4
8/1/2022 13:00	8.0	324.2	9.4	82.6	103.3	0.0	M	100.4
8/1/2022 14:00	8.3	321.4	9.6	82.8	118.3	0.0	M	100.4
8/1/2022 15:00	8.5	320.5	9.9	81.8	88.8	0.0	M	100.4
8/1/2022 16:00	7.6	327.0	10.2	80.3	85.9	0.0	M	100.4
8/1/2022 17:00	7.3	327.2	10.2	78.5	56.9	0.0	M	100.4
8/1/2022 18:00	6.9	328.1	10.4	78.8	55.8	0.0	M	100.4
8/1/2022 19:00	6.7	355.9	10.3	78.3	56.6	0.0	M	100.4
8/1/2022 20:00	5.5	1.4	9.9	79.2	26.7	0.0	M	100.4
8/1/2022 21:00	4.2	1.1	9.5	81.6	9.3	0.0	M	100.4
8/1/2022 22:00	2.8	352.1	9.2	82.4	4.7	0.0	M	100.5
8/1/2022 23:00	1.8	335.4	8.8	84.1	0.3	0.0	M	100.4

8/2/2022 0:00	3.1	320.8	8.8	85.8	0.0	0.0	M	100.4
8/2/2022 1:00	3.6	338.4	8.7	85.5	0.0	0.0	M	100.5
8/2/2022 2:00	4.0	347.9	8.3	86.0	0.3	0.0	M	100.5
8/2/2022 3:00	4.0	337.6	8.2	86.7	1.8	0.0	M	100.5
8/2/2022 4:00	4.4	320.6	8.0	86.8	9.1	0.0	M	100.5
8/2/2022 5:00	2.7	327.2	8.0	87.0	26.2	0.0	M	100.5
8/2/2022 6:00	3.2	326.3	8.1	86.8	45.9	0.0	M	100.5
8/2/2022 7:00	4.8	352.7	8.2	87.1	72.7	0.0	M	100.5
8/2/2022 8:00	4.3	357.8	8.7	86.9	161.2	1.0	M	100.6
8/2/2022 9:00	3.9	6.2	9.4	84.6	205.1	1.0	M	100.6
8/2/2022 10:00	3.6	323.3	10.1	81.9	389.2	1.0	M	100.6
8/2/2022 11:00	3.9	317.6	11.2	78.2	588.5	1.0	M	100.6
8/2/2022 12:00	4.0	312.6	11.6	74.3	492.5	1.0	M	100.6
8/2/2022 13:00	4.2	322.4	12.6	67.5	559.5	1.0	M	100.6
8/2/2022 14:00	3.6	19.6	13.1	59.7	458.2	1.0	M	100.6
8/2/2022 15:00	4.4	5.0	13.7	56.6	482.3	1.0	M	100.6
8/2/2022 16:00	4.0	3.4	13.9	55.1	442.6	1.0	M	100.6
8/2/2022 17:00	4.2	1.1	14.2	54.7	402.0	1.0	M	100.6
8/2/2022 18:00	4.6	327.2	13.6	55.7	189.9	1.0	M	100.7
8/2/2022 19:00	3.7	322.4	12.9	61.9	93.5	0.0	M	100.7
8/2/2022 20:00	3.1	330.1	12.4	65.8	51.2	0.0	M	100.7
8/2/2022 21:00	2.8	1.1	11.7	68.8	51.3	0.0	M	100.7
8/2/2022 22:00	2.4	9.0	10.9	71.0	8.3	0.0	M	100.7
8/2/2022 23:00	2.7	14.5	10.3	72.6	1.9	0.0	M	100.7
8/3/2022 0:00	3.3	8.0	9.8	74.7	0.1	0.0	M	100.8
8/3/2022 1:00	4.2	25.1	9.0	82.4	0.0	0.0	M	100.8
8/3/2022 2:00	2.2	35.9	8.4	84.0	0.8	0.0	M	100.9
8/3/2022 3:00	0.2	25.1	7.0	88.3	4.5	0.0	M	100.9
8/3/2022 4:00	1.3	281.8	6.5	88.8	11.0	0.0	M	100.9
8/3/2022 5:00	0.9	317.4	7.1	88.2	27.7	0.0	M	100.9
8/3/2022 6:00	2.1	289.0	8.3	86.6	68.7	0.0	M	100.9
8/3/2022 7:00	2.3	316.0	9.8	82.3	167.6	1.0	M	100.9
8/3/2022 8:00	2.6	335.9	11.2	74.8	316.2	1.0	M	100.9
8/3/2022 9:00	2.6	357.2	12.0	69.2	429.0	1.0	M	100.9
8/3/2022 10:00	3.2	3.8	11.9	68.4	407.0	1.0	M	100.9
8/3/2022 11:00	1.9	31.2	12.8	63.7	532.7	1.0	M	100.9
8/3/2022 12:00	2.6	210.3	12.8	64.4	385.4	1.0	M	100.9
8/3/2022 13:00	3.2	289.5	13.1	64.0	380.9	1.0	M	100.8
8/3/2022 14:00	4.4	272.5	13.3	62.4	364.1	1.0	M	100.8
8/3/2022 15:00	4.8	272.3	13.0	61.9	362.0	1.0	M	100.8
8/3/2022 16:00	3.9	274.0	14.6	54.5	617.5	1.0	M	100.8
8/3/2022 17:00	4.7	266.9	14.2	54.6	436.3	1.0	M	100.8
8/3/2022 18:00	4.9	268.6	13.7	53.6	357.6	1.0	M	100.8
8/3/2022 19:00	4.9	266.4	13.2	53.7	255.8	1.0	M	100.7
8/3/2022 20:00	4.1	273.3	12.9	54.6	163.7	1.0	M	100.7
8/3/2022 21:00	3.2	280.3	12.3	58.3	65.7	0.0	M	100.7
8/3/2022 22:00	2.4	288.6	11.5	60.2	7.7	0.0	M	100.7
8/3/2022 23:00	1.6	280.3	10.6	61.2	1.6	0.0	M	100.6
8/4/2022 0:00	1.3	266.9	9.2	68.5	0.0	0.0	M	100.6
8/4/2022 1:00	0.4	290.3	9.1	73.7	0.0	0.0	M	100.6
8/4/2022 2:00	1.2	269.8	9.0	77.8	0.4	0.0	M	100.6
8/4/2022 3:00	2.1	279.9	8.6	83.5	3.1	0.0	M	100.6
8/4/2022 4:00	2.4	293.9	8.8	84.4	12.8	0.0	M	100.6
8/4/2022 5:00	1.9	276.5	8.8	83.9	23.8	0.0	M	100.5
8/4/2022 6:00	1.7	306.6	9.4	82.5	46.2	0.0	M	100.5
8/4/2022 7:00	1.7	325.5	9.9	80.3	75.8	0.0	M	100.5
8/4/2022 8:00	1.8	272.0	10.6	76.2	146.3	1.0	M	100.5
8/4/2022 9:00	1.3	285.1	11.8	70.3	182.3	1.0	M	100.5
8/4/2022 10:00	1.6	329.9	12.8	59.4	248.6	1.0	M	100.5
8/4/2022 11:00	2.7	310.9	14.1	51.9	493.1	1.0	M	100.5
8/4/2022 12:00	4.3	275.1	14.4	51.9	530.8	1.0	M	100.5
8/4/2022 13:00	4.3	273.1	14.2	55.2	527.1	1.0	M	100.5
8/4/2022 14:00	4.9	276.4	14.6	52.9	550.3	1.0	M	100.5
8/4/2022 15:00	4.9	273.9	15.2	51.1	581.0	1.0	M	100.6
8/4/2022 16:00	4.9	280.4	15.5	48.2	499.2	1.0	M	100.6
8/4/2022 17:00	5.6	275.6	15.1	49.6	324.0	1.0	M	100.5
8/4/2022 18:00	5.3	263.3	15.0	52.9	340.6	1.0	M	100.5
8/4/2022 19:00	5.4	263.7	14.6	54.6	232.9	1.0	M	100.6
8/4/2022 20:00	5.5	271.1	13.9	61.0	139.5	1.0	M	100.6
8/4/2022 21:00	4.9	274.3	12.3	72.1	32.4	0.0	M	100.6
8/4/2022 22:00	4.9	273.1	11.8	72.0	11.3	0.0	M	100.6
8/4/2022 23:00	4.7	275.5	11.4	72.3	1.4	0.0	M	100.6
8/5/2022 0:00	4.0	277.8	10.6	76.7	0.0	0.0	M	100.6
8/5/2022 1:00	3.9	286.5	10.3	77.7	0.0	0.0	M	100.7
8/5/2022 2:00	3.3	290.3	10.6	74.2	0.3	0.0	M	100.7
8/5/2022 3:00	2.3	282.5	10.2	74.9	2.7	0.0	M	100.7
8/5/2022 4:00	0.3	65.1	8.8	84.4	16.7	0.0	M	100.7
8/5/2022 5:00	0.8	161.5	9.0	85.7	76.8	0.0	M	100.7
8/5/2022 6:00	0.6	130.5	10.9	79.1	194.6	1.0	M	100.7
8/5/2022 7:00	1.6	191.3	12.2	73.0	356.5	1.0	M	100.7

8/5/2022 8:00	4.2	287.9	12.5	70.1	258.9	1.0	M	100.7
8/5/2022 9:00	5.6	282.1	12.6	68.7	265.9	1.0	M	100.7
8/5/2022 10:00	5.5	281.4	12.8	66.7	270.0	1.0	M	100.7
8/5/2022 11:00	4.7	286.2	13.4	63.7	288.7	1.0	M	100.7
8/5/2022 12:00	3.4	296.7	15.0	57.1	456.8	1.0	M	100.7
8/5/2022 13:00	1.7	70.9	17.1	48.0	602.9	1.0	M	100.6
8/5/2022 14:00	0.8	93.5	17.8	44.1	452.0	1.0	M	100.6
8/5/2022 15:00	2.4	13.6	18.0	44.9	415.8	1.0	M	100.6
8/5/2022 16:00	2.7	4.4	18.0	45.6	463.8	1.0	M	100.5
8/5/2022 17:00	1.7	55.5	18.9	42.0	516.1	1.0	M	100.5
8/5/2022 18:00	3.1	188.8	18.7	44.2	436.0	1.0	M	100.5
8/5/2022 19:00	2.3	194.5	18.3	45.3	190.5	1.0	M	100.4
8/5/2022 20:00	2.0	144.3	16.8	51.2	133.8	1.0	M	100.4
8/5/2022 21:00	6.9	107.7	14.8	64.3	54.3	0.0	M	100.4
8/5/2022 22:00	6.9	109.4	13.3	70.2	9.4	0.0	M	100.4
8/5/2022 23:00	6.5	119.2	12.9	72.9	1.0	0.0	M	100.4
8/6/2022 0:00	4.6	138.3	12.0	77.2	0.0	0.0	M	100.4
8/6/2022 1:00	4.2	148.2	11.4	79.2	0.0	0.0	M	100.3
8/6/2022 2:00	5.4	137.5	11.2	76.9	0.3	0.0	M	100.3
8/6/2022 3:00	4.5	134.3	10.3	81.8	2.8	0.0	M	100.3
8/6/2022 4:00	3.2	114.4	9.9	84.8	27.8	0.0	M	100.3
8/6/2022 5:00	2.6	98.4	10.4	83.1	88.7	0.0	M	100.2
8/6/2022 6:00	3.6	105.1	11.6	78.8	163.5	1.0	M	100.2
8/6/2022 7:00	3.2	120.1	13.0	73.9	239.6	1.0	M	100.2
8/6/2022 8:00	3.7	122.5	14.5	68.6	278.2	1.0	M	100.1
8/6/2022 9:00	4.3	126.6	16.2	63.2	403.3	1.0	M	100.1
8/6/2022 10:00	5.3	145.3	18.1	53.2	512.7	1.0	M	100.1
8/6/2022 11:00	6.8	155.1	19.0	43.3	571.5	1.0	M	100.0
8/6/2022 12:00	6.6	150.5	19.2	39.3	618.0	1.0	M	100.0
8/6/2022 13:00	5.8	143.0	19.4	37.7	634.2	1.0	M	100.0
8/6/2022 14:00	4.3	151.9	20.0	35.2	603.2	1.0	M	100.0
8/6/2022 15:00	3.3	159.8	19.5	37.9	295.1	1.0	M	100.0
8/6/2022 16:00	4.7	165.1	19.3	41.0	286.7	1.0	M	100.0
8/6/2022 17:00	4.5	176.8	20.6	35.4	421.8	1.0	M	100.0
8/6/2022 18:00	4.5	181.8	20.5	34.5	295.1	1.0	M	100.0
8/6/2022 19:00	4.9	161.9	19.6	40.2	307.1	1.0	M	100.0
8/6/2022 20:00	4.6	154.4	17.9	49.4	163.1	1.0	M	100.0
8/6/2022 21:00	3.5	153.3	17.2	51.9	78.6	0.0	M	100.0
8/6/2022 22:00	2.3	146.4	16.1	57.6	12.8	0.0	M	100.0
8/6/2022 23:00	2.1	132.5	14.8	67.2	0.9	0.0	M	100.0
8/7/2022 0:00	1.5	140.7	14.4	67.7	0.0	0.0	M	100.1
8/7/2022 1:00	4.4	156.6	14.3	67.3	0.0	0.0	M	100.1
8/7/2022 2:00	4.3	172.9	14.0	65.9	0.0	0.0	M	100.1
8/7/2022 3:00	5.0	171.7	13.5	67.6	1.5	0.0	M	100.1
8/7/2022 4:00	4.0	140.9	12.6	75.7	9.4	0.0	M	100.2
8/7/2022 5:00	4.2	148.0	12.2	77.8	34.6	0.0	M	100.2
8/7/2022 6:00	3.9	147.9	12.2	79.1	82.5	0.0	M	100.2
8/7/2022 7:00	1.5	128.4	13.6	73.9	199.2	1.0	M	100.2
8/7/2022 8:00	2.1	128.1	15.0	67.9	273.9	1.0	M	100.2
8/7/2022 9:00	1.9	141.8	17.5	57.0	405.7	1.0	M	100.2
8/7/2022 10:00	4.3	142.4	19.5	47.1	511.7	1.0	M	100.2
8/7/2022 11:00	5.7	144.9	19.8	44.0	574.5	1.0	M	100.2
8/7/2022 12:00	4.9	139.1	20.3	41.2	564.5	1.0	M	100.2
8/7/2022 13:00	4.8	140.9	19.4	44.2	311.9	1.0	M	100.2
8/7/2022 14:00	4.1	141.3	19.5	41.3	340.5	1.0	M	100.2
8/7/2022 15:00	4.7	135.9	19.2	44.3	283.1	1.0	M	100.3
8/7/2022 16:00	3.5	110.2	19.7	40.1	287.5	1.0	M	100.3
8/7/2022 17:00	3.3	143.0	20.5	36.9	355.9	1.0	M	100.2
8/7/2022 18:00	3.0	135.3	19.8	41.4	311.5	1.0	M	100.3
8/7/2022 19:00	3.3	159.3	20.5	37.5	233.4	1.0	M	100.3
8/7/2022 20:00	2.3	155.9	19.7	39.3	123.8	1.0	M	100.3
8/7/2022 21:00	1.1	149.6	18.6	44.5	53.9	0.0	M	100.3
8/7/2022 22:00	0.4	129.7	16.1	54.2	6.8	0.0	M	100.3
8/7/2022 23:00	0.7	120.7	14.1	66.9	0.8	0.0	M	100.3
8/8/2022 0:00	1.0	95.0	12.9	72.6	0.0	0.0	M	100.4
8/8/2022 1:00	1.2	169.9	12.6	72.3	0.0	0.0	M	100.4
8/8/2022 2:00	2.5	189.5	14.1	60.1	0.0	0.0	M	100.4
8/8/2022 3:00	1.6	126.0	12.3	74.4	2.3	0.0	M	100.4
8/8/2022 4:00	1.3	98.1	11.8	78.3	19.7	0.0	M	100.4
8/8/2022 5:00	0.6	133.6	12.3	76.9	48.4	0.0	M	100.4
8/8/2022 6:00	1.0	121.1	12.9	76.7	106.3	0.0	M	100.4
8/8/2022 7:00	1.4	129.5	13.8	73.4	165.9	1.0	M	100.4
8/8/2022 8:00	2.7	266.7	16.0	62.6	191.3	1.0	M	100.4
8/8/2022 9:00	4.7	280.0	15.0	64.0	259.9	1.0	M	100.4
8/8/2022 10:00	7.3	279.6	14.3	69.4	383.4	1.0	M	100.5
8/8/2022 11:00	8.7	282.0	13.1	79.6	318.5	1.0	M	100.5
8/8/2022 12:00	9.5	273.2	13.0	80.5	433.5	1.0	M	100.4
8/8/2022 13:00	10.1	271.5	13.3	78.1	637.0	1.0	M	100.4
8/8/2022 14:00	8.7	275.3	13.2	76.7	637.7	1.0	M	100.5
8/8/2022 15:00	8.2	281.1	12.8	78.1	512.9	1.0	M	100.5

