NEW GOLD INC.
RAINY RIVER MINE

AMBIENT AIR QUALITY MONITORING PROGRAM
THIRD QUARTER 2019 REPORT

NOVEMBER 2019

ACRONYMS AND ABBREVIATIONS

AAQC	Ambient Air Quality Criteria
AAQO	Alberta Ambient Air Quality Objectives
ACFM	Cubic Feet Per Minute at Actual Conditions
AEP	Alberta Environment and Parks
ASTM	American Society for Testing and Materials
BCMOE	British Columbia Ministry of the Environment
CAAQS	Canadian Ambient Air Quality Standards
Hi-Vol	High Volume Sampler
ICP/AES	Inductively Coupled Plasma / Atomic Emission Spectroscopy
LPM	Litres Per Minute
MECP	Ministry of the Environment, Conservation and Parks
NIST	National Institute of Standards and Technology
TSP	Total Suspended Particulate
$PM_{2.5}$	Particulate Matter less than 2.5 microns in diameter
US EPA	United States Environmental Protection Agency
$\mu g/m^3$	Microgram per Cubic Metre

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1.0 INTRODUCTION

The following is a summary of the Third Quarter (Q3) 2019 results for the ambient air quality monitoring program undertaken at New Gold Inc.'s Rainy River Mine located northwest of Emo, Ontario.

In Q3 of 2019, New Gold Inc. (New Gold) staff operated and maintained the ambient air quality monitoring sampling stations, communicated with the laboratory staff as required, prepared the data summary reports, and performed a Q3 calibration on September 16, 2019 (PQ200s) and September 27, 2019 (TE-5170s).

This Quarterly Ambient Air Quality Report addresses the required elements of a Quarterly Report defined in the *Operations Manual for Air Quality Monitoring in Ontario* (MECP, 2018), hereafter referred to as the Operations Manual. Specifically, the following information is provided:

- Summary statistics;
- Sampling dates (start and end where applicable); and
- A summary of exceedances of an Ontario Standard, Ambient Air Quality Criterion (AAQC), or Canadian Ambient Air Quality Standard (CAAQS).

The purpose of the air monitoring program is to quantify potential air quality effects associated with mine activities. The monitoring program consists of two sampling stations established in May 2015; one located to the southwest of the site near McMillan Road along the realigned Highway 600 and one located to the northeast of the site along Gallinger Road (Figures 2-1, 2-2, and 2-3). Each sampling station consists of the following:

- One High Volume (Hi-Vol) sampler for discrete sampling of Total Suspended Particulate (TSP) and metals;
- One PQ200 sampler for discrete sampling of respirable particulate matter ($PM_{2.5}$);
- One standard passive dustfall collection unit; and
- One passive sampling enclosure measuring NO_2 and SO_2.

Figure 2-4 illustrates the Tait Road station.

Barron Site located near Heatwole Road also contains a meteorological station that provides real-time site wind speed, wind direction, temperature, relative humidity, and precipitation data.

The Ambient Air Monitoring Program was carried out per ECA 0412-A2LR4V and the MECP program approval letter dated November 9, 2016.

2.0 MONITORING STATIONS

The ambient air quality monitoring stations were sited in accordance with the criteria stipulated in the Operations Manual (MECP 2018).

The general location for the two stations is shown in Figure 2-1. UTM co-ordinates for each station based upon NAD 83, are presented in Table 2-1. Imagery showing each station are presented as Figures 2-2 and 2-3.

There were no changes to the station locations in Q3 2019.

Table 2-1: Ambient Air Monitoring Stations

Station	UTM Co-ordinates			Parameters Monitored
	Easting (m)	Northing (m)	Zone	
Tait Road Station (Southwest Station)	426 072	5 406 996	15	TSP, metals, $PM_{2.5}$, NO_2, SO_2, total dustfall
Gallinger Road Station (Northeast Station)	431 133	5 410 534	15	TSP, metals, $PM_{2.5}$, NO_2, SO_2, total dustfall