8/8/2022 16:00	8.0	273.5	12.6	79.0	417.3	1.0	M	100.5
8/8/2022 17:00	7.3	282.9	13.0	76.7	347.0	1.0	M	100.6
8/8/2022 18:00	6.2	288.1	13.1	76.4	288.3	1.0	M	100.6
8/8/2022 19:00	7.1	279.6	12.4	79.9	164.9	1.0	M	100.6
8/8/2022 20:00	8.3	277.7	11.4	84.1	85.1	0.0	M	100.5
8/8/2022 21:00	6.9	285.0	11.4	84.5	45.5	0.0	M	100.6
8/8/2022 22:00	6.3	289.6	10.9	86.7	5.3	0.0	M	100.6
8/8/2022 23:00	6.5	290.2	10.6	88.4	0.5	0.0	M	100.6
8/9/2022 0:00	7.7	285.2	10.5	87.9	0.0	0.0	M	100.5
8/9/2022 1:00	7.9	279.2	10.3	88.4	0.0	0.0	M	100.6
8/9/2022 2:00	6.9	284.3	10.2	89.5	0.0	0.0	M	100.6
8/9/2022 3:00	5.5	289.5	10.2	88.0	2.1	0.0	M	100.7
8/9/2022 4:00	4.7	293.7	10.1	88.5	20.7	0.0	M	100.7
8/9/2022 5:00	5.1	288.2	10.9	86.0	74.4	0.0	M	100.7
8/9/2022 6:00	2.4	269.3	11.7	83.8	149.2	1.0	M	100.7
8/9/2022 7:00	1.1	229.7	13.5	77.5	218.6	1.0	M	100.7
8/9/2022 8:00	1.2	136.9	14.7	75.3	277.7	1.0	M	100.7
8/9/2022 9:00	1.8	134.1	16.9	68.4	393.6	1.0	M	100.6
8/9/2022 10:00	3.9	172.0	19.2	53.7	499.7	1.0	M	100.6
8/9/2022 11:00	5.1	268.6	17.8	60.5	554.8	1.0	M	100.6
8/9/2022 12:00	5.0	278.1	17.6	61.1	573.3	1.0	M	100.6
8/9/2022 13:00	8.5	277.0	15.5	68.4	600.8	1.0	M	100.7
8/9/2022 14:00	6.8	282.8	15.4	65.8	579.3	1.0	M	100.7
8/9/2022 15:00	4.1	278.3	16.5	60.6	534.1	1.0	M	100.6
8/9/2022 16:00	4.7	278.8	17.7	56.0	463.0	1.0	M	100.6
8/9/2022 17:00	3.1	282.7	18.2	55.2	373.5	1.0	M	100.6
8/9/2022 18:00	2.7	285.6	17.8	57.5	244.4	1.0	M	100.5
8/9/2022 19:00	2.8	276.2	16.1	65.3	120.7	1.0	M	100.5
8/9/2022 20:00	3.4	294.5	15.3	67.6	55.9	0.0	M	100.5
8/9/2022 21:00	1.5	307.5	14.9	69.6	22.7	0.0	M	100.5
8/9/2022 22:00	0.2	338.4	13.9	72.2	2.5	0.0	M	100.5
8/9/2022 23:00	0.5	133.6	13.3	76.5	0.1	0.0	M	100.4
8/10/2022 0:00	0.7	115.7	12.2	85.8	0.0	0.0	M	100.4
8/10/2022 1:00	0.5	117.7	11.9	88.2	0.0	0.0	M	100.4
8/10/2022 2:00	0.6	74.1	11.7	90.1	0.0	0.0	M	100.3
8/10/2022 3:00	0.5	50.6	11.3	91.0	1.2	0.0	M	100.3
8/10/2022 4:00	0.7	88.4	11.4	90.3	14.6	0.0	M	100.2
8/10/2022 5:00	0.9	116.8	12.0	90.0	69.1	0.0	M	100.2
8/10/2022 6:00	2.2	139.6	12.7	85.6	154.7	1.0	M	100.1
8/10/2022 7:00	1.7	147.1	14.7	77.9	158.0	1.0	M	100.0
8/10/2022 8:00	5.0	190.0	17.9	61.8	294.4	1.0	M	100.0
8/10/2022 9:00	5.5	172.0	18.6	57.1	281.7	1.0	M	99.9
8/10/2022 10:00	5.7	188.2	18.2	59.6	145.3	1.0	M	99.8
8/10/2022 11:00	5.7	191.3	18.6	58.2	252.5	1.0	M	99.7
8/10/2022 12:00	7.1	201.4	20.5	51.1	354.1	1.0	M	99.7
8/10/2022 13:00	4.8	203.4	18.9	61.5	111.7	0.0	M	99.6
8/10/2022 14:00	3.6	244.2	18.1	69.2	181.4	1.0	M	99.5
8/10/2022 15:00	3.9	277.5	18.6	64.2	172.5	1.0	M	99.4
8/10/2022 16:00	4.1	284.1	17.2	68.3	151.9	1.0	M	99.3
8/10/2022 17:00	2.2	339.7	17.2	67.5	107.1	0.0	M	99.2
8/10/2022 18:00	3.1	260.1	15.9	74.6	46.4	0.0	M	99.1
8/10/2022 19:00	8.4	290.8	14.1	87.1	23.9	0.0	M	99.0
8/10/2022 20:00	13.8	286.7	10.6	94.3	4.9	0.0	M	99.0
8/10/2022 21:00	13.1	293.3	9.2	90.9	3.4	0.0	M	99.2
8/10/2022 22:00	12.0	285.9	8.3	89.8	0.2	0.0	M	99.3
8/10/2022 23:00	11.1	280.3	8.0	85.3	0.0	0.0	M	99.3
8/11/2022 0:00	12.0	264.6	8.0	86.2	0.0	0.0	M	99.3
8/11/2022 1:00	11.0	265.7	8.1	81.4	0.0	0.0	M	99.2
8/11/2022 2:00	11.9	264.2	7.8	81.7	0.0	0.0	M	99.2
8/11/2022 3:00	12.7	265.3	6.9	79.4	0.4	0.0	M	99.1
8/11/2022 4:00	12.5	256.7	6.8	84.3	3.4	0.0	M	99.0
8/11/2022 5:00	15.7	256.4	6.9	87.2	17.3	0.0	M	98.8
8/11/2022 6:00	16.6	262.3	6.2	86.4	31.5	0.0	M	98.7
8/11/2022 7:00	16.5	262.8	6.0	88.6	26.1	0.0	M	98.7
8/11/2022 8:00	19.1	266.2	6.4	92.1	23.6	0.0	M	98.6
8/11/2022 9:00	22.3	268.7	6.9	88.3	41.9	0.0	M	98.4
8/11/2022 10:00	20.5	269.6	7.0	86.7	193.3	1.0	M	98.5
8/11/2022 11:00	22.2	268.8	6.9	85.8	311.5	1.0	M	98.6
8/11/2022 12:00	18.6	267.6	7.0	84.8	292.5	1.0	M	98.8
8/11/2022 13:00	17.6	263.8	7.5	82.9	386.4	1.0	M	99.0
8/11/2022 14:00	18.6	268.3	7.7	81.0	258.9	1.0	M	98.9
8/11/2022 15:00	18.8	268.2	7.7	78.9	176.0	1.0	M	99.0
8/11/2022 16:00	15.6	263.3	7.5	82.2	181.3	1.0	M	99.1
8/11/2022 17:00	15.9	260.7	7.3	83.1	138.4	1.0	M	99.3
8/11/2022 18:00	15.8	263.5	7.3	83.2	84.2	0.0	M	99.3
8/11/2022 19:00	15.1	266.1	7.3	82.4	35.6	0.0	M	99.4
8/11/2022 20:00	14.4	263.3	7.1	83.9	23.7	0.0	M	99.4
8/11/2022 21:00	15.5	263.1	7.0	84.3	16.8	0.0	M	99.4
8/11/2022 22:00	14.4	262.1	7.0	86.4	0.9	0.0	M	99.4
8/11/2022 23:00	13.8	264.3	7.2	87.0	0.0	0.0	M	99.3

8/12/2022 0:00	14.7	262.6	7.5	89.5	0.0	0.0	M	99.4
8/12/2022 1:00	15.4	261.0	8.0	88.8	0.0	0.0	M	99.3
8/12/2022 2:00	13.4	257.6	8.5	88.2	0.0	0.0	M	99.3
8/12/2022 3:00	12.6	271.4	8.3	88.9	0.1	0.0	M	99.3
8/12/2022 4:00	13.8	269.6	7.8	89.1	2.2	0.0	M	99.4
8/12/2022 5:00	13.3	266.2	7.3	90.0	8.6	0.0	M	99.4
8/12/2022 6:00	13.0	266.1	7.0	91.0	13.8	0.0	M	99.4
8/12/2022 7:00	14.8	267.7	7.5	89.9	62.8	0.0	M	99.4
8/12/2022 8:00	15.5	268.4	8.0	88.2	174.7	1.0	M	99.4
8/12/2022 9:00	15.2	268.6	8.4	86.9	264.5	1.0	M	99.5
8/12/2022 10:00	15.4	269.3	8.9	83.6	431.6	1.0	M	99.5
8/12/2022 11:00	13.7	270.0	9.5	81.3	460.4	1.0	M	99.5
8/12/2022 12:00	13.4	267.7	9.3	82.0	378.3	1.0	M	99.6
8/12/2022 13:00	12.4	263.5	8.8	83.6	305.2	1.0	M	99.6
8/12/2022 14:00	13.8	260.4	8.9	83.1	438.8	1.0	M	99.5
8/12/2022 15:00	15.4	260.6	8.5	82.9	531.4	1.0	M	99.5
8/12/2022 16:00	14.8	260.3	8.5	83.0	290.3	1.0	M	99.6
8/12/2022 17:00	14.1	258.9	9.0	79.6	388.2	1.0	M	99.6
8/12/2022 18:00	14.4	257.5	8.6	81.6	161.3	1.0	M	99.5
8/12/2022 19:00	13.6	260.5	8.4	82.7	86.3	0.0	M	99.5
8/12/2022 20:00	13.4	262.2	8.1	84.4	32.1	0.0	M	99.6
8/12/2022 21:00	12.8	267.6	7.9	84.6	7.7	0.0	M	99.6
8/12/2022 22:00	12.8	273.4	7.6	85.2	0.5	0.0	M	99.7
8/12/2022 23:00	10.6	290.7	7.1	81.7	0.0	0.0	M	99.8
8/13/2022 0:00	9.0	292.8	6.8	77.2	0.0	0.0	M	99.9
8/13/2022 1:00	7.2	298.9	6.4	77.9	0.0	0.0	M	100.0
8/13/2022 2:00	6.8	297.6	6.2	77.5	0.0	0.0	M	100.0
8/13/2022 3:00	7.0	281.4	6.2	80.1	0.1	0.0	M	100.0
8/13/2022 4:00	7.8	275.9	6.0	81.9	2.9	0.0	M	100.1
8/13/2022 5:00	7.2	271.9	5.8	83.0	5.5	0.0	M	100.1
8/13/2022 6:00	6.9	271.0	5.7	84.5	59.7	0.0	M	100.1
8/13/2022 7:00	6.9	261.2	5.9	85.4	98.6	0.0	M	100.1
8/13/2022 8:00	6.9	256.5	6.4	86.2	188.9	1.0	M	100.1
8/13/2022 9:00	6.9	263.8	7.6	81.0	395.4	1.0	M	100.1
8/13/2022 10:00	6.3	262.1	8.8	72.4	464.6	1.0	M	100.1
8/13/2022 11:00	6.7	267.5	10.6	67.7	439.3	1.0	M	100.1
8/13/2022 12:00	4.5	271.1	10.7	76.6	176.8	1.0	M	100.1
8/13/2022 13:00	4.3	263.0	11.8	77.5	304.2	1.0	M	100.0
8/13/2022 14:00	1.8	186.3	14.1	70.0	357.7	1.0	M	100.0
8/13/2022 15:00	1.3	120.5	14.9	67.7	382.2	1.0	M	100.0
8/13/2022 16:00	2.4	135.9	16.3	64.9	458.6	1.0	M	99.9
8/13/2022 17:00	2.9	180.2	17.9	58.8	306.8	1.0	M	99.8
8/13/2022 18:00	5.3	271.8	18.2	52.7	278.4	1.0	M	99.9
8/13/2022 19:00	4.5	274.4	15.9	63.0	182.7	1.0	M	100.0
8/13/2022 20:00	4.2	290.2	13.8	69.9	82.0	0.0	M	100.0
8/13/2022 21:00	4.6	292.3	12.6	74.5	32.6	0.0	M	100.1
8/13/2022 22:00	3.3	301.7	12.0	76.7	2.4	0.0	M	100.1
8/13/2022 23:00	1.5	332.7	11.0	80.3	0.0	0.0	M	100.1
8/14/2022 0:00	3.5	283.7	10.7	80.5	0.0	0.0	M	100.2
8/14/2022 1:00	3.6	285.3	9.6	86.7	0.0	0.0	M	100.2
8/14/2022 2:00	1.6	246.6	10.1	85.2	0.0	0.0	M	100.2
8/14/2022 3:00	1.1	147.0	9.6	87.9	0.2	0.0	M	100.3
8/14/2022 4:00	1.3	141.6	8.9	90.8	4.3	0.0	M	100.3
8/14/2022 5:00	0.8	151.3	8.9	90.6	42.9	0.0	M	100.3
8/14/2022 6:00	0.9	131.4	9.9	87.8	112.6	0.0	M	100.3
8/14/2022 7:00	1.2	121.6	10.3	86.8	151.5	1.0	M	100.3
8/14/2022 8:00	1.1	115.8	12.4	79.3	281.9	1.0	M	100.3
8/14/2022 9:00	0.6	98.2	13.4	77.3	133.7	1.0	M	100.3
8/14/2022 10:00	0.9	113.2	15.7	70.9	255.6	1.0	M	100.2
8/14/2022 11:00	1.9	128.6	17.5	63.9	331.7	1.0	M	100.2
8/14/2022 12:00	3.9	167.1	21.3	47.4	527.8	1.0	M	100.1
8/14/2022 13:00	4.2	177.5	23.3	40.3	596.7	1.0	M	100.1
8/14/2022 14:00	5.0	190.8	24.8	35.2	550.4	1.0	M	100.1
8/14/2022 15:00	5.0	247.7	24.3	36.5	426.4	1.0	M	100.1
8/14/2022 16:00	4.4	291.4	23.1	41.0	439.2	1.0	M	100.1
8/14/2022 17:00	4.0	285.2	22.7	43.3	350.2	1.0	M	100.1
8/14/2022 18:00	2.6	291.2	22.6	45.1	254.8	1.0	M	100.1
8/14/2022 19:00	1.5	315.1	22.1	46.2	177.3	1.0	M	100.1
8/14/2022 20:00	0.3	57.9	20.9	51.1	90.2	0.0	M	100.1
8/14/2022 21:00	0.5	39.3	17.6	62.1	18.1	0.0	M	100.1
8/14/2022 22:00	0.2	42.7	15.7	69.8	1.1	0.0	M	100.1
8/14/2022 23:00	1.5	47.5	14.2	75.8	0.0	0.0	M	100.2
8/15/2022 0:00	2.8	61.0	13.2	83.0	0.0	0.0	M	100.2
8/15/2022 1:00	2.7	79.4	11.9	84.2	0.0	0.0	M	100.2
8/15/2022 2:00	4.4	75.2	10.9	84.4	0.0	0.0	M	100.2
8/15/2022 3:00	5.1	81.2	8.7	88.7	0.2	0.0	M	100.1
8/15/2022 4:00	6.1	82.5	7.5	91.1	4.0	0.0	M	100.1
8/15/2022 5:00	7.4	82.3	7.6	93.3	36.8	0.0	M	100.1
8/15/2022 6:00	7.8	85.7	7.7	93.1	84.6	0.0	M	100.1
8/15/2022 7:00	7.5	84.3	8.0	92.2	166.4	1.0	M	100.0