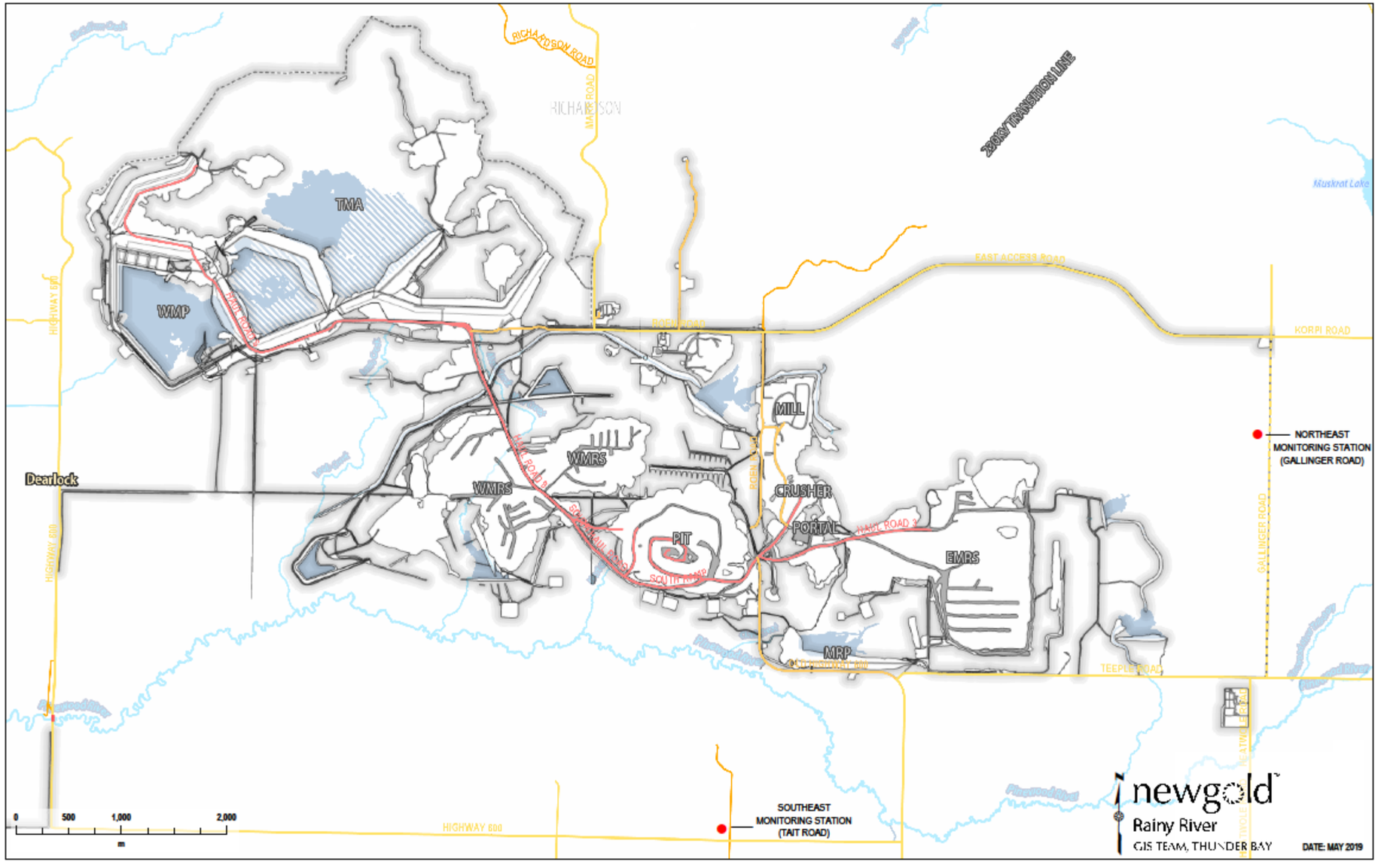

Figure 2-1: Ambient Air Monitoring Stations

Figure 2-2: Ambient Air Monitoring – Southwest Tait Road Monitoring Station

Figure 2-3: Ambient Air Monitoring – Northeast Gallinger Road Monitoring Station

Figure 2-4: Ambient Air Monitoring – Tait Road Station Air Quality Station

3.0 ANALYTICAL AND MONITORING METHODS

3.1 TSP and Metals

The TSP concentrations were determined using the standard gravimetric reference methods approved by the United States Environmental Protection Agency (US EPA) and the Ontario Ministry of the Environment, Conservation and Parks (MECP); as described in the Operations Manual (MECP 2018). Measurements of 24-hour average TSP and metal concentrations were collected as specified in the Operations Manual (MECP 2018); particulate samples were collected every sixth day as per the North American schedule (US EPA 2017). Sampling was performed with Hi-Vol samplers (brush motor and mass flow controlled). Metals and metalloids analyzed included the following: arsenic (As), cadmium (Cd), chromium (Cr), cobalt (Co), copper (Cu), iron (Fe), lead (Pb), manganese (Mn), nickel (Ni), selenium (Se), vanadium (V) and zinc (Zn). A metalloid is an element such as As that has both metallic and non-metallic properties.

Metal concentrations were determined using standard Inductively Coupled Plasma Atomic Emission Spectroscopy (ICP/AES) methodology. Method detection limits are as shown on the data sheets in Appendix A-1.

The lowest detectable limit of total particulate on the filter is 2.3 milligrams (mg). A typical 24-hour sample volume of 1,630 m³ results in a method detection limit of 1.4 micrograms per cubic metre (µg/m³).

Total Volume is calculated for each run using sampler manufacturer recommended calculations. These calculations consider ambient temperature, ambient pressure, sample flow rate, and individual monitor specifications.

3.2 $PM_{2.5}$

Sampling was performed with PQ200 samplers. $PM_{2.5}$ concentrations were determined using the standard gravimetric reference methods approved by the US EPA and the MECP; as described in the Operations Manual (MECP 2018). $PM_{2.5}$ measurements were collected over a 24-hour period to match the averaging time for the Canadian Ambient Air Quality Standard (CAAQS); particulate samples were collected every sixth day as per the North American schedule (US EPA 2017).

The lowest detectable limit of $PM_{2.5}$ on the Teflon filters is 15 µg. A typical 24-hour sample volume of 24 m³ results in a method detection limit of 0.6 µg/m³.

Total Volume is recorded mechanically by the PQ200 samplers for each run.

3.3 Total Dustfall

Water soluble and insoluble portions of dustfall were determined using ASTM method D-1739-98 and the British Columbia Ministry of Environment method outlined in Section G of Air Constituents – Inorganic (MECP 2018). Standard dustfall samplers were used to measure total dustfall deposition. The method detection limit for total dustfall is 0.3 g/m²/30 days.

3.4 Passive Sampling for SO_2 and NO_2

SO_2 and NO_2 concentrations were monitored with passive sampling devices. Testing was conducted using methodology developed, approved and validated by Alberta Environment with the support of the Alberta Research Council, the Clean Air Strategic Alliance of Alberta, and the National Research Council of Canada.

Sample uptake is dependent on temperature, relative humidity and wind speed. Analytical results are adjusted for these meteorological parameters measured during the exposure period (monthly averages). Required meteorological data were obtained from the Environment and Climate Change Canada website. Fort Frances meteorological station (Climate ID 6022474) is downloaded by Maxxam Analytics with each- sample submission. For both SO_2 and NO_2, the analytical method detection limit is in the order of 0.1 parts per billion (ppb). Validation tests conducted in Alberta show that results from passive sampling are typically within 10% of those obtained from sampling with continuous analyzers for 30-day exposure periods.

Since there are no MECP guidelines for monthly concentrations of SO_2 and NO_2 obtained from passive sampling, the data is only used for screening purposes. For NO_2, the monthly results were compared to the MECP 24-hour AAQC converted to an equivalent 30-day average (78 µg/m³) using the methodology outlined in the *Procedure for Preparing an Emission Summary and Dispersion Modelling Report* (MECP 2018). For SO_2, the results were compared against the 30-day Alberta Ambient Air Quality Objective of 30 µg/m^3 (AEP 2016).

3.5 Field Operations

3.5.1 Hi-Vol and PQ200 Samplers

To meet the requirements of 1 in 6 day sampling schedule, stations were visited once every six days. The exposed filter was recovered, and a pre-weighed filter installed for the subsequent sample run. Additional visits were made to resolve instrumentation issues and perform flow calibration checks and preventative/proactive maintenance.

New Gold staff performed flow, temperature, and barometric pressure calibrations on PQ200 samplers using an electronic BGI flow calibrator. The flows were calibrated to 16.7 litres per minute (LPM) for each station.

New Gold staff performed flow calibrations on Hi Vol TE-5170 samplers using a Tisch Delta Calibration kit.

Q3 Calibrations were performed on all Hi-Vol samplers on September 27, 2019. Q3 Calibrations were performed on all PQ200 samplers on September 16, 2019. Calibration sheets can be found in Appendix E.

3.5.2 Dustfall Samplers

The dustfall samplers containing algaecide were changed every month. Dustfall jars were provided by the laboratory with screw-on lids to prevent sample loss during transport.

3.5.3 Passive Samplers

The permeation filters in the passive samplers were changed every month. Filters were kept in cassettes inside Ziploc bags until deployed to prevent premature exposure. After the sample was collected, the filter was placed back in its cassette and into a Ziploc bag for shipment to the lab.

3.5.4 Performance and Site Audits

MECP conducted an instrumentation audit of both Tait Road and Gallinger Road Air Quality Monitoring Stations on September 18, 2019. No issues were found as a result of the audit. Audit Records are attached this report as Appendix C.

3.5.5 Equipment and Sampling Issues

During Q3 2019, 6 samples were invalidated, as discussed below:

- July: Dustfall sample at the Gallinger Road station was invalidated due to organic influences.
- July 14: PM2.5 sample at the Gallinger Road Station was invalidated due to insufficient run time.
- August 7: PM2.5 sample at the Gallinger Road Station was invalidated due to insufficient run time.
- August 13: PM2.5 sample at the Gallinger Road Station were invalidated due to insufficient run time.
- August 19: PM2.5 sample at the Tait Road Station were invalidated due to excessive run time.
- September 24: PM2.5 sample at the Tait Road Station were invalidated due to technician error, monitor set for wrong date.

4.0 RESULTS

Sampling program results for Q3 2019 are presented in Appendix A-1 for the particulate and metals data, Appendix A-2 for the dustfall data and Appendix A-3 for the passive SO_2 and NO_2 data. For the purpose of performing statistical analyses following MECP protocol, a value of half the detection limit was substituted for concentrations less than the detection limit. Laboratory Certificates of Analysis for all the samples collected in Q3 2019 can be found in Appendix D.

For comparative purposes, the MOECC AAQC and CAAQS values are presented, where available, noting that the AAQCs are numerically equivalent to the Ontario Regulation 419/05 standards.

Summaries of the statistical analyses for Q3 2019 for the TSP, metals, and $PM_{2.5}$ concentrations are presented in Tables 4-1, 4-2, and 4-3, respectively. During the quarter, the 1 in 6 day sampling schedule presented a possible 16 sampling days between July 1, 2019 and September 30, 2019.

A summary of the statistical analyses for Q3 2019 for the total dustfall data is presented in Table 4-4. A summary of the statistical analysis for the Q3 2019 passive SO_2 and NO_2 results is presented in Table 4-5.

4.1 TSP and Metals

Tait Road and Gallinger Road stations both collected 16 valid samples, resulting in 100% valid data for Q3 2019 at each station.

For the quarter, the geometric mean TSP concentrations were 24.31 µg/m³ for the Tait Road station and 23.70 µg/m³ for the Gallinger Road station. Values reported by the laboratory as below the detection limit were substituted with one-half of the detection limit. The maximum 24-hour concentration for TSP was 52.89 µg/m³ at the Tait Road station on September 18, 2019, and 46.49 µg/m³ at the Gallinger Road station on July 8, 2019.

There were no exceedances of an MECP AAQC measured for any of TSP, metals, or metalloids in Q3 2019 at either station.

Appendix A-1 and Figure 4-1 present individual sample data. The Q3 2019 TSP and metals summary statistics are summarized in Tables 4-1 and 4-2, respectively.

4.2 $PM_{2.5}$

The Tait Road station collected 14 valid samples, resulting in 88% valid data for Q3 2019. The Gallinger Road Station collected 13 valid samples, resulting in 81% valid data for Q3 2019.

Values reported by the laboratory as below the detection limit were substituted with one-half of the detection limit. The maximum 24-hour concentration for $PM_{2.5}$ was 15.94 µg/m³ at the Tait Road station (July 8, 2019), and 13.24 µg/m³ at the Gallinger Road station (July 8, 2019).

There were no $PM_{2.5}$ exceedances of the MECP AAQC of 30 µg/m³ or CAAQS (ECCC 2013) of 28 µg/m³ measured in Q3 2019. Appendix A-1 and Figure 4-2 present individual sample data. The Q3 2019 $PM_{2.5}$ summary statistics are summarized in Table 4-3.

4.3 Total Dustfall

In Q3 2019, three valid samples were collected at the Tait Road Station, and two valid samples were collected at the Gallinger Road Station. Each dustfall jar was exposed for approximately 30-days to coincide with each calendar month in the quarter.

Values reported by the laboratory as below the detection limit were substituted with one-half of the detection limit. The maximum 30-day concentration for dustfall was 4.65 µg/m³ at the Tait Road station (August), and 2.01 µg/m³ at the Gallinger Road station (August).

One dustfall sample at the Gallinger Road Station exceeded the 30-day MECP AAQC of 7 g/m² measured in Q3 2019. The elevated levels occurred during the month of July 2019. It was determined that of the 9.00 µg/m³ total dustfall measurement, 4.77 µg/m³ was volatile (organic) matter (insects, bird droppings, etc.). This was reported to MECP on November 1, 2019 via Transmittal MECP-IFI-0031 Rev E. A copy of the report can be found In Appendix B. The sample was invalidated in this report due to the organic influences as mentioned above.