8/15/2022 8:00	7.3	80.7	9.0	89.6	216.4	1.0	M	100.0
8/15/2022 9:00	7.1	82.3	10.1	86.6	349.3	1.0	M	100.0
8/15/2022 10:00	6.9	76.3	11.2	83.4	356.0	1.0	M	99.9
8/15/2022 11:00	6.7	69.5	12.7	78.2	506.1	1.0	M	99.8
8/15/2022 12:00	6.7	80.5	14.6	72.3	579.7	1.0	M	99.8
8/15/2022 13:00	6.8	77.9	15.9	68.9	542.7	1.0	M	99.7
8/15/2022 14:00	6.5	79.6	17.1	65.4	476.7	1.0	M	99.7
8/15/2022 15:00	6.3	67.9	16.6	66.2	326.1	1.0	M	99.7
8/15/2022 16:00	6.3	58.0	15.2	68.7	228.0	1.0	M	99.7
8/15/2022 17:00	6.8	62.4	14.0	71.9	191.5	1.0	M	99.7
8/15/2022 18:00	7.4	64.4	13.4	74.1	127.8	1.0	M	99.7
8/15/2022 19:00	5.3	59.6	12.7	76.6	53.9	0.0	M	99.7
8/15/2022 20:00	4.1	76.7	11.7	78.5	16.2	0.0	M	99.7
8/15/2022 21:00	4.7	80.7	10.4	81.7	4.2	0.0	M	99.7
8/15/2022 22:00	4.5	85.4	9.3	83.4	0.3	0.0	M	99.7
8/15/2022 23:00	3.0	80.6	9.0	84.2	0.0	0.0	M	99.7
8/16/2022 0:00	3.4	47.1	8.6	85.0	0.0	0.0	M	99.7
8/16/2022 1:00	2.8	69.1	8.4	85.7	0.0	0.0	M	99.7
8/16/2022 2:00	2.4	74.8	8.2	86.9	0.0	0.0	M	99.7
8/16/2022 3:00	2.2	74.3	8.2	87.2	0.0	0.0	M	99.8
8/16/2022 4:00	2.0	78.6	8.1	88.1	2.0	0.0	M	99.8
8/16/2022 5:00	1.9	89.4	7.9	88.4	15.6	0.0	M	99.9
8/16/2022 6:00	0.9	63.4	8.3	87.4	68.8	0.0	M	99.9
8/16/2022 7:00	1.5	44.3	9.5	82.4	166.2	1.0	M	99.9
8/16/2022 8:00	1.9	354.2	10.1	79.9	259.9	1.0	M	100.0
8/16/2022 9:00	2.4	324.3	10.1	79.9	298.5	1.0	M	100.0
8/16/2022 10:00	2.9	321.8	9.1	84.5	245.2	1.0	M	100.0
8/16/2022 11:00	3.4	312.6	8.7	85.9	288.6	1.0	M	100.0
8/16/2022 12:00	4.6	318.7	8.5	85.3	310.2	1.0	M	100.1
8/16/2022 13:00	5.2	311.8	9.3	81.5	361.7	1.0	M	100.2
8/16/2022 14:00	4.1	302.6	9.8	80.4	342.1	1.0	M	100.2
8/16/2022 15:00	4.6	285.9	10.1	82.8	189.1	1.0	M	100.2
8/16/2022 16:00	6.1	272.3	10.9	80.5	275.4	1.0	M	100.3
8/16/2022 17:00	7.0	273.7	10.7	81.8	174.5	1.0	M	100.3
8/16/2022 18:00	7.9	275.7	9.9	82.2	62.1	0.0	M	100.4
8/16/2022 19:00	6.3	285.3	9.5	82.7	29.5	0.0	M	100.4
8/16/2022 20:00	4.6	294.6	9.3	82.2	9.8	0.0	M	100.4
8/16/2022 21:00	4.3	275.7	8.8	90.8	2.4	0.0	M	100.5
8/16/2022 22:00	3.8	273.5	8.7	93.2	0.1	0.0	M	100.5
8/16/2022 23:00	2.8	276.5	8.6	94.1	0.0	0.0	M	100.6
8/17/2022 0:00	2.3	279.0	8.7	95.0	0.0	0.0	M	100.6
8/17/2022 1:00	3.2	271.6	8.8	96.2	0.0	0.0	M	100.6
8/17/2022 2:00	4.4	260.4	8.6	96.8	0.0	0.0	M	100.7
8/17/2022 3:00	3.8	294.5	8.4	97.3	0.0	0.0	M	100.7
8/17/2022 4:00	3.0	333.2	8.1	97.4	0.5	0.0	M	100.8
8/17/2022 5:00	3.1	349.0	7.9	96.5	6.1	0.0	M	100.9
8/17/2022 6:00	2.1	9.1	7.9	94.3	38.4	0.0	M	100.9
8/17/2022 7:00	2.0	339.4	8.1	91.7	62.5	0.0	M	101.0
8/17/2022 8:00	2.7	324.5	8.1	90.2	66.0	0.0	M	101.0
8/17/2022 9:00	2.9	324.9	8.0	89.4	124.0	1.0	M	101.1
8/17/2022 10:00	2.8	327.3	8.2	88.0	118.2	0.0	M	101.2
8/17/2022 11:00	2.5	345.6	8.4	86.4	142.1	1.0	M	101.2
8/17/2022 12:00	2.7	326.3	8.7	83.8	239.9	1.0	M	101.2
8/17/2022 13:00	2.9	316.9	9.3	79.5	302.1	1.0	M	101.3
8/17/2022 14:00	2.4	320.2	9.8	74.7	308.5	1.0	M	101.3
8/17/2022 15:00	3.1	316.6	10.1	70.7	246.6	1.0	M	101.3
8/17/2022 16:00	3.1	293.5	10.0	72.9	169.9	1.0	M	101.3
8/17/2022 17:00	3.7	273.9	9.8	78.4	198.1	1.0	M	101.4
8/17/2022 18:00	3.2	270.4	10.1	77.3	205.2	1.0	M	101.4
8/17/2022 19:00	3.1	257.4	9.9	78.4	140.6	1.0	M	101.4
8/17/2022 20:00	1.9	282.2	9.4	83.2	25.4	0.0	M	101.4
8/17/2022 21:00	2.2	33.1	9.8	74.4	10.7	0.0	M	101.4
8/17/2022 22:00	2.2	127.2	9.8	76.7	0.2	0.0	M	101.4
8/17/2022 23:00	5.6	121.2	8.9	80.3	0.0	0.0	M	101.4
8/18/2022 0:00	5.1	119.1	8.7	79.9	0.0	0.0	M	101.3
8/18/2022 1:00	5.1	123.6	8.6	82.2	0.0	0.0	M	101.3
8/18/2022 2:00	5.1	122.1	8.6	83.8	0.0	0.0	M	101.2
8/18/2022 3:00	3.9	137.2	8.3	87.6	0.1	0.0	M	101.2
8/18/2022 4:00	4.9	117.3	8.1	89.5	6.6	0.0	M	101.1
8/18/2022 5:00	6.9	118.1	8.7	88.1	32.8	0.0	M	101.0
8/18/2022 6:00	8.3	121.3	9.3	86.3	56.2	0.0	M	100.9
8/18/2022 7:00	9.8	127.4	10.1	84.3	95.3	0.0	M	100.8
8/18/2022 8:00	9.9	123.2	10.9	82.4	120.6	1.0	M	100.7
8/18/2022 9:00	10.2	119.4	11.6	81.1	142.4	1.0	M	100.5
8/18/2022 10:00	11.1	127.0	12.8	78.5	202.5	1.0	M	100.4
8/18/2022 11:00	11.4	127.8	14.4	73.9	300.7	1.0	M	100.2
8/18/2022 12:00	11.1	137.0	16.6	69.7	368.5	1.0	M	100.0
8/18/2022 13:00	12.3	142.6	18.4	65.1	518.3	1.0	M	99.8
8/18/2022 14:00	12.5	142.3	19.5	63.6	294.0	1.0	M	99.6
8/18/2022 15:00	10.2	150.9	20.4	62.6	135.8	1.0	M	99.5

8/18/2022 16:00	10.1	162.2	22.7	56.2	151.4	1.0	M	99.3
8/18/2022 17:00	11.0	179.6	24.1	52.5	154.6	1.0	M	99.1
8/18/2022 18:00	9.6	257.5	16.8	82.3	7.0	0.0	M	99.5
8/18/2022 19:00	5.3	236.0	15.7	87.3	7.7	0.0	M	99.4
8/18/2022 20:00	4.5	225.4	15.5	86.6	37.3	0.0	M	99.3
8/18/2022 21:00	4.9	180.7	15.2	86.2	14.0	0.0	M	99.3
8/18/2022 22:00	5.6	180.9	14.3	89.1	0.5	0.0	M	99.3
8/18/2022 23:00	5.8	193.4	14.7	87.6	0.0	0.0	M	99.3
8/19/2022 0:00	7.2	196.1	15.0	84.8	0.0	0.0	M	99.2
8/19/2022 1:00	8.2	199.7	15.2	79.2	0.0	0.0	M	99.2
8/19/2022 2:00	7.9	219.0	15.4	69.3	0.0	0.0	M	99.2
8/19/2022 3:00	6.6	215.1	14.9	67.8	0.0	0.0	M	99.1
8/19/2022 4:00	8.3	213.6	14.1	71.3	1.5	0.0	M	99.1
8/19/2022 5:00	13.6	248.9	13.0	71.1	14.8	0.0	M	99.1
8/19/2022 6:00	13.6	250.2	11.6	74.3	58.0	0.0	M	99.0
8/19/2022 7:00	15.1	250.2	11.4	75.2	110.6	0.0	M	99.0
8/19/2022 8:00	14.7	251.1	10.8	75.2	203.2	1.0	M	99.1
8/19/2022 9:00	18.0	254.5	10.0	76.1	278.0	1.0	M	99.1
8/19/2022 10:00	18.7	255.7	7.7	81.5	151.3	1.0	M	98.9
8/19/2022 11:00	19.8	257.0	6.6	85.1	165.3	1.0	M	99.1
8/19/2022 12:00	19.1	262.6	6.3	83.2	174.4	1.0	M	99.2
8/19/2022 13:00	18.4	268.2	6.6	81.5	208.7	1.0	M	99.5
8/19/2022 14:00	16.8	266.2	7.0	79.1	205.7	1.0	M	99.6
8/19/2022 15:00	16.6	262.7	7.3	78.6	231.0	1.0	M	99.7
8/19/2022 16:00	14.4	264.0	7.9	78.4	297.7	1.0	M	99.8
8/19/2022 17:00	16.4	257.5	7.6	79.7	210.5	1.0	M	99.8
8/19/2022 18:00	16.0	256.7	7.2	81.8	190.0	1.0	M	99.8
8/19/2022 19:00	14.7	251.9	6.8	84.4	76.0	0.0	M	99.9
8/19/2022 20:00	13.8	255.5	6.7	84.9	59.6	0.0	M	100.0
8/19/2022 21:00	13.2	257.0	6.5	86.3	14.7	0.0	M	100.0
8/19/2022 22:00	12.5	257.4	6.5	87.5	0.9	0.0	M	100.1
8/19/2022 23:00	10.8	259.0	6.3	88.0	0.0	0.0	M	100.1
8/20/2022 0:00	10.0	260.1	6.3	87.9	0.0	0.0	M	100.1
8/20/2022 1:00	10.3	257.4	6.3	87.7	0.0	0.0	M	100.1
8/20/2022 2:00	9.7	258.1	6.9	83.0	0.0	0.0	M	100.1
8/20/2022 3:00	9.6	264.7	7.1	81.0	0.0	0.0	M	100.2
8/20/2022 4:00	9.1	265.6	6.9	81.4	3.4	0.0	M	100.1
8/20/2022 5:00	8.5	269.3	6.9	83.2	10.0	0.0	M	100.2
8/20/2022 6:00	8.0	264.1	6.7	85.6	37.5	0.0	M	100.1
8/20/2022 7:00	8.2	262.2	6.6	86.2	69.1	0.0	M	100.2
8/20/2022 8:00	8.0	271.8	6.4	85.9	107.1	0.0	M	100.2
8/20/2022 9:00	8.5	278.1	5.8	84.1	121.8	1.0	M	100.2
8/20/2022 10:00	9.0	278.6	5.6	80.8	162.8	1.0	M	100.2
8/20/2022 11:00	10.2	281.0	5.6	76.2	336.5	1.0	M	100.2
8/20/2022 12:00	10.6	278.4	5.8	73.9	309.2	1.0	M	100.3
8/20/2022 13:00	11.0	279.6	6.0	73.3	240.8	1.0	M	100.3
8/20/2022 14:00	10.7	275.2	6.1	71.8	214.1	1.0	M	100.3
8/20/2022 15:00	11.4	272.4	6.5	68.8	222.2	1.0	M	100.3
8/20/2022 16:00	11.6	272.5	6.9	67.4	228.2	1.0	M	100.3
8/20/2022 17:00	12.0	269.6	6.9	71.8	164.7	1.0	M	100.3
8/20/2022 18:00	10.6	263.8	7.0	75.9	105.7	0.0	M	100.4
8/20/2022 19:00	10.0	266.1	7.2	74.7	71.7	0.0	M	100.4
8/20/2022 20:00	10.9	270.2	7.1	72.0	23.5	0.0	M	100.4
8/20/2022 21:00	11.8	271.4	6.8	75.3	4.8	0.0	M	100.4
8/20/2022 22:00	12.0	267.8	6.4	75.2	0.2	0.0	M	100.4
8/20/2022 23:00	12.0	277.4	6.2	74.9	0.0	0.0	M	100.5
8/21/2022 0:00	12.0	286.5	5.9	74.6	0.0	0.0	M	100.6
8/21/2022 1:00	11.8	287.0	5.5	75.6	0.0	0.0	M	100.6
8/21/2022 2:00	12.0	292.2	5.2	76.0	0.0	0.0	M	100.7
8/21/2022 3:00	11.5	294.1	5.0	77.0	0.0	0.0	M	100.7
8/21/2022 4:00	10.9	287.4	5.1	77.1	0.4	0.0	M	100.8
8/21/2022 5:00	11.5	284.8	5.1	76.4	4.3	0.0	M	100.9
8/21/2022 6:00	11.2	287.3	5.0	76.3	19.2	0.0	M	100.9
8/21/2022 7:00	11.4	289.0	4.9	75.0	46.0	0.0	M	100.9
8/21/2022 8:00	10.5	287.0	5.0	76.2	63.1	0.0	M	101.0
8/21/2022 9:00	11.1	279.9	5.0	77.5	82.8	0.0	M	101.0
8/21/2022 10:00	11.3	277.4	5.3	76.2	138.8	1.0	M	101.0
8/21/2022 11:00	11.7	272.6	5.6	75.9	228.1	1.0	M	101.0
8/21/2022 12:00	12.5	268.6	5.9	73.8	324.7	1.0	M	101.0
8/21/2022 13:00	12.2	269.0	6.4	73.3	427.9	1.0	M	101.0
8/21/2022 14:00	12.4	268.7	7.0	71.2	540.5	1.0	M	101.0
8/21/2022 15:00	10.6	268.8	7.8	69.1	487.9	1.0	M	101.0
8/21/2022 16:00	9.7	260.9	7.9	72.3	420.5	1.0	M	101.0
8/21/2022 17:00	9.9	256.2	7.6	75.6	332.7	1.0	M	101.0
8/21/2022 18:00	9.4	257.0	7.4	76.3	217.2	1.0	M	101.0
8/21/2022 19:00	7.8	257.9	6.8	79.9	96.0	0.0	M	101.0
8/21/2022 20:00	6.4	259.7	6.2	83.7	22.0	0.0	M	101.0
8/21/2022 21:00	6.1	261.4	5.8	86.1	3.7	0.0	M	101.0
8/21/2022 22:00	5.3	268.4	5.9	86.0	0.1	0.0	M	101.0
8/21/2022 23:00	4.6	265.4	6.0	84.7	0.0	0.0	M	101.0

8/22/2022 0:00	4.8	272.1	5.9	85.8	0.0	0.0	M	101.0
8/22/2022 1:00	4.8	268.7	5.9	87.4	0.0	0.0	M	101.0
8/22/2022 2:00	4.3	272.9	5.7	88.4	0.0	0.0	M	101.0
8/22/2022 3:00	3.4	317.7	5.7	85.8	0.0	0.0	M	101.0
8/22/2022 4:00	3.1	318.1	5.4	85.9	0.2	0.0	M	101.0
8/22/2022 5:00	2.6	308.6	5.1	88.7	3.7	0.0	M	101.0
8/22/2022 6:00	3.2	334.8	5.2	85.5	14.4	0.0	M	101.0
8/22/2022 7:00	2.9	348.9	5.1	83.9	43.7	0.0	M	101.0
8/22/2022 8:00	3.8	355.9	5.6	81.2	194.1	1.0	M	101.0
8/22/2022 9:00	5.2	326.2	5.6	81.2	189.2	1.0	M	101.0
8/22/2022 10:00	5.9	319.9	5.3	80.5	221.6	1.0	M	101.1
8/22/2022 11:00	6.4	328.4	5.7	78.5	371.2	1.0	M	101.2
8/22/2022 12:00	6.5	327.3	6.1	74.9	321.4	1.0	M	101.2
8/22/2022 13:00	8.2	319.1	6.8	66.7	391.2	1.0	M	101.3
8/22/2022 14:00	8.8	320.3	5.8	78.9	253.1	1.0	M	101.3
8/22/2022 15:00	8.6	317.0	6.3	75.8	249.9	1.0	M	101.4
8/22/2022 16:00	8.5	320.4	6.8	69.1	243.3	1.0	M	101.5
8/22/2022 17:00	8.2	317.0	6.7	70.0	166.2	1.0	M	101.5
8/22/2022 18:00	7.6	319.2	7.2	69.1	206.4	1.0	M	101.5
8/22/2022 19:00	7.5	305.4	7.0	70.0	108.6	0.0	M	101.6
8/22/2022 20:00	6.9	302.7	6.3	72.3	47.3	0.0	M	101.6
8/22/2022 21:00	5.4	302.0	5.8	76.6	4.0	0.0	M	101.7
8/22/2022 22:00	5.7	299.9	6.0	75.5	0.0	0.0	M	101.7
8/22/2022 23:00	6.2	295.7	6.1	75.5	0.0	0.0	M	101.7
8/23/2022 0:00	6.9	289.9	6.0	76.3	0.0	0.0	M	101.7
8/23/2022 1:00	6.5	292.0	5.8	78.0	0.0	0.0	M	101.7
8/23/2022 2:00	6.6	292.8	5.2	82.5	0.0	0.0	M	101.7
8/23/2022 3:00	6.0	300.3	4.5	86.5	0.0	0.0	M	101.7
8/23/2022 4:00	6.1	294.6	4.7	87.1	0.7	0.0	M	101.7
8/23/2022 5:00	6.2	296.8	4.8	84.2	4.8	0.0	M	101.7
8/23/2022 6:00	7.0	289.5	4.9	81.3	17.8	0.0	M	101.7
8/23/2022 7:00	7.1	293.7	4.8	81.2	33.8	0.0	M	101.8
8/23/2022 8:00	7.3	293.0	4.6	82.6	56.7	0.0	M	101.7
8/23/2022 9:00	7.6	296.1	4.6	82.1	76.2	0.0	M	101.7
8/23/2022 10:00	7.9	292.7	4.7	80.6	119.5	0.0	M	101.7
8/23/2022 11:00	8.3	291.6	4.9	79.5	190.3	1.0	M	101.7
8/23/2022 12:00	7.9	289.6	5.6	75.2	300.3	1.0	M	101.7
8/23/2022 13:00	8.3	280.3	6.4	72.3	444.4	1.0	M	101.7
8/23/2022 14:00	9.2	270.3	6.7	71.0	527.1	1.0	M	101.7
8/23/2022 15:00	8.8	267.4	6.9	72.5	489.1	1.0	M	101.6
8/23/2022 16:00	9.3	259.8	6.7	75.9	419.4	1.0	M	101.6
8/23/2022 17:00	8.7	265.7	6.5	78.4	331.3	1.0	M	101.6
8/23/2022 18:00	8.3	264.9	6.3	80.1	228.4	1.0	M	101.6
8/23/2022 19:00	7.7	265.6	5.9	82.3	134.6	1.0	M	101.6
8/23/2022 20:00	7.2	263.2	5.2	85.3	49.8	0.0	M	101.6
8/23/2022 21:00	7.6	267.2	4.9	85.8	3.9	0.0	M	101.6
8/23/2022 22:00	7.7	266.1	4.6	87.5	0.1	0.0	M	101.6
8/23/2022 23:00	7.4	268.6	4.3	89.5	0.0	0.0	M	101.6
8/24/2022 0:00	7.0	267.3	4.3	90.3	0.0	0.0	M	101.6
8/24/2022 1:00	6.4	263.5	4.5	91.3	0.0	0.0	M	101.6
8/24/2022 2:00	6.5	266.4	4.5	92.0	0.0	0.0	M	101.6
8/24/2022 3:00	6.7	272.0	4.4	92.4	0.0	0.0	M	101.6
8/24/2022 4:00	5.7	278.3	4.3	92.2	1.1	0.0	M	101.6
8/24/2022 5:00	6.3	271.3	4.7	91.6	26.3	0.0	M	101.6
8/24/2022 6:00	5.8	262.2	5.1	91.0	76.1	0.0	M	101.6
8/24/2022 7:00	6.8	255.9	5.1	93.1	92.1	0.0	M	101.6
8/24/2022 8:00	6.9	263.1	6.1	88.2	215.1	1.0	M	101.6
8/24/2022 9:00	8.4	269.3	6.8	83.4	360.0	1.0	M	101.6
8/24/2022 10:00	8.1	272.2	7.3	81.0	442.9	1.0	M	101.5
8/24/2022 11:00	7.8	268.6	7.7	82.1	504.8	1.0	M	101.5
8/24/2022 12:00	8.1	275.2	8.4	79.5	533.2	1.0	M	101.5
8/24/2022 13:00	7.1	271.1	9.1	74.6	540.3	1.0	M	101.5
8/24/2022 14:00	8.0	261.6	9.2	74.5	522.7	1.0	M	101.4
8/24/2022 15:00	7.6	257.5	9.5	72.5	474.3	1.0	M	101.4
8/24/2022 16:00	6.7	260.7	9.7	71.3	405.6	1.0	M	101.4
8/24/2022 17:00	5.1	274.3	10.1	69.2	319.7	1.0	M	101.4
8/24/2022 18:00	4.6	281.4	10.1	67.8	224.4	1.0	M	101.4
8/24/2022 19:00	4.4	272.9	9.4	71.0	131.0	1.0	M	101.4
8/24/2022 20:00	4.2	280.4	8.1	76.4	46.0	0.0	M	101.4
8/24/2022 21:00	3.7	284.6	7.0	82.9	3.4	0.0	M	101.3
8/24/2022 22:00	3.9	283.8	6.6	84.5	0.0	0.0	M	101.3
8/24/2022 23:00	4.8	287.3	6.4	87.2	0.0	0.0	M	101.3
8/25/2022 0:00	4.8	288.6	6.2	87.0	0.0	0.0	M	101.3
8/25/2022 1:00	4.0	287.8	5.7	87.2	0.0	0.0	M	101.2
8/25/2022 2:00	1.8	275.4	4.5	89.4	0.0	0.0	M	101.2
8/25/2022 3:00	3.4	286.0	4.6	89.5	0.0	0.0	M	101.2
8/25/2022 4:00	2.4	277.7	4.8	89.9	1.1	0.0	M	101.2
8/25/2022 5:00	2.6	291.8	5.0	89.8	23.3	0.0	M	101.1
8/25/2022 6:00	1.9	296.7	6.4	84.6	88.4	0.0	M	101.1
8/25/2022 7:00	0.6	151.7	7.4	82.5	135.8	1.0	M	101.1