A summary of the results is presented in Table 4-4 and the monthly results are presented in Appendix A-2.

4.4 Passive SO_2 and NO_2

In Q3 2019, 3 valid samples were collected at each station of each SO_2 and NO_2.

There are no MECP standards, guidelines or AAQCs for SO_2 or NO_2 for a 30-day averaging period. The 30-day measured average SO_2 or NO_2 concentrations allow for future analysis of trends in the ambient concentrations, to identify any notable increases, and for potential comparison with dispersion modelling results.

For NO_2, the monthly results were compared to the MECP 24-hour AAQC converted to an equivalent 30-day average (78 µg/m³) using the methodology outlined in the *Procedure for Preparing an Emission Summary and Dispersion Modelling Report* (MECP 2018). For SO_2, the results were compared against the Alberta Ambient Air Quality Objective of 30 µg/m³ (AEP 2017).

A summary of the passive results is presented in Table 4-5 and the monthly results are presented in Appendix A-3.

4.5 Evaluation of Effects of Abatement Measures on Monitored Concentrations

The Rainy River Mine has a comprehensive Best Management Practices Plan (BMPP) for Fugitive Dust approved by the MECP as part of the ECA review process. This BMPP effectively controls the generation and dispersion of dust such that the particulate matter measured at the two ambient monitoring stations was below the AAQC standard for all Q3 2019 samples.

Table 4-1: Summary Statistics For Q3 2019 TSP Concentration Data

Statistics	Tait Road (SW)	Gallinger (NE)
Geometric mean (µg/m^3)	24.31	23.70
Arithmetic mean (µg/m^3)	29.50	30.21
July Maximum (µg/m^3)	39.49	46.49
August Maximum (µg/m^3)	47.73	44.97
September Maximum (µg/m^3)	52.89	41.15
Maximum 24-hr (µg/m^3)	52.89	46.49
90th percentile	46.35	44.65
95th percentile	49.02	45.43
24-hr AAQC	120	120
No. Valid Samples	16	16
Valid Data	100%	100%
No. Samples > AAQC (particulate)	0	0
No. Samples > AAQC (metals)	0	0
No. Samples > AAQC (metalloids)	0	0

Table 4-2: Summary Statistics For Q3 2019 Metals Concentration Data

Metal	24-hr AAQC (µg/m^3)	Tait Road (SW)		Gallinger Road (NE)	
		Maximum 24-hr Concentration (µg/m^3)	Fraction of 24-hr AAQC	Maximum 24-hr Concentration (µg/m^3)	Fraction of 24-hr AAQC
As	0.3	0.0012	0.40%	0.000896	0.30%
Cd	0.025	0.000914	3.66%	0.000862	3.45%
Cr	0.5	0.00454	0.91%	0.00332	0.66%
Co	0.1	0.000679	0.68%	0.000598	0.60%
Cu	50	0.041	0.08%	0.461	0.92%
Fe	4	0.842	21.50%	0.401	10.03%
Pb	0.5	0.00102	0.20%	0.00233	0.47%
Mn	0.4	0.0313	7.83%	0.0196	4.90%
Ni	0.2	0.00102	0.51%	0.000896	0.45%
Se	10	0.00339	0.03%	0.00299	0.03%
V	2	0.0017	0.09%	0.00149	0.07%
Zn	120	0.0211	0.02%	0.0185	0.02%

Table 4-3: Summary Statistics for Q3 2019 $PM_{2.5}$ Concentration Data

Statistics	Tait Road (SW)	Gallinger (NE)
Geometric mean (µg/m³)	3.20	1.97
Arithmetic mean (µg/m³)	4.81	3.52
July Maximum (µg/m³)	15.94	13.24
August Maximum (µg/m³)	6.74	7.33
September Maximum (µg/m³)	4.63	5.60
Maximum 24-hr (µg/m³)	15.94	13.24
90th percentile	6.89	7.04
95th percentile	10.10	9.99
24-hr CAAQS	28	28
No. Valid Samples	14	13
Valid Data	88%	81%
No. Samples > AAQC (particulate)	0	0

Table 4-4: Summary Statistics for Q3 2019 Total Dustfall Data

Statistics	Tait Road (SW)	Gallinger (NE)
Arithmetic mean (µg/m³/30d)	3.17	1.86
Maximum 24-hr (µg/m³/30d)	4.65	2.01
30-day AAQC	7	7
No. > AAQC	0	0
No. Valid Samples	3	2
Valid Data	100%	66%

Table 4-5: Summary Statistics for Q3 2019 Passive SO_2 and NO_2 Concentration Data

Statistics	Tait Road (SW)		Gallinger Road (NE)	
	SO_2	NO_2	SO_2	NO_2
Mean (µg/m³)	0.13	0.94	0.13	1.32
Maximum (µg/m³)	0.13	1.32	0.13	1.69
AAQC* 24-hr converted to 30 day (µg/m³)	N/A	78	N/A	78
Alberta AAQO (µg/m³)	30	N/A	30	N/A
No. valid samples (µg/m³)	3	3	3	3
Valid data	100%	100%	100%	100%