8/25/2022 8:00	1.3	257.8	8.4	79.9	217.6	1.0	M	101.0
8/25/2022 9:00	1.4	284.5	9.6	72.5	359.5	1.0	M	101.0
8/25/2022 10:00	1.3	323.8	11.1	65.4	436.3	1.0	M	100.9
8/25/2022 11:00	1.1	333.6	12.4	55.5	493.3	1.0	M	100.9
8/25/2022 12:00	1.5	57.8	12.4	53.1	530.4	1.0	M	100.8
8/25/2022 13:00	1.0	89.1	13.3	48.0	537.7	1.0	M	100.8
8/25/2022 14:00	1.8	59.4	13.4	48.6	516.2	1.0	M	100.7
8/25/2022 15:00	2.5	56.4	13.6	48.8	472.1	1.0	M	100.7
8/25/2022 16:00	3.7	52.4	13.6	50.9	403.2	1.0	M	100.6
8/25/2022 17:00	5.7	58.5	13.1	55.4	251.9	1.0	M	100.6
8/25/2022 18:00	6.6	77.4	11.4	61.5	113.8	0.0	M	100.5
8/25/2022 19:00	5.7	88.0	10.0	68.6	70.6	0.0	M	100.5
8/25/2022 20:00	5.3	101.0	7.9	76.0	16.5	0.0	M	100.5
8/25/2022 21:00	4.9	93.5	6.6	77.6	1.0	0.0	M	100.5
8/25/2022 22:00	5.7	89.9	6.1	83.5	0.0	0.0	M	100.4
8/25/2022 23:00	6.2	100.7	6.2	86.1	0.0	0.0	M	100.4
8/26/2022 0:00	7.4	94.3	5.7	87.3	0.0	0.0	M	100.4
8/26/2022 1:00	7.8	94.2	5.1	88.3	0.0	0.0	M	100.3
8/26/2022 2:00	7.8	89.5	4.6	88.3	0.0	0.0	M	100.2
8/26/2022 3:00	8.3	87.4	4.0	89.7	0.0	0.0	M	100.2
8/26/2022 4:00	7.5	84.2	3.5	91.5	1.2	0.0	M	100.1
8/26/2022 5:00	8.2	87.0	3.3	93.1	15.5	0.0	M	100.1
8/26/2022 6:00	9.0	88.4	3.3	93.4	26.4	0.0	M	100.0
8/26/2022 7:00	7.2	90.0	3.4	92.9	42.2	0.0	M	100.0
8/26/2022 8:00	7.6	99.0	3.8	92.0	51.5	0.0	M	99.9
8/26/2022 9:00	8.3	101.7	4.6	91.9	66.1	0.0	M	99.8
8/26/2022 10:00	12.0	87.9	5.0	92.9	67.5	0.0	M	99.7
8/26/2022 11:00	12.3	90.5	5.3	92.5	100.7	0.0	M	99.7
8/26/2022 12:00	12.3	88.1	6.0	89.8	80.4	0.0	M	99.6
8/26/2022 13:00	11.8	90.0	6.2	91.3	27.8	0.0	M	99.6
8/26/2022 14:00	11.8	93.1	6.7	92.4	66.8	0.0	M	99.6
8/26/2022 15:00	11.5	92.9	7.2	92.9	66.2	0.0	M	99.6
8/26/2022 16:00	10.5	98.9	7.5	93.4	30.1	0.0	M	99.6
8/26/2022 17:00	10.7	98.6	7.7	93.0	24.2	0.0	M	99.5
8/26/2022 18:00	10.7	96.1	7.9	92.1	19.2	0.0	M	99.5
8/26/2022 19:00	10.2	98.5	7.9	92.4	7.5	0.0	M	99.5
8/26/2022 20:00	9.7	97.3	7.6	93.8	1.8	0.0	M	99.5
8/26/2022 21:00	10.1	95.4	7.7	93.9	0.1	0.0	M	99.5
8/26/2022 22:00	9.7	93.6	7.6	94.1	0.0	0.0	M	99.5
8/26/2022 23:00	10.2	91.8	7.4	94.1	0.0	0.0	M	99.5
8/27/2022 0:00	10.7	94.3	7.4	93.9	0.0	0.0	M	99.4
8/27/2022 1:00	10.8	94.1	7.2	93.6	0.0	0.0	M	99.5
8/27/2022 2:00	10.8	93.6	7.0	93.8	0.0	0.0	M	99.4
8/27/2022 3:00	11.2	93.7	6.8	94.1	0.0	0.0	M	99.5
8/27/2022 4:00	11.1	94.4	6.7	94.3	0.0	0.0	M	99.5
8/27/2022 5:00	10.1	90.3	6.6	93.7	1.2	0.0	M	99.6
8/27/2022 6:00	9.5	85.1	6.3	93.4	10.0	0.0	M	99.6
8/27/2022 7:00	9.6	83.4	6.0	93.3	22.9	0.0	M	99.6
8/27/2022 8:00	10.4	85.5	6.1	91.7	41.1	0.0	M	99.6
8/27/2022 9:00	10.4	83.6	6.1	92.0	80.9	0.0	M	99.6
8/27/2022 10:00	10.1	84.8	6.3	91.6	88.8	0.0	M	99.7
8/27/2022 11:00	9.6	86.3	6.5	92.4	114.9	0.0	M	99.8
8/27/2022 12:00	9.5	87.7	6.7	92.6	127.5	1.0	M	99.8
8/27/2022 13:00	10.0	87.5	7.0	91.9	127.4	1.0	M	99.8
8/27/2022 14:00	10.0	89.7	7.1	91.6	152.8	1.0	M	99.9
8/27/2022 15:00	9.9	93.1	7.4	91.3	133.5	1.0	M	100.0
8/27/2022 16:00	9.6	93.4	7.8	88.8	122.9	1.0	M	100.0
8/27/2022 17:00	9.0	93.3	8.1	87.1	133.9	1.0	M	100.0
8/27/2022 18:00	8.6	94.3	8.2	84.7	61.7	0.0	M	100.1
8/27/2022 19:00	7.0	87.1	8.1	86.3	21.2	0.0	M	100.1
8/27/2022 20:00	6.3	82.7	7.6	88.9	6.6	0.0	M	100.2
8/27/2022 21:00	6.2	80.7	6.9	90.8	0.9	0.0	M	100.2
8/27/2022 22:00	5.8	86.5	6.2	91.1	0.0	0.0	M	100.2
8/27/2022 23:00	4.9	89.1	5.4	92.0	0.0	0.0	M	100.3
8/28/2022 0:00	5.9	95.5	5.0	92.5	0.0	0.0	M	100.3
8/28/2022 1:00	5.3	82.9	5.1	91.4	0.0	0.0	M	100.3
8/28/2022 2:00	5.2	82.1	5.4	90.8	0.0	0.0	M	100.4
8/28/2022 3:00	6.1	77.6	5.3	91.0	0.0	0.0	M	100.4
8/28/2022 4:00	6.5	85.9	5.2	89.6	0.3	0.0	M	100.5
8/28/2022 5:00	5.7	78.7	5.0	89.8	7.6	0.0	M	100.5
8/28/2022 6:00	5.2	80.0	5.4	89.8	66.0	0.0	M	100.5
8/28/2022 7:00	6.5	72.3	5.7	91.5	71.8	0.0	M	100.5
8/28/2022 8:00	6.9	79.6	6.5	88.4	182.9	1.0	M	100.5
8/28/2022 9:00	7.4	90.4	7.5	83.1	292.7	1.0	M	100.5
8/28/2022 10:00	8.3	99.7	8.9	77.4	425.9	1.0	M	100.6
8/28/2022 11:00	10.4	98.1	9.4	71.1	460.3	1.0	M	100.6
8/28/2022 12:00	10.8	99.8	9.6	69.7	413.8	1.0	M	100.6
8/28/2022 13:00	9.9	102.0	9.4	72.5	218.2	1.0	M	100.6
8/28/2022 14:00	9.6	96.5	9.3	74.0	180.9	1.0	M	100.6
8/28/2022 15:00	9.4	92.0	9.2	74.0	172.1	1.0	M	100.7

8/28/2022 16:00	8.9	88.3	9.3	70.9	231.7	1.0	M	100.7
8/28/2022 17:00	9.0	87.5	9.0	72.5	81.7	0.0	M	100.7
8/28/2022 18:00	9.4	84.8	8.7	71.2	71.0	0.0	M	100.8
8/28/2022 19:00	7.6	81.0	8.3	72.5	24.9	0.0	M	100.8
8/28/2022 20:00	6.7	76.3	7.6	76.9	6.7	0.0	M	100.8
8/28/2022 21:00	6.4	77.1	7.2	79.2	1.2	0.0	M	100.8
8/28/2022 22:00	5.8	77.1	6.7	79.8	0.0	0.0	M	100.8
8/28/2022 23:00	6.8	85.2	6.9	79.4	0.0	0.0	M	100.8
8/29/2022 0:00	6.9	85.0	7.0	77.7	0.0	0.0	M	100.9
8/29/2022 1:00	6.9	87.5	6.9	78.0	0.0	0.0	M	100.9
8/29/2022 2:00	6.7	89.0	6.7	80.6	0.0	0.0	M	100.9
8/29/2022 3:00	6.0	90.3	6.3	85.2	0.0	0.0	M	100.9
8/29/2022 4:00	6.3	94.2	6.2	85.8	0.0	0.0	M	101.0
8/29/2022 5:00	6.0	98.7	6.3	84.4	1.8	0.0	M	101.0
8/29/2022 6:00	6.1	97.9	6.3	82.7	16.1	0.0	M	101.0
8/29/2022 7:00	5.5	86.3	6.4	82.0	46.1	0.0	M	101.0
8/29/2022 8:00	5.8	89.5	6.4	83.9	67.2	0.0	M	101.0
8/29/2022 9:00	4.9	92.8	6.7	84.0	110.9	0.0	M	101.0
8/29/2022 10:00	4.9	86.9	7.1	81.7	141.5	1.0	M	101.1
8/29/2022 11:00	5.2	87.8	7.9	77.8	179.4	1.0	M	101.1
8/29/2022 12:00	4.9	90.2	8.5	74.3	203.7	1.0	M	101.1
8/29/2022 13:00	5.3	103.6	9.2	71.9	270.1	1.0	M	101.1
8/29/2022 14:00	4.7	106.2	9.8	67.9	285.4	1.0	M	101.1
8/29/2022 15:00	6.6	103.9	10.0	66.0	282.5	1.0	M	101.1
8/29/2022 16:00	5.8	117.6	9.9	67.6	211.1	1.0	M	101.1
8/29/2022 17:00	5.4	111.8	10.2	66.3	354.8	1.0	M	101.1
8/29/2022 18:00	5.7	103.3	9.8	65.5	124.3	1.0	M	101.1
8/29/2022 19:00	4.3	86.0	9.1	72.4	25.4	0.0	M	101.2
8/29/2022 20:00	4.1	82.8	8.4	80.4	7.1	0.0	M	101.1
8/29/2022 21:00	4.2	76.5	8.0	84.1	0.4	0.0	M	101.1
8/29/2022 22:00	4.2	89.6	7.9	81.7	0.0	0.0	M	101.1
8/29/2022 23:00	5.7	101.6	7.5	83.1	0.0	0.0	M	101.1
8/30/2022 0:00	3.6	135.0	6.9	84.5	0.0	0.0	M	101.2
8/30/2022 1:00	2.9	124.5	6.5	85.3	0.0	0.0	M	101.2
8/30/2022 2:00	3.3	123.6	6.1	86.4	0.0	0.0	M	101.2
8/30/2022 3:00	3.3	131.5	5.7	88.7	0.0	0.0	M	101.2
8/30/2022 4:00	2.7	122.0	5.7	89.7	0.0	0.0	M	101.2
8/30/2022 5:00	2.3	91.8	5.7	89.8	3.6	0.0	M	101.2
8/30/2022 6:00	1.9	90.2	5.9	90.0	14.3	0.0	M	101.2
8/30/2022 7:00	2.2	96.1	6.5	89.2	59.5	0.0	M	101.2
8/30/2022 8:00	3.8	140.6	7.0	88.9	57.0	0.0	M	101.2
8/30/2022 9:00	4.5	150.3	7.6	88.4	129.7	1.0	M	101.1
8/30/2022 10:00	5.4	148.2	8.3	82.9	144.4	1.0	M	101.1
8/30/2022 11:00	5.9	143.6	9.1	73.4	204.7	1.0	M	101.1
8/30/2022 12:00	6.1	142.0	9.3	73.4	233.4	1.0	M	101.1
8/30/2022 13:00	6.2	144.2	9.3	72.9	246.0	1.0	M	101.1
8/30/2022 14:00	6.7	145.2	9.8	71.2	220.1	1.0	M	101.1
8/30/2022 15:00	6.1	150.9	10.0	65.5	137.1	1.0	M	101.0
8/30/2022 16:00	5.7	153.7	10.1	64.4	103.0	0.0	M	101.0
8/30/2022 17:00	6.6	166.6	10.3	62.9	129.5	1.0	M	101.0
8/30/2022 18:00	5.6	163.2	9.9	66.9	70.2	0.0	M	101.0
8/30/2022 19:00	5.1	149.4	9.7	71.7	82.3	0.0	M	100.9
8/30/2022 20:00	4.1	153.0	9.0	73.5	7.4	0.0	M	100.9
8/30/2022 21:00	3.2	154.9	8.4	75.7	0.2	0.0	M	101.0
8/30/2022 22:00	4.5	155.2	8.2	76.4	0.0	0.0	M	100.9
8/30/2022 23:00	5.1	157.9	7.8	76.3	0.0	0.0	M	100.8
8/31/2022 0:00	5.5	155.6	7.4	76.6	0.0	0.0	M	100.8
8/31/2022 1:00	5.2	148.5	6.7	80.9	0.0	0.0	M	100.8
8/31/2022 2:00	4.7	151.3	6.1	83.4	0.0	0.0	M	100.8
8/31/2022 3:00	5.0	147.2	6.2	84.0	0.0	0.0	M	100.8
8/31/2022 4:00	4.5	145.3	6.1	84.2	0.0	0.0	M	100.8
8/31/2022 5:00	4.3	146.2	5.9	84.4	3.5	0.0	M	100.7
8/31/2022 6:00	4.9	141.1	6.2	83.6	19.1	0.0	M	100.7
8/31/2022 7:00	4.8	138.6	6.8	82.8	56.9	0.0	M	100.7
8/31/2022 8:00	4.9	133.3	7.6	80.8	102.3	0.0	M	100.7
8/31/2022 9:00	6.0	135.0	8.7	73.2	332.1	1.0	M	100.7
8/31/2022 10:00	8.0	135.9	9.6	67.7	459.3	1.0	M	100.6
8/31/2022 11:00	8.3	148.3	10.2	62.9	497.0	1.0	M	100.6
8/31/2022 12:00	7.8	141.8	10.2	65.0	263.9	1.0	M	100.6
8/31/2022 13:00	7.5	142.4	10.3	64.0	235.4	1.0	M	100.6
8/31/2022 14:00	7.3	144.8	10.8	61.9	374.1	1.0	M	100.6
8/31/2022 15:00	6.6	142.4	11.1	59.9	298.7	1.0	M	100.6
8/31/2022 16:00	6.9	143.7	11.4	58.5	288.1	1.0	M	100.6
8/31/2022 17:00	7.3	147.7	11.7	56.9	363.1	1.0	M	100.5
8/31/2022 18:00	6.7	154.2	11.5	56.7	157.5	1.0	M	100.6
8/31/2022 19:00	4.9	137.7	10.5	67.2	45.7	0.0	M	100.6
8/31/2022 20:00	2.7	139.6	9.6	71.7	15.0	0.0	M	100.6
8/31/2022 21:00	2.1	152.5	9.0	74.2	0.2	0.0	M	100.6
8/31/2022 22:00	3.1	141.9	8.6	75.2	0.0	0.0	M	100.6
8/31/2022 23:00	4.6	150.6	8.1	74.6	0.0	0.0	M	100.6