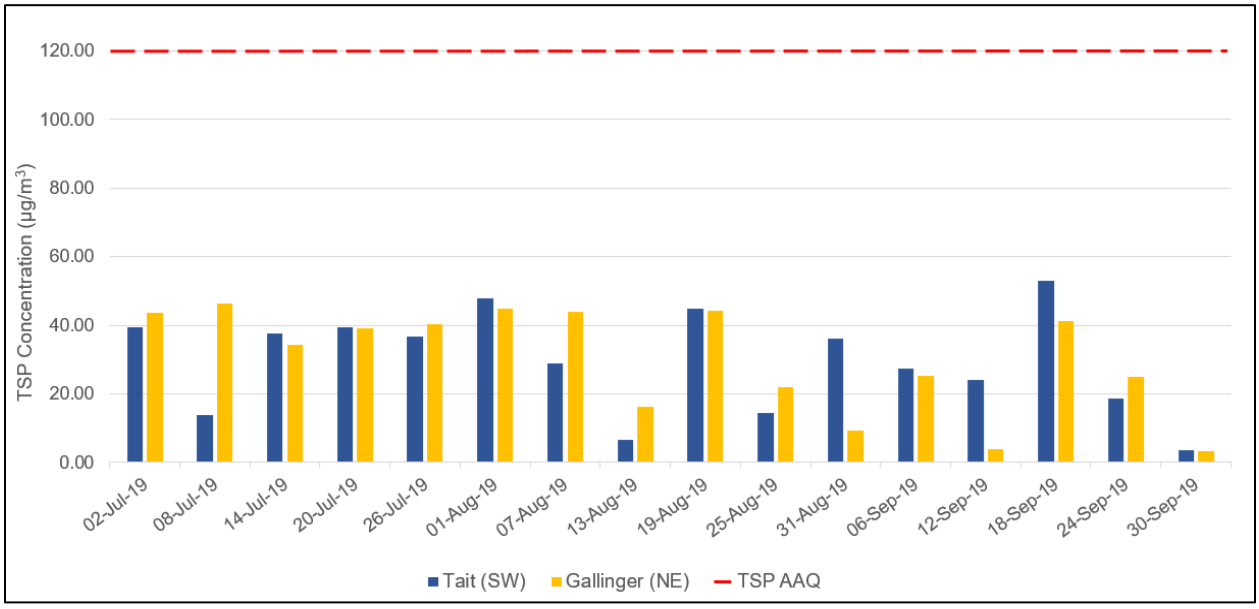

Figure 4-1: TSP Concentrations (Q3 2019)

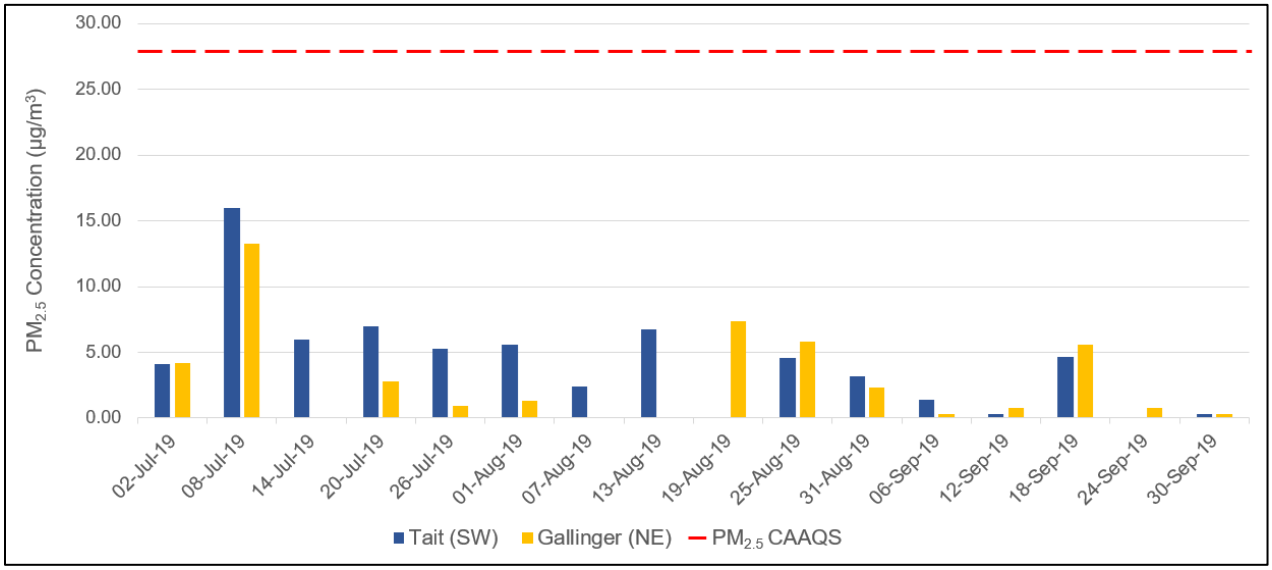

Figure 4-2: $PM_{2.5}$ Concentrations (Q3 2019)

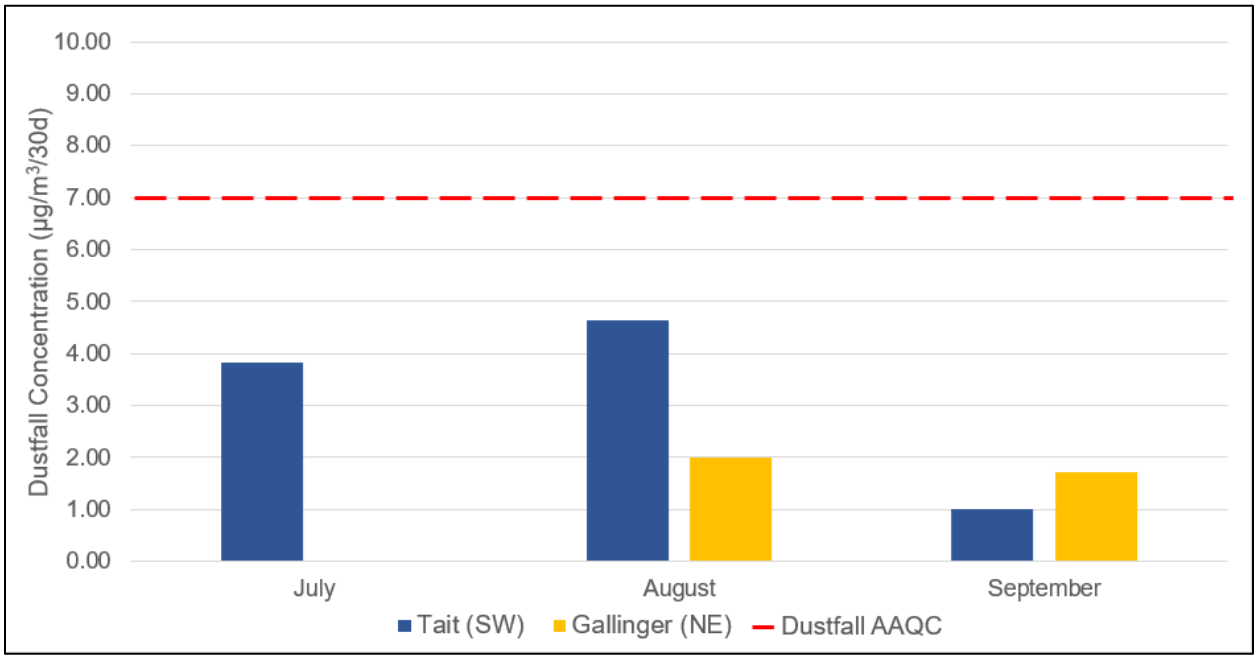

Figure 4-3: Dustfall Concentrations (Q3 2019)

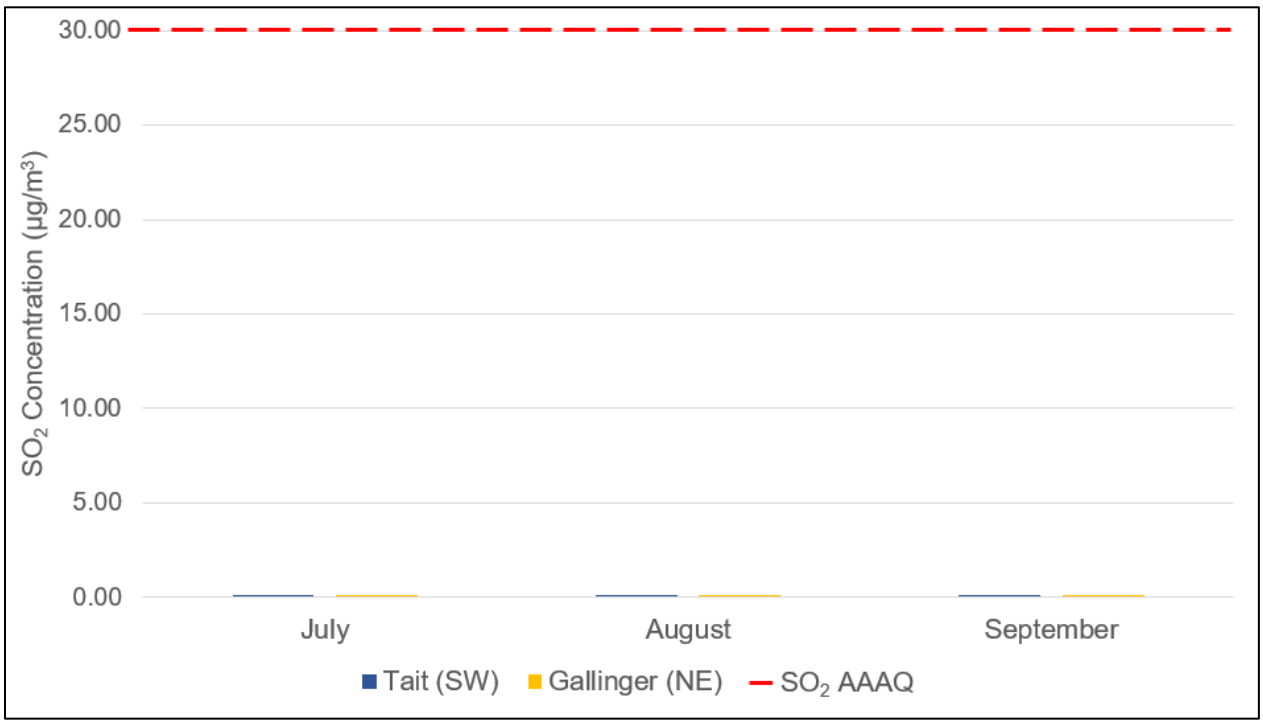

Figure 4-4: SO_2 Concentrations (Q3 2019)

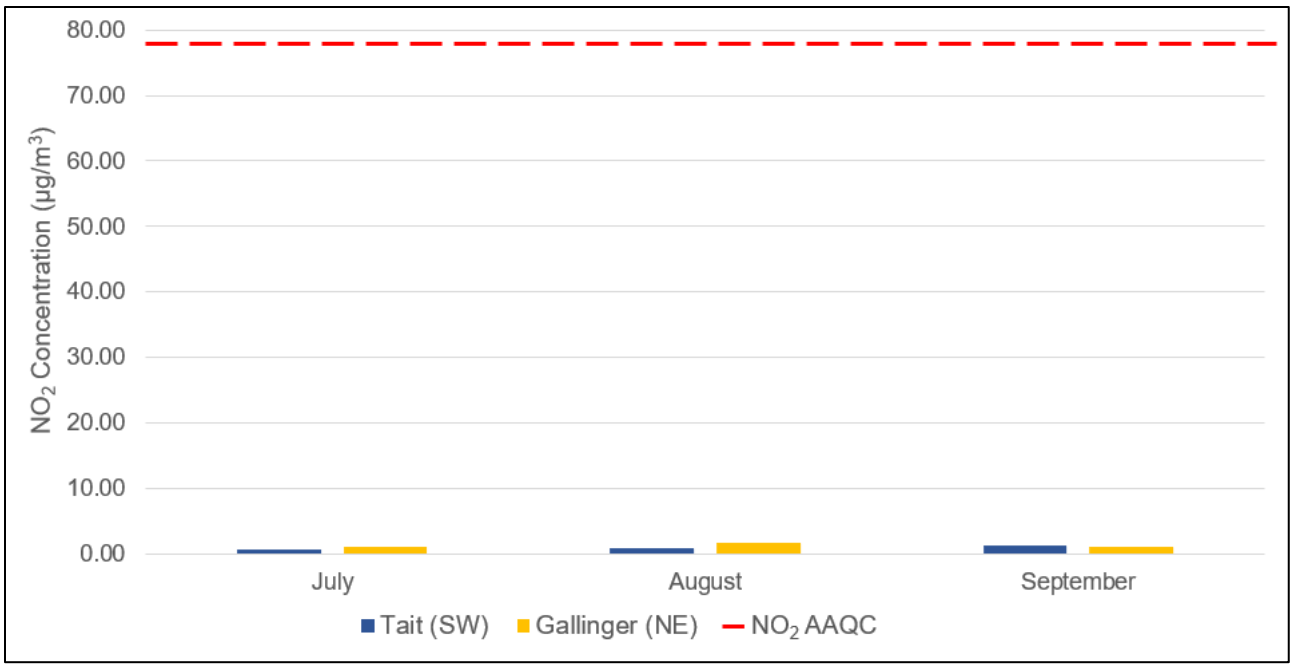

Figure 4-5: NO_2 Concentrations (Q3 2019)