9/1/2022 0:00	5.8	170.2	7.4	76.3	0.0	0.0	M	100.6
9/1/2022 1:00	5.8	168.0	6.7	78.8	0.0	0.0	M	100.6
9/1/2022 2:00	4.4	160.1	6.0	83.0	0.0	0.0	M	100.6
9/1/2022 3:00	3.4	143.3	5.5	85.6	0.0	0.0	M	100.6
9/1/2022 4:00	2.8	153.7	5.1	87.8	0.0	0.0	M	100.6
9/1/2022 5:00	2.7	159.8	4.8	86.7	3.3	0.0	M	100.6
9/1/2022 6:00	2.4	154.2	4.7	88.2	29.6	0.0	M	100.6
9/1/2022 7:00	3.9	154.2	4.9	87.4	89.4	0.0	M	100.6
9/1/2022 8:00	4.3	160.9	6.3	82.1	158.1	1.0	M	100.6
9/1/2022 9:00	4.4	168.5	7.9	74.1	244.3	1.0	M	100.6
9/1/2022 10:00	4.9	176.3	9.7	64.7	351.5	1.0	M	100.6
9/1/2022 11:00	4.8	181.5	10.6	59.5	432.1	1.0	M	100.5
9/1/2022 12:00	4.6	188.6	11.4	53.3	495.1	1.0	M	100.5
9/1/2022 13:00	3.9	200.4	12.1	48.6	481.2	1.0	M	100.5
9/1/2022 14:00	3.8	205.9	12.2	47.8	390.3	1.0	M	100.5
9/1/2022 15:00	4.0	209.1	12.5	46.0	360.0	1.0	M	100.5
9/1/2022 16:00	3.2	204.6	12.0	46.5	198.9	1.0	M	100.5
9/1/2022 17:00	2.9	264.7	11.5	50.5	146.1	1.0	M	100.5
9/1/2022 18:00	1.6	38.2	11.5	51.5	171.7	1.0	M	100.5
9/1/2022 19:00	1.1	104.4	11.0	56.8	76.7	0.0	M	100.4
9/1/2022 20:00	0.8	75.5	9.9	60.6	10.2	0.0	M	100.4
9/1/2022 21:00	1.0	45.9	8.5	65.1	0.2	0.0	M	100.4
9/1/2022 22:00	0.8	46.3	7.7	69.0	0.0	0.0	M	100.4
9/1/2022 23:00	0.8	64.7	6.6	76.7	0.0	0.0	M	100.4
9/2/2022 0:00	0.7	106.5	5.8	83.4	0.0	0.0	M	100.4
9/2/2022 1:00	0.5	113.5	4.8	85.0	0.0	0.0	M	100.4
9/2/2022 2:00	0.6	63.4	4.1	88.0	0.0	0.0	M	100.4
9/2/2022 3:00	0.5	95.4	3.8	89.6	0.0	0.0	M	100.3
9/2/2022 4:00	1.2	103.3	3.8	89.7	0.0	0.0	M	100.3
9/2/2022 5:00	0.7	142.6	4.0	87.6	3.0	0.0	M	100.4
9/2/2022 6:00	0.9	139.3	3.5	89.3	18.5	0.0	M	100.3
9/2/2022 7:00	1.1	120.2	5.3	85.6	116.8	0.0	M	100.3
9/2/2022 8:00	1.4	117.2	6.5	82.3	166.8	1.0	M	100.3
9/2/2022 9:00	1.7	124.4	8.8	77.1	311.5	1.0	M	100.3
9/2/2022 10:00	3.8	161.6	11.0	64.8	389.7	1.0	M	100.3
9/2/2022 11:00	4.1	146.4	11.8	60.0	422.1	1.0	M	100.2
9/2/2022 12:00	3.8	167.0	12.6	50.7	468.6	1.0	M	100.2
9/2/2022 13:00	3.6	175.4	13.1	47.7	492.0	1.0	M	100.2
9/2/2022 14:00	4.2	164.1	13.3	44.9	461.4	1.0	M	100.2
9/2/2022 15:00	5.1	186.6	13.6	44.6	444.1	1.0	M	100.2
9/2/2022 16:00	4.7	186.6	12.9	48.7	344.8	1.0	M	100.2
9/2/2022 17:00	4.8	200.8	12.2	52.3	223.3	1.0	M	100.2
9/2/2022 18:00	3.7	179.2	11.1	57.1	115.1	0.0	M	100.2
9/2/2022 19:00	2.7	182.6	10.7	59.7	62.0	0.0	M	100.2
9/2/2022 20:00	1.9	171.9	9.5	65.7	5.2	0.0	M	100.2
9/2/2022 21:00	0.9	152.6	9.1	69.9	0.1	0.0	M	100.2
9/2/2022 22:00	0.9	156.2	8.6	74.5	0.0	0.0	M	100.2
9/2/2022 23:00	0.8	91.1	7.3	78.0	0.0	0.0	M	100.2
9/3/2022 0:00	0.7	52.0	6.5	82.6	0.0	0.0	M	100.2
9/3/2022 1:00	1.1	54.9	6.5	82.7	0.0	0.0	M	100.2
9/3/2022 2:00	1.5	48.9	6.8	82.2	0.0	0.0	M	100.2
9/3/2022 3:00	1.5	62.8	7.0	83.1	0.0	0.0	M	100.2
9/3/2022 4:00	2.2	46.4	6.9	83.7	0.0	0.0	M	100.2
9/3/2022 5:00	2.3	57.0	6.6	85.5	1.1	0.0	M	100.2
9/3/2022 6:00	2.4	75.1	6.9	85.5	8.9	0.0	M	100.2
9/3/2022 7:00	2.3	62.0	7.0	84.7	28.5	0.0	M	100.2
9/3/2022 8:00	2.2	73.1	7.4	84.5	62.0	0.0	M	100.2
9/3/2022 9:00	2.0	123.2	8.5	82.9	93.7	0.0	M	100.2
9/3/2022 10:00	1.5	140.3	9.0	81.6	112.1	0.0	M	100.3
9/3/2022 11:00	2.0	144.0	9.4	80.4	102.2	0.0	M	100.3
9/3/2022 12:00	3.5	141.4	9.7	81.1	121.3	1.0	M	100.3
9/3/2022 13:00	2.7	143.2	10.4	78.5	141.7	1.0	M	100.3
9/3/2022 14:00	1.2	127.0	11.5	73.7	154.5	1.0	M	100.3
9/3/2022 15:00	0.6	74.5	12.7	69.8	153.8	1.0	M	100.2
9/3/2022 16:00	1.6	125.2	12.7	70.4	156.8	1.0	M	100.2
9/3/2022 17:00	2.9	110.1	12.3	72.3	84.5	0.0	M	100.2
9/3/2022 18:00	3.0	75.0	12.2	74.4	50.9	0.0	M	100.2
9/3/2022 19:00	2.4	70.1	11.8	75.3	18.3	0.0	M	100.2
9/3/2022 20:00	1.9	66.7	11.4	75.6	2.8	0.0	M	100.2
9/3/2022 21:00	1.6	57.6	11.0	78.0	0.0	0.0	M	100.2
9/3/2022 22:00	1.9	57.7	10.7	80.0	0.0	0.0	M	100.2
9/3/2022 23:00	1.9	55.2	10.3	82.7	0.0	0.0	M	100.1
9/4/2022 0:00	1.8	54.9	9.9	84.0	0.0	0.0	M	100.1
9/4/2022 1:00	1.3	61.8	9.2	86.1	0.0	0.0	M	100.1
9/4/2022 2:00	0.8	40.1	8.3	88.1	0.0	0.0	M	100.1
9/4/2022 3:00	1.6	49.0	7.2	90.2	0.0	0.0	M	100.1
9/4/2022 4:00	1.7	60.2	6.8	91.6	0.0	0.0	M	100.1
9/4/2022 5:00	2.3	64.5	6.6	92.2	5.1	0.0	M	100.1
9/4/2022 6:00	2.5	89.0	7.1	91.0	64.5	0.0	M	100.1
9/4/2022 7:00	2.3	78.8	7.3	91.1	83.7	0.0	M	100.1

9/4/2022 8:00	2.9	79.3	8.6	88.4	137.3	1.0	M	100.1
9/4/2022 9:00	4.4	96.4	10.7	80.2	296.2	1.0	M	100.1
9/4/2022 10:00	5.3	105.1	12.1	75.0	371.0	1.0	M	100.1
9/4/2022 11:00	6.0	96.1	13.9	69.5	425.1	1.0	M	100.0
9/4/2022 12:00	6.2	111.8	15.4	65.4	457.6	1.0	M	100.0
9/4/2022 13:00	6.3	118.2	16.9	61.2	464.3	1.0	M	100.0
9/4/2022 14:00	6.9	121.3	17.7	58.4	443.0	1.0	M	100.0
9/4/2022 15:00	7.3	121.4	18.0	57.5	397.1	1.0	M	100.0
9/4/2022 16:00	7.4	122.5	17.8	57.1	313.3	1.0	M	99.9
9/4/2022 17:00	7.3	115.6	17.3	57.7	203.2	1.0	M	99.9
9/4/2022 18:00	6.4	109.0	15.4	63.9	63.4	0.0	M	99.8
9/4/2022 19:00	6.9	106.2	14.4	67.1	28.2	0.0	M	99.8
9/4/2022 20:00	8.0	106.8	14.0	70.3	2.5	0.0	M	99.8
9/4/2022 21:00	7.8	114.3	13.5	72.6	0.0	0.0	M	99.8
9/4/2022 22:00	8.5	111.0	13.0	73.4	0.0	0.0	M	99.8
9/4/2022 23:00	8.4	112.2	12.7	72.7	0.0	0.0	M	99.7
9/5/2022 0:00	8.0	108.7	11.9	74.5	0.0	0.0	M	99.6
9/5/2022 1:00	8.5	109.4	11.7	74.8	0.0	0.0	M	99.6
9/5/2022 2:00	8.1	113.9	11.5	76.2	0.0	0.0	M	99.5
9/5/2022 3:00	7.0	118.8	11.4	79.6	0.0	0.0	M	99.4
9/5/2022 4:00	7.4	115.4	11.6	82.2	0.0	0.0	M	99.3
9/5/2022 5:00	7.8	115.7	11.3	89.3	0.0	0.0	M	99.3
9/5/2022 6:00	8.2	113.1	11.2	92.7	2.8	0.0	M	99.3
9/5/2022 7:00	8.3	116.3	11.3	93.3	7.2	0.0	M	99.2
9/5/2022 8:00	9.8	108.2	11.1	94.0	13.0	0.0	M	99.0
9/5/2022 9:00	10.9	113.9	11.3	93.5	68.2	0.0	M	98.9
9/5/2022 10:00	12.1	116.6	11.4	92.2	90.3	0.0	M	98.9
9/5/2022 11:00	10.9	120.6	11.6	91.3	118.0	0.0	M	98.9
9/5/2022 12:00	11.7	122.9	12.0	89.9	208.4	1.0	M	98.8
9/5/2022 13:00	9.1	121.4	12.0	89.7	131.2	1.0	M	98.8
9/5/2022 14:00	9.6	124.8	12.6	88.2	145.5	1.0	M	98.8
9/5/2022 15:00	9.9	130.5	12.6	88.2	144.2	1.0	M	98.7
9/5/2022 16:00	8.9	124.0	12.6	88.7	79.9	0.0	M	98.7
9/5/2022 17:00	9.4	123.6	12.4	89.3	55.3	0.0	M	98.7
9/5/2022 18:00	7.4	113.3	11.4	91.9	4.9	0.0	M	98.7
9/5/2022 19:00	5.9	109.5	10.6	93.4	2.7	0.0	M	98.7
9/5/2022 20:00	4.9	113.2	10.4	95.1	0.1	0.0	M	98.7
9/5/2022 21:00	2.9	115.2	10.4	95.7	0.0	0.0	M	98.5
9/5/2022 22:00	4.7	61.0	10.4	95.9	0.0	0.0	M	98.6
9/5/2022 23:00	2.8	103.4	10.2	96.1	0.0	0.0	M	98.6
9/6/2022 0:00	4.1	98.0	10.2	96.5	0.0	0.0	M	98.6
9/6/2022 1:00	3.3	87.0	10.1	96.8	0.0	0.0	M	98.5
9/6/2022 2:00	3.2	77.4	9.9	97.2	0.0	0.0	M	98.5
9/6/2022 3:00	3.4	82.5	9.8	97.5	0.0	0.0	M	98.5
9/6/2022 4:00	4.3	80.6	9.6	97.7	0.0	0.0	M	98.5
9/6/2022 5:00	3.4	79.8	9.4	97.8	0.8	0.0	M	98.4
9/6/2022 6:00	3.8	84.9	9.0	98.0	11.6	0.0	M	98.5
9/6/2022 7:00	3.2	80.9	9.1	98.1	49.0	0.0	M	98.5
9/6/2022 8:00	2.9	69.2	9.2	98.1	57.1	0.0	M	98.5
9/6/2022 9:00	2.3	75.7	9.2	98.1	35.7	0.0	M	98.5
9/6/2022 10:00	3.5	98.4	9.2	98.1	87.2	0.0	M	98.5
9/6/2022 11:00	2.7	125.6	9.9	98.2	128.2	1.0	M	98.6
9/6/2022 12:00	3.5	227.7	9.6	98.0	78.0	0.0	M	98.6
9/6/2022 13:00	5.5	275.7	8.3	97.7	52.0	0.0	M	98.6
9/6/2022 14:00	4.6	284.3	8.6	96.9	135.7	1.0	M	98.7
9/6/2022 15:00	4.6	281.4	8.9	95.7	158.8	1.0	M	98.6
9/6/2022 16:00	4.0	282.3	8.8	94.4	118.6	0.0	M	98.7
9/6/2022 17:00	3.5	283.0	8.5	94.4	70.7	0.0	M	98.7
9/6/2022 18:00	2.9	282.1	8.3	94.1	43.9	0.0	M	98.8
9/6/2022 19:00	2.8	16.9	7.9	96.1	10.2	0.0	M	98.8
9/6/2022 20:00	5.4	42.6	7.2	96.8	0.3	0.0	M	98.9
9/6/2022 21:00	5.8	36.7	6.8	97.2	0.0	0.0	M	98.9
9/6/2022 22:00	6.2	20.5	6.1	97.3	0.0	0.0	M	98.9
9/6/2022 23:00	6.5	2.2	5.5	97.7	0.0	0.0	M	98.9
9/7/2022 0:00	6.9	2.6	5.3	97.7	0.0	0.0	M	99.0
9/7/2022 1:00	8.6	354.7	5.0	95.9	0.0	0.0	M	98.9
9/7/2022 2:00	8.7	351.7	4.7	95.2	0.0	0.0	M	99.0
9/7/2022 3:00	7.6	341.2	4.4	95.2	0.0	0.0	M	99.0
9/7/2022 4:00	7.1	332.4	4.3	94.4	0.0	0.0	M	99.1
9/7/2022 5:00	8.4	325.7	4.2	92.7	0.1	0.0	M	99.1
9/7/2022 6:00	8.3	330.2	4.2	91.3	2.4	0.0	M	99.1
9/7/2022 7:00	9.6	328.5	4.0	92.7	9.3	0.0	M	99.1
9/7/2022 8:00	9.8	330.1	4.0	92.8	19.3	0.0	M	99.1
9/7/2022 9:00	10.4	329.1	4.3	91.6	33.8	0.0	M	99.1
9/7/2022 10:00	10.2	325.6	4.4	90.4	67.7	0.0	M	99.0
9/7/2022 11:00	10.3	324.4	4.4	90.7	74.1	0.0	M	99.1
9/7/2022 12:00	10.4	325.8	4.5	89.7	78.6	0.0	M	99.0
9/7/2022 13:00	11.3	322.7	4.6	88.4	75.2	0.0	M	99.0
9/7/2022 14:00	11.3	321.0	4.6	88.4	138.9	1.0	M	99.1
9/7/2022 15:00	10.3	318.7	4.2	88.2	65.5	0.0	M	99.1