5.0 CONCLUSIONS

A summary of the Q3 2019 ambient air quality monitoring program results is provided below:

- The Tait Road and Gallinger Road stations collected 16 valid TSP samples, resulting in 100% sample validity. Metal and metalloid concentrations were measured on each of the valid TSP filters. There were no measured exceedances of an MECP AAQC for TSP, metals, or metalloids in Q3 2019.
- 14 and 13 valid $PM_{2.5}$ samples were collected at the Tait and Gallinger Road stations, resulting in 88% and 81% valid data, respectively. There were no exceedances of the 24-hour $PM_{2.5}$ CAAQS in Q3 2019.
- 3 valid dustfall samples were collected at the Tait Road station (100% sample validity). 2 valid dustfall samples were collected at the Gallinger Road Station (67% sample validity). Note that one sample was invalidated due to contamination of the sample by organic matter including insects and bird droppings. Details can be found in Appendix B.
- 3 valid passive SO_2 and NO_2 samples were collected at each of the two stations (100% sample validity). There were no exceedances of AEP Criterion for SO_2 or the 30-day equivalent AAQC standard for NO_2 in Q2 2019.

6.0 REFERENCES

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7.0 CLOSING

This *Rainy River Mine Ambient Air Quality Monitoring Program Second Quarter 2019 Report* was prepared by New Gold Inc. The quality of information, conclusions and estimates contained herein are based on:

i) information available at the time of preparation;

ii) data supplied by outside sources; and

iii) the assumptions, conditions and qualifications set forth in this document.

If you require further information regarding the above or the mine in general, please contact the undersigned at (807) 482-0900 ext. 8328.

Sincerely,

New Gold Inc.
Rainy River Mine

Prepared by:

<original signed by>

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Environmental Specialist

APPENDIX A

SAMPLING RESULTS

Appendix A-1	TSP, Metals and $PM_{2.5}$ Sampling Results
Appendix A-2	Total Dustfall Sampling Results
Appendix A-3	SO_2 and NO_2 Passive Sampling Results

APPENDIX A-1

TSP, METALS AND $PM_{2.5}$ SAMPLING RESULTS

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Southwest Tait Road Monitoring Results for TSP and Metals (Third Quarter 2019)
(results expressed in µg/m³)