9/7/2022 16:00	9.8	313.3	4.0	89.3	40.5	0.0	M	99.1
9/7/2022 17:00	9.7	317.2	4.3	91.2	18.2	0.0	M	99.1
9/7/2022 18:00	9.8	317.3	4.3	91.0	13.3	0.0	M	99.1
9/7/2022 19:00	10.3	319.6	4.3	92.0	3.8	0.0	M	99.1
9/7/2022 20:00	10.3	320.6	4.2	91.0	0.2	0.0	M	99.1
9/7/2022 21:00	9.6	320.2	4.0	92.8	0.0	0.0	M	99.1
9/7/2022 22:00	9.0	321.7	4.0	93.8	0.0	0.0	M	99.0
9/7/2022 23:00	8.3	325.4	4.0	92.8	0.0	0.0	M	99.1
9/8/2022 0:00	7.4	328.5	4.0	92.1	0.0	0.0	M	99.1
9/8/2022 1:00	7.2	329.3	4.0	93.2	0.0	0.0	M	99.1
9/8/2022 2:00	6.2	331.2	3.9	94.5	0.0	0.0	M	99.2
9/8/2022 3:00	6.4	329.0	4.0	95.8	0.0	0.0	M	99.2
9/8/2022 4:00	8.2	348.7	4.0	95.7	0.0	0.0	M	99.2
9/8/2022 5:00	8.6	349.3	4.1	94.8	0.0	0.0	M	99.2
9/8/2022 6:00	9.0	351.9	4.3	92.5	4.4	0.0	M	99.2
9/8/2022 7:00	8.9	359.3	4.2	93.0	13.6	0.0	M	99.3
9/8/2022 8:00	8.9	356.2	4.1	94.5	23.7	0.0	M	99.4
9/8/2022 9:00	9.1	353.9	4.0	94.9	37.9	0.0	M	99.4
9/8/2022 10:00	7.9	348.9	4.3	93.3	52.6	0.0	M	99.5
9/8/2022 11:00	8.3	350.6	4.5	93.0	68.4	0.0	M	99.5
9/8/2022 12:00	7.6	349.8	4.6	91.3	61.8	0.0	M	99.6
9/8/2022 13:00	6.4	340.9	4.8	89.5	65.2	0.0	M	99.7
9/8/2022 14:00	9.9	351.3	4.9	87.8	62.4	0.0	M	99.7
9/8/2022 15:00	8.5	345.8	5.0	87.9	64.4	0.0	M	99.7
9/8/2022 16:00	8.1	340.8	5.0	87.5	31.9	0.0	M	99.8
9/8/2022 17:00	7.7	335.5	4.8	86.8	13.3	0.0	M	99.9
9/8/2022 18:00	6.3	338.0	4.8	87.7	6.5	0.0	M	100.0
9/8/2022 19:00	6.9	338.4	4.6	87.4	2.6	0.0	M	100.0
9/8/2022 20:00	7.8	333.7	4.2	87.8	0.0	0.0	M	100.0
9/8/2022 21:00	9.7	346.7	3.9	87.9	0.0	0.0	M	100.0
9/8/2022 22:00	9.6	330.4	3.9	88.8	0.0	0.0	M	100.1
9/8/2022 23:00	9.1	329.6	3.8	89.2	0.0	0.0	M	100.1
9/9/2022 0:00	8.0	330.2	3.2	90.2	0.0	0.0	M	100.1
9/9/2022 1:00	8.0	342.6	2.8	88.2	0.0	0.0	M	100.1
9/9/2022 2:00	7.5	344.2	2.6	87.5	0.0	0.0	M	100.1
9/9/2022 3:00	5.7	326.0	2.5	87.2	0.0	0.0	M	100.2
9/9/2022 4:00	4.7	333.6	2.4	88.6	0.0	0.0	M	100.2
9/9/2022 5:00	6.6	340.9	2.3	88.9	0.5	0.0	M	100.2
9/9/2022 6:00	6.9	337.5	2.4	87.8	8.1	0.0	M	100.2
9/9/2022 7:00	7.1	327.0	2.5	87.3	10.7	0.0	M	100.2
9/9/2022 8:00	6.9	327.1	2.7	88.4	33.4	0.0	M	100.2
9/9/2022 9:00	6.1	333.2	2.8	88.6	66.0	0.0	M	100.2
9/9/2022 10:00	6.1	338.8	2.6	91.9	92.7	0.0	M	100.3
9/9/2022 11:00	6.8	325.8	2.7	92.6	126.2	1.0	M	100.3
9/9/2022 12:00	7.5	328.8	2.7	92.2	120.5	1.0	M	100.3
9/9/2022 13:00	6.4	329.5	2.8	92.8	129.3	1.0	M	100.3
9/9/2022 14:00	7.4	328.4	2.9	90.8	111.9	0.0	M	100.3
9/9/2022 15:00	7.6	327.2	3.2	85.6	100.9	0.0	M	100.3
9/9/2022 16:00	7.6	320.5	3.4	85.0	64.8	0.0	M	100.3
9/9/2022 17:00	7.5	319.3	3.4	84.2	38.1	0.0	M	100.3
9/9/2022 18:00	6.7	319.2	3.4	83.9	21.6	0.0	M	100.3
9/9/2022 19:00	6.8	318.4	3.4	84.4	13.0	0.0	M	100.3
9/9/2022 20:00	5.9	317.0	3.3	84.3	1.3	0.0	M	100.2
9/9/2022 21:00	6.3	319.5	3.0	88.2	0.0	0.0	M	100.2
9/9/2022 22:00	4.8	309.5	2.9	90.6	0.0	0.0	M	100.1
9/9/2022 23:00	5.3	302.8	2.4	95.4	0.0	0.0	M	100.1
9/10/2022 0:00	6.0	316.6	2.3	96.7	0.0	0.0	M	100.1
9/10/2022 1:00	5.0	309.8	2.3	95.9	0.0	0.0	M	100.1
9/10/2022 2:00	4.9	306.2	2.1	95.1	0.0	0.0	M	100.1
9/10/2022 3:00	5.8	302.3	2.0	95.0	0.0	0.0	M	100.1
9/10/2022 4:00	6.1	301.9	2.0	95.6	0.0	0.0	M	100.0
9/10/2022 5:00	6.0	305.9	2.1	95.3	0.2	0.0	M	99.9
9/10/2022 6:00	5.1	303.7	2.0	95.8	8.3	0.0	M	99.9
9/10/2022 7:00	5.2	303.7	2.1	96.6	33.8	0.0	M	99.8
9/10/2022 8:00	5.1	302.3	2.2	97.2	61.4	0.0	M	99.8
9/10/2022 9:00	5.2	304.9	2.7	95.8	95.9	0.0	M	99.8
9/10/2022 10:00	5.0	298.8	3.0	96.2	146.3	1.0	M	99.7
9/10/2022 11:00	5.6	291.6	3.4	94.9	172.1	1.0	M	99.7
9/10/2022 12:00	5.6	293.0	3.8	92.8	196.1	1.0	M	99.7
9/10/2022 13:00	5.7	298.1	4.2	90.0	167.6	1.0	M	99.7
9/10/2022 14:00	5.7	291.4	4.5	90.7	146.5	1.0	M	99.7
9/10/2022 15:00	5.2	295.5	4.6	91.0	108.3	0.0	M	99.6
9/10/2022 16:00	5.0	297.0	4.5	93.3	75.3	0.0	M	99.6
9/10/2022 17:00	4.6	296.0	4.4	95.5	53.2	0.0	M	99.6
9/10/2022 18:00	4.3	314.5	4.4	95.9	20.5	0.0	M	99.6
9/10/2022 19:00	4.9	322.4	4.1	94.8	5.1	0.0	M	99.6
9/10/2022 20:00	4.8	324.2	4.0	95.1	0.4	0.0	M	99.6
9/10/2022 21:00	3.9	326.0	4.1	94.3	0.0	0.0	M	99.6
9/10/2022 22:00	3.7	326.4	4.0	94.2	0.0	0.0	M	99.6
9/10/2022 23:00	4.1	323.9	3.9	93.7	0.0	0.0	M	99.6

9/11/2022 0:00	4.2	337.7	3.8	93.5	0.0	0.0	M	99.6
9/11/2022 1:00	3.9	334.3	3.7	93.7	0.0	0.0	M	99.6
9/11/2022 2:00	4.9	329.6	3.4	94.2	0.0	0.0	M	99.6
9/11/2022 3:00	5.7	327.5	3.3	92.8	0.0	0.0	M	99.6
9/11/2022 4:00	5.8	324.4	3.1	94.3	0.0	0.0	M	99.7
9/11/2022 5:00	5.6	325.5	2.9	95.6	0.0	0.0	M	99.8
9/11/2022 6:00	5.6	329.3	2.9	95.7	3.9	0.0	M	99.8
9/11/2022 7:00	5.0	330.4	3.0	94.1	16.8	0.0	M	99.8
9/11/2022 8:00	5.4	344.6	2.9	92.6	28.6	0.0	M	99.9
9/11/2022 9:00	5.7	341.4	2.5	92.9	64.7	0.0	M	100.0
9/11/2022 10:00	6.2	342.1	2.4	92.8	127.5	1.0	M	100.0
9/11/2022 11:00	6.0	337.9	2.8	91.1	171.5	1.0	M	100.1
9/11/2022 12:00	6.2	332.2	2.9	88.2	116.5	0.0	M	100.1
9/11/2022 13:00	7.0	330.1	2.8	90.0	122.4	1.0	M	100.2
9/11/2022 14:00	7.4	326.2	2.9	90.8	148.8	1.0	M	100.3
9/11/2022 15:00	7.4	323.7	2.7	91.3	99.0	0.0	M	100.3
9/11/2022 16:00	7.3	323.7	2.8	90.1	50.7	0.0	M	100.4
9/11/2022 17:00	6.2	328.5	3.0	88.7	49.0	0.0	M	100.4
9/11/2022 18:00	6.2	326.8	2.8	88.5	18.8	0.0	M	100.4
9/11/2022 19:00	6.6	329.8	2.4	83.9	4.1	0.0	M	100.5
9/11/2022 20:00	6.2	321.9	1.9	87.3	0.5	0.0	M	100.6
9/11/2022 21:00	5.8	320.9	1.8	87.6	0.0	0.0	M	100.6
9/11/2022 22:00	6.4	324.7	1.7	85.0	0.0	0.0	M	100.7
9/11/2022 23:00	5.4	327.7	1.8	82.7	0.0	0.0	M	100.7
9/12/2022 0:00	4.7	312.1	1.8	84.5	0.0	0.0	M	100.7
9/12/2022 1:00	3.8	306.2	1.6	87.0	0.0	0.0	M	100.8
9/12/2022 2:00	4.1	306.6	1.7	87.9	0.0	0.0	M	100.8
9/12/2022 3:00	3.5	313.8	1.8	87.3	0.0	0.0	M	100.8
9/12/2022 4:00	2.6	300.0	1.9	89.3	0.0	0.0	M	100.8
9/12/2022 5:00	2.3	296.9	2.3	86.8	0.0	0.0	M	100.8
9/12/2022 6:00	2.1	266.6	2.5	86.8	3.3	0.0	M	100.8
9/12/2022 7:00	3.0	220.0	2.4	91.8	18.6	0.0	M	100.8
9/12/2022 8:00	3.7	232.6	3.2	90.8	47.3	0.0	M	100.7
9/12/2022 9:00	5.6	265.9	4.2	84.2	100.9	0.0	M	100.7
9/12/2022 10:00	6.3	258.1	4.3	83.3	140.8	1.0	M	100.7
9/12/2022 11:00	7.1	265.2	4.7	78.9	261.7	1.0	M	100.6
9/12/2022 12:00	6.8	270.8	5.0	76.2	267.7	1.0	M	100.6
9/12/2022 13:00	5.8	270.4	5.0	76.7	178.2	1.0	M	100.6
9/12/2022 14:00	6.5	280.3	5.2	78.4	183.3	1.0	M	100.6
9/12/2022 15:00	7.4	276.0	5.0	77.1	129.8	1.0	M	100.6
9/12/2022 16:00	6.8	272.2	4.3	81.5	85.9	0.0	M	100.6
9/12/2022 17:00	5.7	268.5	4.4	81.5	74.0	0.0	M	100.5
9/12/2022 18:00	4.3	267.2	3.8	89.4	25.6	0.0	M	100.5
9/12/2022 19:00	4.9	261.3	4.1	86.0	10.1	0.0	M	100.5
9/12/2022 20:00	4.2	247.0	3.7	87.7	0.2	0.0	M	100.5
9/12/2022 21:00	4.1	247.8	3.6	88.4	0.0	0.0	M	100.4
9/12/2022 22:00	4.1	262.0	3.9	85.7	0.0	0.0	M	100.4
9/12/2022 23:00	3.1	219.2	3.3	90.2	0.0	0.0	M	100.3
9/13/2022 0:00	2.7	207.3	3.4	90.6	0.0	0.0	M	100.3
9/13/2022 1:00	1.2	256.8	3.4	92.4	0.0	0.0	M	100.3
9/13/2022 2:00	2.7	208.5	3.3	92.3	0.0	0.0	M	100.2
9/13/2022 3:00	2.7	218.8	3.3	91.8	0.0	0.0	M	100.2
9/13/2022 4:00	2.5	263.2	3.2	93.7	0.0	0.0	M	100.2
9/13/2022 5:00	2.3	239.2	3.0	95.8	0.0	0.0	M	100.2
9/13/2022 6:00	4.1	263.1	2.9	92.9	2.3	0.0	M	100.2
9/13/2022 7:00	5.9	269.0	3.5	84.9	27.0	0.0	M	100.1
9/13/2022 8:00	6.1	268.9	3.7	86.6	58.5	0.0	M	100.1
9/13/2022 9:00	6.1	267.6	3.8	87.5	73.6	0.0	M	100.1
9/13/2022 10:00	6.0	277.6	4.1	86.5	116.7	0.0	M	100.1
9/13/2022 11:00	6.3	276.0	4.9	79.0	340.0	1.0	M	100.1
9/13/2022 12:00	7.9	278.2	3.9	82.1	238.7	1.0	M	100.2
9/13/2022 13:00	7.9	286.7	3.5	81.6	248.6	1.0	M	100.2
9/13/2022 14:00	7.6	294.1	3.9	80.1	353.2	1.0	M	100.3
9/13/2022 15:00	6.9	305.1	4.1	80.4	315.2	1.0	M	100.3
9/13/2022 16:00	5.7	301.9	3.8	78.8	165.9	1.0	M	100.3
9/13/2022 17:00	5.0	310.8	3.6	80.9	113.2	0.0	M	100.4
9/13/2022 18:00	3.5	326.6	3.1	84.1	37.5	0.0	M	100.4
9/13/2022 19:00	3.2	307.0	2.9	83.7	7.6	0.0	M	100.5
9/13/2022 20:00	2.5	305.3	2.9	83.7	0.2	0.0	M	100.5
9/13/2022 21:00	2.0	283.0	2.6	83.6	0.0	0.0	M	100.5
9/13/2022 22:00	0.6	196.4	2.3	84.8	0.0	0.0	M	100.5
9/13/2022 23:00	1.7	198.2	2.2	86.2	0.0	0.0	M	100.5
9/14/2022 0:00	0.8	235.5	1.8	90.9	0.0	0.0	M	100.5
9/14/2022 1:00	1.0	304.2	1.6	92.7	0.0	0.0	M	100.5
9/14/2022 2:00	0.8	263.6	1.5	92.5	0.0	0.0	M	100.5
9/14/2022 3:00	0.7	77.7	1.4	93.1	0.0	0.0	M	100.5
9/14/2022 4:00	1.4	195.4	1.1	94.0	0.0	0.0	M	100.5
9/14/2022 5:00	0.8	257.0	0.8	94.1	0.0	0.0	M	100.5
9/14/2022 6:00	0.9	313.0	0.9	94.0	2.3	0.0	M	100.5
9/14/2022 7:00	1.5	73.9	1.0	96.6	32.1	0.0	M	100.4

9/14/2022 8:00	0.9	237.3	1.5	95.2	78.7	0.0	M	100.5
9/14/2022 9:00	2.3	308.9	2.6	90.1	247.3	1.0	M	100.5
9/14/2022 10:00	3.0	329.7	2.9	85.2	279.2	1.0	M	100.5
9/14/2022 11:00	4.1	327.6	2.8	82.2	272.6	1.0	M	100.5
9/14/2022 12:00	4.6	324.8	2.3	83.1	198.3	1.0	M	100.5
9/14/2022 13:00	4.5	323.3	2.4	80.4	220.0	1.0	M	100.5
9/14/2022 14:00	4.2	315.8	2.8	77.3	226.2	1.0	M	100.6
9/14/2022 15:00	4.5	316.5	2.8	84.2	183.5	1.0	M	100.6
9/14/2022 16:00	4.8	325.3	3.1	80.6	186.4	1.0	M	100.6
9/14/2022 17:00	4.0	340.5	3.1	81.4	203.7	1.0	M	100.6
9/14/2022 18:00	5.3	320.8	3.2	74.5	74.6	0.0	M	100.7
9/14/2022 19:00	4.0	312.0	2.4	80.9	9.9	0.0	M	100.7
9/14/2022 20:00	2.6	298.6	1.4	86.5	0.4	0.0	M	100.7
9/14/2022 21:00	3.6	295.1	1.5	85.9	0.0	0.0	M	100.8
9/14/2022 22:00	5.4	295.1	2.1	83.3	0.0	0.0	M	100.8
9/14/2022 23:00	6.0	297.2	2.0	84.9	0.0	0.0	M	100.8
9/15/2022 0:00	6.8	296.5	2.1	87.3	0.0	0.0	M	100.8
9/15/2022 1:00	6.6	293.9	2.5	90.2	0.0	0.0	M	100.8
9/15/2022 2:00	6.5	300.0	2.6	91.5	0.0	0.0	M	100.9
9/15/2022 3:00	5.0	304.2	2.1	93.9	0.0	0.0	M	101.0
9/15/2022 4:00	5.4	306.3	2.1	94.5	0.0	0.0	M	101.0
9/15/2022 5:00	4.7	308.4	2.2	93.7	0.0	0.0	M	101.0
9/15/2022 6:00	4.7	308.2	2.3	93.3	3.0	0.0	M	101.1
9/15/2022 7:00	4.5	306.5	2.4	93.0	19.5	0.0	M	101.1
9/15/2022 8:00	4.7	302.7	2.5	92.2	50.4	0.0	M	101.2
9/15/2022 9:00	4.8	304.7	2.6	91.2	83.7	0.0	M	101.2
9/15/2022 10:00	4.4	320.8	2.9	90.3	119.1	0.0	M	101.2
9/15/2022 11:00	3.6	322.4	2.8	90.4	121.8	1.0	M	101.3
9/15/2022 12:00	3.4	310.8	2.4	93.5	141.0	1.0	M	101.3
9/15/2022 13:00	3.1	302.0	2.4	93.3	150.4	1.0	M	101.3
9/15/2022 14:00	3.1	294.7	2.5	93.0	147.4	1.0	M	101.4
9/15/2022 15:00	2.4	295.1	2.5	93.2	161.7	1.0	M	101.4
9/15/2022 16:00	1.7	335.5	2.5	93.6	90.8	0.0	M	101.4
9/15/2022 17:00	1.5	287.4	2.2	94.2	54.4	0.0	M	101.4
9/15/2022 18:00	1.8	241.1	1.9	94.7	36.5	0.0	M	101.4
9/15/2022 19:00	1.4	334.0	1.5	96.1	4.1	0.0	M	101.5
9/15/2022 20:00	1.5	86.4	1.3	96.7	0.0	0.0	M	101.5
9/15/2022 21:00	1.4	125.7	1.3	97.5	0.0	0.0	M	101.4
9/15/2022 22:00	2.8	91.1	1.0	98.2	0.0	0.0	M	101.5
9/15/2022 23:00	2.9	72.0	0.7	98.8	0.0	0.0	M	101.5
9/16/2022 0:00	3.6	91.5	0.8	99.1	0.0	0.0	M	101.5
9/16/2022 1:00	4.2	80.0	0.6	99.3	0.0	0.0	M	101.5
9/16/2022 2:00	4.5	82.6	0.7	99.5	0.0	0.0	M	101.5
9/16/2022 3:00	4.7	86.7	0.3	99.7	0.0	0.0	M	101.5
9/16/2022 4:00	5.0	89.1	0.0	99.9	0.0	0.0	M	101.4
9/16/2022 5:00	5.4	86.1	-0.2	100.0	0.1	0.0	M	101.3
9/16/2022 6:00	5.9	84.0	-0.4	100.0	10.4	0.0	M	101.3
9/16/2022 7:00	6.6	86.3	-0.3	100.0	50.8	0.0	M	101.5
9/16/2022 8:00	7.3	86.9	0.2	99.7	97.7	0.0	M	101.5
9/16/2022 9:00	7.9	87.7	0.9	99.0	148.7	1.0	M	101.3
9/16/2022 10:00	8.3	86.0	1.7	97.4	203.5	1.0	M	101.2
9/16/2022 11:00	9.3	89.2	2.4	95.8	279.0	1.0	M	101.1
9/16/2022 12:00	9.9	92.1	3.3	93.9	268.3	1.0	M	101.1
9/16/2022 13:00	10.5	95.5	4.4	88.9	275.7	1.0	M	101.0
9/16/2022 14:00	11.2	85.6	5.4	84.7	368.0	1.0	M	100.9
9/16/2022 15:00	11.3	79.7	5.7	83.1	282.4	1.0	M	100.9
9/16/2022 16:00	11.1	79.7	5.1	85.9	132.0	1.0	M	100.8
9/16/2022 17:00	11.6	74.3	3.8	93.0	43.8	0.0	M	100.8
9/16/2022 18:00	11.8	76.3	2.8	97.1	17.4	0.0	M	100.8
9/16/2022 19:00	11.4	80.9	2.7	97.0	2.1	0.0	M	100.8
9/16/2022 20:00	12.1	82.9	2.8	97.1	0.0	0.0	M	100.7
9/16/2022 21:00	11.7	85.2	3.1	95.3	0.0	0.0	M	100.7
9/16/2022 22:00	11.5	83.6	3.5	93.8	0.0	0.0	M	100.6
9/16/2022 23:00	10.7	82.3	3.4	93.7	0.0	0.0	M	100.5
9/17/2022 0:00	10.4	80.9	3.5	93.4	0.0	0.0	M	100.5
9/17/2022 1:00	10.7	82.2	3.5	93.3	0.0	0.0	M	100.4
9/17/2022 2:00	11.3	85.0	3.6	93.5	0.0	0.0	M	100.4
9/17/2022 3:00	11.2	87.9	3.7	94.1	0.0	0.0	M	100.3
9/17/2022 4:00	10.5	90.2	3.7	94.2	0.0	0.0	M	100.3
9/17/2022 5:00	9.0	87.0	3.5	94.4	0.0	0.0	M	100.2
9/17/2022 6:00	9.5	85.6	3.5	94.7	0.4	0.0	M	100.2
9/17/2022 7:00	7.1	101.2	3.6	95.4	3.2	0.0	M	100.2
9/17/2022 8:00	4.8	98.7	3.4	96.8	8.0	0.0	M	100.2
9/17/2022 9:00	3.6	92.4	3.3	97.5	9.9	0.0	M	100.2
9/17/2022 10:00	2.5	92.5	3.3	97.5	32.6	0.0	M	100.2
9/17/2022 11:00	1.6	95.5	3.6	96.2	119.1	0.0	M	100.1
9/17/2022 12:00	0.5	114.6	4.2	94.3	135.0	1.0	M	100.1
9/17/2022 13:00	1.5	280.9	4.5	95.5	91.7	0.0	M	100.1
9/17/2022 14:00	3.5	260.8	4.7	96.4	118.5	0.0	M	100.1
9/17/2022 15:00	6.3	263.3	4.7	96.9	78.7	0.0	M	100.0

9/17/2022 16:00	7.0	258.9	4.6	96.3	42.0	0.0	M	100.0
9/17/2022 17:00	6.1	262.7	4.5	96.3	18.5	0.0	M	100.0
9/17/2022 18:00	6.7	265.2	4.7	96.2	8.3	0.0	M	100.0
9/17/2022 19:00	7.2	264.2	4.5	97.2	2.2	0.0	M	100.0
9/17/2022 20:00	2.8	315.8	3.9	97.6	0.0	0.0	M	100.0
9/17/2022 21:00	1.6	20.1	3.1	98.2	0.0	0.0	M	99.9
9/17/2022 22:00	2.1	9.2	3.0	98.5	0.0	0.0	M	99.9
9/17/2022 23:00	2.9	2.4	2.6	98.7	0.0	0.0	M	99.9
9/18/2022 0:00	3.2	328.5	2.3	98.8	0.0	0.0	M	100.0
9/18/2022 1:00	4.0	311.1	1.7	97.4	0.0	0.0	M	100.0
9/18/2022 2:00	3.3	297.3	1.5	95.5	0.0	0.0	M	100.0
9/18/2022 3:00	3.4	298.7	1.4	94.6	0.0	0.0	M	100.0
9/18/2022 4:00	3.5	300.2	1.3	94.4	0.0	0.0	M	100.1
9/18/2022 5:00	4.0	301.4	1.1	94.6	0.0	0.0	M	100.1
9/18/2022 6:00	4.3	304.6	1.1	93.8	2.0	0.0	M	100.1
9/18/2022 7:00	5.0	301.8	1.1	94.5	19.4	0.0	M	100.1
9/18/2022 8:00	5.1	301.4	1.2	94.4	48.4	0.0	M	100.2
9/18/2022 9:00	4.9	300.5	1.5	92.8	69.0	0.0	M	100.2
9/18/2022 10:00	5.2	301.8	1.8	92.3	95.9	0.0	M	100.2
9/18/2022 11:00	4.9	306.6	2.2	92.1	150.3	1.0	M	100.3
9/18/2022 12:00	4.1	311.8	2.9	87.4	225.4	1.0	M	100.3
9/18/2022 13:00	3.9	326.1	3.4	83.9	306.8	1.0	M	100.4
9/18/2022 14:00	3.4	327.2	3.2	88.2	194.5	1.0	M	100.5
9/18/2022 15:00	3.8	14.8	3.4	84.8	136.4	1.0	M	100.5
9/18/2022 16:00	3.7	12.8	3.4	85.2	82.4	0.0	M	100.5
9/18/2022 17:00	4.1	11.3	3.1	87.6	40.4	0.0	M	100.6
9/18/2022 18:00	3.9	24.1	2.8	89.7	17.7	0.0	M	100.6
9/18/2022 19:00	3.3	48.8	2.8	88.7	2.7	0.0	M	100.7
9/18/2022 20:00	3.5	53.3	2.5	90.7	0.0	0.0	M	100.7
9/18/2022 21:00	3.3	53.0	2.1	93.1	0.0	0.0	M	100.8
9/18/2022 22:00	4.0	59.7	1.8	93.3	0.0	0.0	M	100.8
9/18/2022 23:00	3.8	65.5	1.6	92.4	0.0	0.0	M	100.9
9/19/2022 0:00	3.1	67.9	1.4	92.6	0.0	0.0	M	100.9
9/19/2022 1:00	2.7	67.7	1.3	92.2	0.0	0.0	M	101.0
9/19/2022 2:00	3.0	69.0	1.3	93.5	0.0	0.0	M	101.0
9/19/2022 3:00	4.2	68.6	1.3	93.7	0.0	0.0	M	101.0
9/19/2022 4:00	4.5	70.7	1.0	94.9	0.0	0.0	M	101.1
9/19/2022 5:00	5.0	73.6	0.9	95.5	0.0	0.0	M	101.1
9/19/2022 6:00	5.5	70.8	0.8	95.8	1.8	0.0	M	101.1
9/19/2022 7:00	6.1	70.6	0.6	96.1	13.6	0.0	M	101.1
9/19/2022 8:00	5.5	75.6	0.8	95.6	44.2	0.0	M	101.1
9/19/2022 9:00	6.0	81.7	1.0	93.6	79.9	0.0	M	101.1
9/19/2022 10:00	5.8	82.7	1.2	93.2	104.2	0.0	M	101.2
9/19/2022 11:00	5.6	82.3	1.4	92.8	170.2	1.0	M	101.2
9/19/2022 12:00	5.4	88.4	1.9	90.2	189.6	1.0	M	101.2
9/19/2022 13:00	5.6	79.8	2.0	89.3	157.2	1.0	M	101.2
9/19/2022 14:00	5.4	81.8	2.3	87.4	170.6	1.0	M	101.1
9/19/2022 15:00	6.3	71.6	2.5	86.8	140.1	1.0	M	101.1
9/19/2022 16:00	6.4	73.5	2.1	89.4	89.5	0.0	M	101.2
9/19/2022 17:00	6.7	69.7	1.7	89.5	82.5	0.0	M	101.2
9/19/2022 18:00	6.1	69.0	1.5	88.2	48.7	0.0	M	101.2
9/19/2022 19:00	5.9	67.6	1.1	89.2	4.7	0.0	M	101.2
9/19/2022 20:00	5.8	71.3	0.7	91.2	0.0	0.0	M	101.2
9/19/2022 21:00	5.6	72.5	0.5	93.0	0.0	0.0	M	101.2
9/19/2022 22:00	5.4	70.8	0.3	94.7	0.0	0.0	M	101.2
9/19/2022 23:00	4.6	76.8	0.2	97.4	0.0	0.0	M	101.2
9/20/2022 0:00	4.6	72.3	0.0	98.4	0.0	0.0	M	101.2
9/20/2022 1:00	4.9	65.8	-0.3	99.0	0.0	0.0	M	101.2
9/20/2022 2:00	4.6	67.9	-0.3	99.3	0.0	0.0	M	101.2
9/20/2022 3:00	4.1	79.4	-0.3	99.4	0.0	0.0	M	101.2
9/20/2022 4:00	4.3	57.4	-0.5	99.3	0.0	0.0	M	101.2
9/20/2022 5:00	3.9	63.8	-0.7	99.1	0.0	0.0	M	101.3
9/20/2022 6:00	3.4	72.1	-0.7	98.4	3.0	0.0	M	101.2
9/20/2022 7:00	3.6	64.9	-0.7	97.5	24.8	0.0	M	101.3
9/20/2022 8:00	3.6	93.7	-0.7	96.6	76.4	0.0	M	101.3
9/20/2022 9:00	3.0	93.3	-0.6	96.0	131.5	1.0	M	101.5
9/20/2022 10:00	3.1	70.5	-0.7	96.3	136.8	1.0	M	101.4
9/20/2022 11:00	2.2	81.0	-0.1	95.1	180.8	1.0	M	101.5
9/20/2022 12:00	1.1	63.2	0.5	92.2	249.5	1.0	M	101.2
9/20/2022 13:00	1.8	22.8	0.6	92.0	129.7	1.0	M	101.2
9/20/2022 14:00	2.3	35.5	0.8	90.1	165.3	1.0	M	101.3
9/20/2022 15:00	1.8	58.8	1.4	84.9	139.3	1.0	M	101.3
9/20/2022 16:00	1.5	44.7	1.5	84.0	63.2	0.0	M	101.2
9/20/2022 17:00	2.3	49.5	1.5	84.0	43.0	0.0	M	101.2
9/20/2022 18:00	3.7	52.0	1.3	85.9	17.2	0.0	M	101.2
9/20/2022 19:00	3.5	58.6	0.9	87.4	1.8	0.0	M	101.2
9/20/2022 20:00	3.6	71.1	0.4	94.4	0.0	0.0	M	101.2
9/20/2022 21:00	3.5	68.7	0.0	95.4	0.0	0.0	M	101.2
9/20/2022 22:00	3.0	82.4	0.0	94.2	0.0	0.0	M	101.2
9/20/2022 23:00	3.1	94.0	0.1	94.9	0.0	0.0	M	101.1

9/21/2022 0:00	3.0	90.4	0.0	95.2	0.0	0.0	M	101.1
9/21/2022 1:00	2.8	95.2	0.2	96.7	0.0	0.0	M	101.1
9/21/2022 2:00	4.1	73.2	0.1	96.7	0.0	0.0	M	101.0
9/21/2022 3:00	4.7	81.2	0.1	96.3	0.0	0.0	M	101.0
9/21/2022 4:00	5.2	85.8	0.0	95.2	0.0	0.0	M	100.9
9/21/2022 5:00	6.3	89.1	0.0	94.5	0.0	0.0	M	100.8
9/21/2022 6:00	6.5	93.7	0.2	94.3	1.3	0.0	M	100.8
9/21/2022 7:00	6.5	100.4	0.5	94.9	4.4	0.0	M	100.7
9/21/2022 8:00	7.3	99.6	0.8	95.0	34.2	0.0	M	100.6
9/21/2022 9:00	7.6	105.0	1.0	94.5	67.2	0.0	M	100.6
9/21/2022 10:00	6.9	105.3	1.3	94.8	50.2	0.0	M	100.4
9/21/2022 11:00	7.5	98.8	1.6	95.7	58.3	0.0	M	100.3
9/21/2022 12:00	7.1	92.1	1.8	96.3	38.9	0.0	M	100.3
9/21/2022 13:00	6.4	78.1	2.0	96.2	42.8	0.0	M	100.1
9/21/2022 14:00	6.7	72.0	2.3	96.4	46.9	0.0	M	100.1
9/21/2022 15:00	5.6	64.8	2.5	96.4	42.0	0.0	M	100.1
9/21/2022 16:00	4.8	53.8	2.4	97.2	15.4	0.0	M	100.0
9/21/2022 17:00	4.8	56.2	2.5	97.9	14.5	0.0	M	100.0
9/21/2022 18:00	4.8	56.8	2.4	98.1	6.1	0.0	M	100.1
9/21/2022 19:00	5.2	59.0	2.3	98.5	0.5	0.0	M	100.0
9/21/2022 20:00	5.4	70.8	2.2	98.8	0.0	0.0	M	100.0
9/21/2022 21:00	5.7	71.1	2.0	98.8	0.0	0.0	M	100.0
9/21/2022 22:00	4.8	75.5	2.0	98.6	0.0	0.0	M	99.9
9/21/2022 23:00	5.1	74.4	2.0	98.3	0.0	0.0	M	99.9
9/22/2022 0:00	4.5	84.3	2.1	98.0	0.0	0.0	M	99.9
9/22/2022 1:00	5.4	82.0	2.1	97.7	0.0	0.0	M	99.8
9/22/2022 2:00	5.7	73.3	2.0	98.1	0.0	0.0	M	99.8
9/22/2022 3:00	6.1	71.8	1.8	98.7	0.0	0.0	M	99.8
9/22/2022 4:00	5.3	77.3	1.6	98.9	0.0	0.0	M	99.8
9/22/2022 5:00	5.8	81.8	1.5	98.7	0.0	0.0	M	99.8
9/22/2022 6:00	5.9	79.8	1.3	98.2	0.3	0.0	M	99.8
9/22/2022 7:00	5.4	78.0	0.8	98.7	6.0	0.0	M	99.9
9/22/2022 8:00	5.5	74.8	0.8	98.8	24.7	0.0	M	99.9
9/22/2022 9:00	6.0	74.1	0.8	98.7	47.6	0.0	M	99.9
9/22/2022 10:00	5.7	80.0	1.0	96.9	78.7	0.0	M	99.9
9/22/2022 11:00	5.8	87.1	1.2	95.4	76.0	0.0	M	99.9
9/22/2022 12:00	5.5	88.9	1.4	93.8	135.9	1.0	M	99.9
9/22/2022 13:00	5.7	112.4	2.0	92.7	245.0	1.0	M	99.9
9/22/2022 14:00	5.5	107.2	2.1	91.2	121.8	1.0	M	99.9
9/22/2022 15:00	6.0	93.0	2.0	89.6	63.5	0.0	M	99.9
9/22/2022 16:00	6.7	98.8	1.9	90.0	57.2	0.0	M	99.9
9/22/2022 17:00	7.1	99.1	1.7	88.4	23.1	0.0	M	99.8
9/22/2022 18:00	7.1	105.5	1.6	87.5	9.8	0.0	M	99.8
9/22/2022 19:00	7.7	106.0	1.3	86.7	0.7	0.0	M	99.7
9/22/2022 20:00	9.1	108.2	0.8	86.3	0.0	0.0	M	99.7
9/22/2022 21:00	9.3	103.4	0.4	88.9	0.0	0.0	M	99.6
9/22/2022 22:00	10.6	103.5	0.2	89.7	0.0	0.0	M	99.5
9/22/2022 23:00	10.4	103.5	0.3	90.4	0.0	0.0	M	99.4
9/23/2022 0:00	10.4	104.5	0.2	91.4	0.0	0.0	M	99.3
9/23/2022 1:00	10.8	103.8	0.2	93.4	0.0	0.0	M	99.2
9/23/2022 2:00	12.2	92.2	0.2	96.9	0.0	0.0	M	99.0
9/23/2022 3:00	14.1	86.2	0.2	97.7	0.0	0.0	M	98.8
9/23/2022 4:00	15.2	92.2	0.4	97.6	0.0	0.0	M	98.5
9/23/2022 5:00	14.3	94.9	0.4	96.6	0.0	0.0	M	98.4
9/23/2022 6:00	14.6	96.7	0.7	96.6	0.0	0.0	M	98.3
9/23/2022 7:00	15.5	99.0	0.8	97.0	1.0	0.0	M	98.1
9/23/2022 8:00	15.7	98.1	0.7	97.0	2.2	0.0	M	98.0
9/23/2022 9:00	15.2	102.0	0.8	95.0	7.2	0.0	M	97.9
9/23/2022 10:00	15.0	95.4	0.9	95.6	13.0	0.0	M	97.7
9/23/2022 11:00	14.4	92.8	1.0	97.7	32.8	0.0	M	97.5
9/23/2022 12:00	12.6	93.8	1.3	98.0	21.5	0.0	M	97.4
9/23/2022 13:00	10.1	97.7	1.8	97.9	42.6	0.0	M	97.3
9/23/2022 14:00	4.3	108.0	2.1	98.0	28.6	0.0	M	97.3
9/23/2022 15:00	1.6	115.4	2.8	98.1	43.1	0.0	M	97.3
9/23/2022 16:00	6.7	258.8	5.4	94.2	64.7	0.0	M	97.4
9/23/2022 17:00	7.3	251.4	5.9	89.2	46.8	0.0	M	97.4
9/23/2022 18:00	6.0	252.0	5.8	88.1	13.3	0.0	M	97.4
9/23/2022 19:00	4.7	254.5	5.3	90.3	1.0	0.0	M	97.4
9/23/2022 20:00	2.8	232.0	4.1	90.8	0.0	0.0	M	97.4
9/23/2022 21:00	1.0	165.2	3.1	94.3	0.0	0.0	M	97.4
9/23/2022 22:00	0.7	236.7	3.1	95.2	0.0	0.0	M	97.3
9/23/2022 23:00	1.9	212.0	2.5	93.1	0.0	0.0	M	97.3
9/24/2022 0:00	3.7	226.6	3.0	89.3	0.0	0.0	M	97.3
9/24/2022 1:00	3.9	226.1	3.1	92.9	0.0	0.0	M	97.3
9/24/2022 2:00	3.5	226.5	3.1	94.8	0.0	0.0	M	97.4
9/24/2022 3:00	3.0	284.9	2.7	97.3	0.0	0.0	M	97.4
9/24/2022 4:00	5.9	312.0	1.5	97.5	0.0	0.0	M	97.5
9/24/2022 5:00	7.5	341.4	1.2	96.1	0.0	0.0	M	97.6
9/24/2022 6:00	10.0	354.2	0.6	94.6	0.4	0.0	M	97.7
9/24/2022 7:00	10.6	352.8	0.6	90.2	5.9	0.0	M	97.8

9/24/2022 8:00	9.3	341.1	0.3	89.7	27.8	0.0	M	98.1
9/24/2022 9:00	9.7	331.8	0.1	89.1	55.4	0.0	M	98.1
9/24/2022 10:00	11.2	328.3	0.1	88.3	136.0	1.0	M	98.2
9/24/2022 11:00	11.2	328.4	0.2	86.5	172.9	1.0	M	98.7
9/24/2022 12:00	11.6	327.9	0.1	86.6	164.5	1.0	M	99.0
9/24/2022 13:00	12.6	321.1	-0.3	89.3	115.0	0.0	M	99.2
9/24/2022 14:00	12.3	322.3	-0.4	84.1	116.5	0.0	M	99.4
9/24/2022 15:00	11.6	321.7	-0.7	79.7	97.7	0.0	M	99.6
9/24/2022 16:00	10.9	324.3	-1.1	77.9	66.2	0.0	M	99.8
9/24/2022 17:00	10.7	320.8	-1.5	76.3	27.2	0.0	M	100.0
9/24/2022 18:00	9.3	314.4	-1.8	77.1	8.8	0.0	M	100.1
9/24/2022 19:00	9.5	317.6	-2.0	72.9	0.6	0.0	M	100.2
9/24/2022 20:00	9.3	319.9	-1.9	70.3	0.0	0.0	M	100.4
9/24/2022 21:00	8.5	311.7	-2.3	81.5	0.0	0.0	M	100.4
9/24/2022 22:00	8.4	319.0	-2.6	79.6	0.0	0.0	M	100.6
9/24/2022 23:00	7.4	317.7	-2.9	80.5	0.0	0.0	M	100.6
9/25/2022 0:00	7.1	307.7	-3.3	83.0	0.0	0.0	M	100.7
9/25/2022 1:00	6.9	308.5	-3.7	83.2	0.0	0.0	M	100.8
9/25/2022 2:00	6.4	311.5	-3.8	82.3	0.0	0.0	M	100.8
9/25/2022 3:00	5.5	312.4	-4.0	83.0	0.0	0.0	M	100.9
9/25/2022 4:00	5.4	313.1	-4.1	82.2	0.0	0.0	M	100.9
9/25/2022 5:00	5.0	305.5	-4.2	82.5	0.0	0.0	M	101.0
9/25/2022 6:00	4.5	310.7	-4.1	83.0	0.4	0.0	M	101.0
9/25/2022 7:00	4.8	307.5	-4.2	85.6	8.4	0.0	M	101.0
9/25/2022 8:00	4.9	300.8	-4.2	84.6	30.7	0.0	M	101.0
9/25/2022 9:00	4.4	302.9	-4.1	84.1	49.7	0.0	M	101.0
9/25/2022 10:00	4.6	313.6	-4.0	85.2	67.3	0.0	M	101.1
9/25/2022 11:00	5.5	297.5	-3.8	84.5	95.8	0.0	M	101.0
9/25/2022 12:00	5.9	298.0	-3.7	82.3	154.4	1.0	M	101.0
9/25/2022 13:00	5.6	294.7	-3.4	81.0	226.9	1.0	M	101.0
9/25/2022 14:00	4.6	299.2	-3.1	79.4	256.8	1.0	M	101.0
9/25/2022 15:00	3.9	290.8	-2.4	77.1	243.0	1.0	M	101.0
9/25/2022 16:00	3.6	287.7	-2.0	77.2	103.8	0.0	M	101.0
9/25/2022 17:00	3.9	287.0	-1.7	78.0	28.5	0.0	M	101.0
9/25/2022 18:00	3.5	313.7	-2.1	88.3	6.9	0.0	M	101.0
9/25/2022 19:00	1.4	300.3	-2.8	90.9	0.9	0.0	M	101.0
9/25/2022 20:00	0.7	199.3	-2.6	90.3	0.0	0.0	M	101.0
9/25/2022 21:00	1.4	190.3	-2.6	94.4	0.0	0.0	M	101.0
9/25/2022 22:00	1.9	167.6	-2.5	96.6	0.0	0.0	M	101.0
9/25/2022 23:00	2.5	225.7	-2.5	97.5	0.0	0.0	M	101.0
9/26/2022 0:00	3.4	324.6	-2.0	94.2	0.0	0.0	M	101.0
9/26/2022 1:00	3.4	323.1	-2.2	86.0	0.0	0.0	M	101.0
9/26/2022 2:00	2.7	321.1	-2.0	84.9	0.0	0.0	M	101.0
9/26/2022 3:00	2.9	328.5	-2.0	84.0	0.0	0.0	M	101.1
9/26/2022 4:00	3.2	315.2	-2.0	85.9	0.0	0.0	M	101.1
9/26/2022 5:00	5.1	300.8	-2.0	85.6	0.0	0.0	M	101.1
9/26/2022 6:00	5.1	302.6	-2.3	86.1	0.4	0.0	M	101.2
9/26/2022 7:00	4.6	307.6	-2.5	90.0	8.0	0.0	M	101.2
9/26/2022 8:00	5.3	300.6	-2.7	90.6	38.5	0.0	M	101.2
9/26/2022 9:00	6.7	275.9	-2.2	84.8	89.7	0.0	M	101.2
9/26/2022 10:00	6.7	275.2	-1.9	84.4	168.8	1.0	M	101.2
9/26/2022 11:00	7.0	284.9	-2.0	87.9	208.2	1.0	M	101.2
9/26/2022 12:00	7.4	275.2	-2.1	83.7	133.9	1.0	M	101.2
9/26/2022 13:00	8.2	278.4	-1.4	78.3	133.1	1.0	M	101.2
9/26/2022 14:00	7.7	286.7	-0.9	76.6	185.9	1.0	M	101.2
9/26/2022 15:00	7.2	287.7	-1.0	75.8	132.7	1.0	M	101.3
9/26/2022 16:00	6.9	283.0	-0.9	75.6	100.2	0.0	M	101.2
9/26/2022 17:00	6.2	282.2	-0.8	76.4	72.7	0.0	M	101.2
9/26/2022 18:00	6.0	272.7	-0.8	76.9	12.1	0.0	M	101.2
9/26/2022 19:00	4.7	284.8	-1.0	83.9	0.3	0.0	M	101.2
9/26/2022 20:00	4.4	270.4	-0.7	77.6	0.0	0.0	M	101.2
9/26/2022 21:00	4.5	253.7	-0.8	77.4	0.0	0.0	M	101.2
9/26/2022 22:00	4.1	260.8	-0.9	75.7	0.0	0.0	M	101.2
9/26/2022 23:00	2.2	234.8	-0.9	77.8	0.0	0.0	M	101.1
9/27/2022 0:00	2.4	202.3	-1.0	80.1	0.0	0.0	M	101.1
9/27/2022 1:00	3.2	192.2	-1.0	78.3	0.0	0.0	M	101.1
9/27/2022 2:00	2.4	176.7	-1.1	77.1	0.0	0.0	M	101.0
9/27/2022 3:00	2.6	152.9	-0.9	79.6	0.0	0.0	M	101.0
9/27/2022 4:00	3.5	153.0	-1.5	84.2	0.0	0.0	M	100.9
9/27/2022 5:00	4.8	106.1	-1.8	88.7	0.0	0.0	M	100.9
9/27/2022 6:00	5.5	99.8	-2.3	88.4	0.8	0.0	M	100.8
9/27/2022 7:00	5.8	96.5	-2.4	89.2	23.1	0.0	M	100.7
9/27/2022 8:00	6.7	105.7	-1.6	88.5	72.9	0.0	M	100.7
9/27/2022 9:00	7.2	111.0	-1.5	88.6	93.2	0.0	M	100.6
9/27/2022 10:00	7.4	113.7	-1.1	87.6	154.4	1.0	M	100.5
9/27/2022 11:00	9.6	107.4	-0.4	87.0	154.7	1.0	M	100.3
9/27/2022 12:00	10.7	103.8	0.1	86.0	133.6	1.0	M	100.2
9/27/2022 13:00	10.2	100.5	0.6	86.0	123.0	1.0	M	100.1
9/27/2022 14:00	10.9	100.7	0.8	85.1	131.7	1.0	M	99.9
9/27/2022 15:00	11.9	92.6	1.0	86.6	75.6	0.0	M	99.8

9/27/2022 16:00	12.0	90.1	1.0	88.0	27.6	0.0	M	99.6
9/27/2022 17:00	11.0	80.4	0.4	92.5	7.1	0.0	M	99.6
9/27/2022 18:00	11.2	76.1	0.4	96.4	1.0	0.0	M	99.3
9/27/2022 19:00	12.9	83.7	1.0	98.0	0.0	0.0	M	99.1
9/27/2022 20:00	13.2	85.4	1.2	98.6	0.0	0.0	M	99.1
9/27/2022 21:00	9.9	87.5	1.3	98.7	0.0	0.0	M	99.0
9/27/2022 22:00	7.7	85.1	1.1	98.8	0.0	0.0	M	99.0
9/27/2022 23:00	4.8	84.5	1.2	98.8	0.0	0.0	M	99.0
9/28/2022 0:00	2.5	76.7	1.1	98.9	0.0	0.0	M	99.0
9/28/2022 1:00	1.3	53.1	1.1	99.0	0.0	0.0	M	99.0
9/28/2022 2:00	0.8	18.3	0.9	99.2	0.0	0.0	M	99.0
9/28/2022 3:00	7.1	257.8	1.9	99.2	0.0	0.0	M	99.1
9/28/2022 4:00	11.1	269.5	2.1	98.5	0.0	0.0	M	99.0
9/28/2022 5:00	11.0	271.8	1.7	96.4	0.0	0.0	M	99.1
9/28/2022 6:00	8.6	272.0	1.7	95.3	0.1	0.0	M	99.2
9/28/2022 7:00	6.5	268.5	1.8	95.2	2.1	0.0	M	99.2
9/28/2022 8:00	8.0	272.7	1.8	93.5	21.9	0.0	M	99.2
9/28/2022 9:00	9.3	266.6	1.6	93.8	48.9	0.0	M	99.3
9/28/2022 10:00	7.7	294.8	1.4	94.4	75.1	0.0	M	99.3
9/28/2022 11:00	7.4	342.1	0.7	95.5	125.6	1.0	M	99.4
9/28/2022 12:00	10.0	356.1	-0.1	92.7	87.7	0.0	M	99.4
9/28/2022 13:00	9.5	349.6	-0.2	86.8	149.9	1.0	M	99.3
9/28/2022 14:00	8.6	339.6	-0.6	87.9	141.2	1.0	M	99.3
9/28/2022 15:00	10.3	324.0	-0.4	84.4	133.3	1.0	M	99.4
9/28/2022 16:00	11.4	321.8	-0.3	76.4	166.3	1.0	M	100.4
9/28/2022 17:00	11.1	320.6	-0.3	70.2	65.5	0.0	M	100.5
9/28/2022 18:00	10.3	320.7	-0.4	71.9	8.4	0.0	M	100.7
9/28/2022 19:00	7.4	310.4	-0.5	73.5	0.1	0.0	M	100.9
9/28/2022 20:00	7.1	311.2	-0.5	72.6	0.0	0.0	M	101.0
9/28/2022 21:00	8.3	321.2	-0.4	69.7	0.0	0.0	M	101.0
9/28/2022 22:00	7.0	316.7	-0.5	71.7	0.0	0.0	M	101.1
9/28/2022 23:00	6.2	311.1	-0.7	80.0	0.0	0.0	M	101.2
9/29/2022 0:00	5.9	309.1	-0.9	82.6	0.0	0.0	M	101.2
9/29/2022 1:00	5.9	306.9	-1.2	86.4	0.0	0.0	M	101.3
9/29/2022 2:00	6.4	308.8	-1.7	86.6	0.0	0.0	M	101.4
9/29/2022 3:00	5.1	312.3	-2.3	88.6	0.0	0.0	M	101.4
9/29/2022 4:00	6.0	321.3	-2.4	89.5	0.0	0.0	M	101.5
9/29/2022 5:00	5.1	322.3	-2.6	88.5	0.0	0.0	M	101.6
9/29/2022 6:00	4.9	328.3	-3.0	86.8	0.4	0.0	M	101.7
9/29/2022 7:00	5.1	331.7	-3.1	84.8	25.5	0.0	M	101.8
9/29/2022 8:00	4.5	339.2	-2.7	81.6	93.7	0.0	M	101.8
9/29/2022 9:00	5.1	351.5	-3.3	81.6	79.5	0.0	M	101.9
9/29/2022 10:00	5.3	353.2	-3.3	81.5	102.8	0.0	M	101.9
9/29/2022 11:00	4.3	339.9	-2.9	78.9	160.0	1.0	M	102.0
9/29/2022 12:00	4.9	344.3	-2.5	75.5	215.4	1.0	M	102.0
9/29/2022 13:00	4.3	331.3	-2.4	74.3	209.7	1.0	M	102.1
9/29/2022 14:00	4.2	332.2	-2.4	72.8	154.3	1.0	M	102.1
9/29/2022 15:00	4.7	325.8	-2.5	72.6	116.8	0.0	M	102.1
9/29/2022 16:00	4.1	336.1	-2.9	78.5	77.4	0.0	M	102.2
9/29/2022 17:00	3.5	357.2	-3.6	84.4	53.8	0.0	M	102.2
9/29/2022 18:00	2.2	354.2	-4.3	87.0	7.9	0.0	M	102.2
9/29/2022 19:00	2.4	4.2	-4.5	87.2	0.2	0.0	M	102.2
9/29/2022 20:00	2.5	21.2	-5.0	89.1	0.0	0.0	M	102.3
9/29/2022 21:00	2.1	22.8	-5.1	89.3	0.0	0.0	M	102.3
9/29/2022 22:00	2.7	88.0	-5.0	90.9	0.0	0.0	M	102.3
9/29/2022 23:00	3.5	104.5	-4.8	92.9	0.0	0.0	M	102.3
9/30/2022 0:00	3.5	111.7	-4.8	93.5	0.0	0.0	M	102.3
9/30/2022 1:00	4.5	114.0	-4.9	94.2	0.0	0.0	M	102.3
9/30/2022 2:00	5.1	118.7	-5.3	95.9	0.0	0.0	M	102.3
9/30/2022 3:00	5.7	116.5	-5.4	97.4	0.0	0.0	M	102.3
9/30/2022 4:00	5.5	112.1	-5.3	97.4	0.0	0.0	M	102.2
9/30/2022 5:00	5.5	111.4	-5.2	97.3	0.0	0.0	M	102.1
9/30/2022 6:00	5.3	119.1	-5.3	97.4	0.2	0.0	M	102.1
9/30/2022 7:00	5.5	114.9	-4.7	97.7	10.9	0.0	M	102.0
9/30/2022 8:00	6.4	117.9	-3.8	97.9	61.6	0.0	M	101.9
9/30/2022 9:00	7.5	117.2	-2.5	95.6	148.7	1.0	M	101.8
9/30/2022 10:00	7.7	123.3	-0.4	87.4	212.0	1.0	M	101.7
9/30/2022 11:00	7.6	129.0	2.3	80.0	243.8	1.0	M	101.6
9/30/2022 12:00	9.2	150.3	3.5	75.0	203.9	1.0	M	101.4
9/30/2022 13:00	8.6	147.5	4.0	74.0	152.5	1.0	M	101.3
9/30/2022 14:00	8.0	151.0	4.5	72.0	89.9	0.0	M	101.2
9/30/2022 15:00	8.6	155.1	4.7	71.0	72.0	0.0	M	101.1
9/30/2022 16:00	8.1	147.3	4.5	74.1	18.2	0.0	M	100.9
9/30/2022 17:00	10.4	156.3	4.5	72.8	10.9	0.0	M	100.6
9/30/2022 18:00	10.6	158.0	4.5	73.5	5.1	0.0	M	100.6
9/30/2022 19:00	10.1	164.1	4.9	70.3	0.0	0.0	M	100.5
9/30/2022 20:00	9.5	164.4	4.8	72.2	0.0	0.0	M	100.4
9/30/2022 21:00	9.5	166.3	4.6	77.7	0.0	0.0	M	100.3
9/30/2022 22:00	9.1	164.8	4.8	77.7	0.0	0.0	M	100.1
9/30/2022 23:00	7.0	159.9	4.6	79.8	0.0	0.0	M	100.0