Date	PM2.5	TSP	As	Cd	Cr	Co	Cu	Fe	Pb	Mn	Ni	Se	V	Zn
02-Jul-19	4.08	39.49	*8.49E-04*	*5.66E-04*	3.00E-03	*5.66E-04*	4.10E-02	2.85E-01	*8.49E-04*	1.49E-02	*8.49E-04*	*2.83E-03*	*1.41E-03*	9.22E-03
08-Jul-19	15.94	13.90	*9.14E-04*	*9.14E-04*	3.47E-03	*6.10E-04*	3.73E-02	2.77E-01	*9.14E-04*	1.66E-02	*9.14E-04*	*3.05E-03*	*1.52E-03*	1.84E-02
14-Jul-19	5.99	37.50	*9.94E-04*	*6.63E-04*	3.58E-03	*6.63E-04*	3.04E-02	2.62E-01	*9.94E-04*	1.11E-02	*9.94E-04*	*3.31E-03*	*1.66E-03*	9.08E-03
20-Jul-19	6.95	39.36	*1.02E-03*	*6.78E-04*	3.46E-03	*6.78E-04*	3.00E-02	2.43E-01	*1.02E-03*	1.16E-02	*1.02E-03*	*3.39E-03*	*1.69E-03*	1.39E-02
26-Jul-19	5.29	36.64	*1.01E-03*	*6.76E-04*	3.58E-03	*6.76E-04*	2.25E-02	2.04E-01	*1.01E-03*	1.30E-02	*1.01E-03*	*3.38E-03*	*1.69E-03*	1.15E-02
01-Aug-19	5.62	47.73	*1.00E-03*	*6.68E-04*	4.08E-03	*6.68E-04*	3.34E-02	5.05E-01	*1.00E-03*	2.20E-02	*1.00E-03*	*3.34E-03*	*1.67E-03*	1.00E-02
07-Aug-19	2.37	28.98	*1.02E-03*	*6.77E-04*	*1.69E-03*	*6.77E-04*	3.14E-02	2.53E-01	*1.02E-03*	6.30E-03	*1.02E-03*	*3.38E-03*	*1.69E-03*	6.03E-03
13-Aug-19	6.74	6.56	*9.94E-04*	*6.63E-04*	4.31E-03	*6.63E-04*	3.22E-02	8.42E-01	*9.94E-04*	3.13E-02	*9.94E-04*	*3.31E-03*	*1.66E-03*	2.11E-02
19-Aug-19	--	44.98	*1.00E-03*	*6.67E-04*	3.47E-03	*6.67E-04*	2.06E-02	7.87E-01	*1.00E-03*	1.92E-02	*1.00E-03*	*3.34E-03*	*1.67E-03*	6.74E-03
25-Aug-19	4.54	14.55	*9.53E-04*	*6.35E-04*	3.43E-03	*6.35E-04*	2.27E-02	2.64E-01	*9.53E-04*	7.11E-03	*9.53E-04*	*3.18E-03*	*1.59E-03*	8.38E-03
31-Aug-19	3.21	36.04	*1.02E-03*	*6.79E-04*	3.73E-03	*6.79E-04*	2.43E-02	6.20E-01	*1.02E-03*	1.60E-02	*1.02E-03*	*3.39E-03*	*1.70E-03*	8.08E-03
06-Sep-19	1.40	27.29	*1.02E-03*	*6.77E-04*	*1.69E-03*	*6.77E-04*	1.63E-02	1.96E-01	*1.02E-03*	4.47E-03	*1.02E-03*	*3.39E-03*	*1.69E-03*	4.88E-03
12-Sep-19	*0.32*	23.96	*8.75E-04*	*5.83E-04*	*1.46E-03*	*5.83E-04*	2.35E-02	2.62E-01	*8.75E-04*	5.95E-03	*8.75E-04*	*2.92E-03*	*1.46E-03*	7.35E-03
18-Sep-19	4.63	52.89	*9.73E-04*	*6.49E-04*	4.54E-03	*6.49E-04*	3.74E-02	3.42E-01	*9.73E-04*	1.67E-02	*9.73E-04*	*3.24E-03*	*1.62E-03*	1.89E-02
24-Sep-19	--	18.53	*9.33E-04*	*6.22E-04*	*1.55E-03*	*6.22E-04*	3.92E-02	1.88E-01	*9.33E-04*	1.26E-02	*9.33E-04*	*3.11E-03*	*1.55E-03*	5.35E-03
30-Sep-19	*0.31*	3.65	*1.01E-03*	*6.76E-04*	1.69E-03	*6.76E-04*	3.38E-02	3.92E-02	*1.01E-03*	1.08E-03	*1.01E-03*	*3.38E-03*	*1.69E-03*	3.79E-03
Geometric mean	3.20	24.31	9.72E-04	6.65E-04	2.84E-03	6.48E-04	2.88E-02	2.85E-01	9.72E-04	1.06E-02	9.72E-04	3.24E-03	1.62E-03	9.03E-03
Arithmetic mean	4.81	29.50	9.74E-04	6.68E-04	3.05E-03	6.49E-04	2.98E-02	3.48E-01	9.74E-04	1.31E-02	9.74E-04	3.25E-03	1.62E-03	1.02E-02
Max. concentration	15.94	52.89	1.02E-03	9.14E-04	4.54E-03	6.79E-04	4.10E-02	8.42E-01	1.02E-03	3.13E-02	1.02E-03	3.39E-03	1.70E-03	2.11E-02
Min. concentration	0.31	3.65	8.49E-04	5.66E-04	1.46E-03	5.66E-04	1.63E-02	3.92E-02	8.49E-04	1.08E-03	8.49E-04	2.83E-03	1.41E-03	3.79E-03
90th percentile	6.89	46.35	1.02E-03	6.78E-04	4.19E-03	6.77E-04	3.83E-02	7.04E-01	1.02E-03	2.06E-02	1.02E-03	3.39E-03	1.69E-03	1.86E-02
95th percentile	10.10	49.02	1.02E-03	7.38E-04	4.37E-03	6.78E-04	3.96E-02	8.01E-01	1.02E-03	2.43E-02	1.02E-03	3.39E-03	1.69E-03	1.94E-02
CAAQS	28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
No. > CAAQS value*	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AAQC	N/A	120	0.3	0.025	0.5	0.1	50	4	0.5	0.4	0.2	10	2	120
No. > AAQC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No. of valid samples	14	16	16	16	16	16	16	16	16	16	16	16	16	16
No. samples < mdl	2	0	16	16	4	16	0	0	16	0	16	16	16	0
Detection limit (µg)	15	2300	3	2	5	2	4	20	3	1	3	10	10	5
Half detection limit (µg)	7.5	1150	1.5	1	2.5	1	2	10	1.5	0.5	1.5	5	5	2.5
% < detection limit	13	0	100	100	25	100	0	0	100	0	100	100	100	0
% valid data	88	100	100	100	100	100	100	100	100	100	100	100	100	100

Notes:
All non detectable results were reported as 1/2 detection limit and are denoted by italics & underlining
(If samples had differing detection limits, the highest is displayed here)

N/A: Not applicable —: Invalid Sample

*Canadian Ambient Air Quality Standard, 24-hour standard

newgold™ Rainy River

Northeast Gallinger Road Monitoring Results for TSP and Metals (Third Quarter 2019)
(results expressed in µg/m³)

Date	PM2.5	TSP	As	Cd	Cr	Co	Cu	Fe	Pb	Mn	Ni	Se	V	Zn
02-Jul-19	4.20	43.66	*8.64E-04*	*5.76E-04*	3.28E-03	*5.76E-04*	4.61E-01	2.43E-01	*8.64E-04*	1.67E-02	*8.64E-04*	*2.88E-03*	*1.44E-03*	1.79E-02
08-Jul-19	13.24	46.49	*8.60E-04*	*5.73E-04*	*1.43E-03*	*5.73E-04*	3.33E-01	1.16E-01	*8.60E-04*	1.04E-02	*8.60E-04*	*2.87E-03*	*1.43E-03*	1.61E-02
14-Jul-19	--	34.25	*8.51E-04*	*5.67E-04*	2.95E-03	*5.67E-04*	3.47E-01	1.24E-01	*8.51E-04*	7.37E-03	*8.51E-04*	*2.84E-03*	*1.42E-03*	1.10E-02
20-Jul-19	2.79	39.15	*8.62E-04*	*8.62E-04*	*1.44E-03*	*5.75E-04*	3.39E-01	1.47E-01	*8.62E-04*	8.16E-03	*8.62E-04*	*2.87E-03*	*1.44E-03*	1.80E-02
26-Jul-19	0.95	40.35	*8.77E-04*	*5.85E-04*	2.98E-03	*5.85E-04*	2.53E-01	2.02E-01	*8.77E-04*	1.29E-02	*8.77E-04*	*2.92E-03*	*1.46E-03*	1.85E-02
01-Aug-19	1.34	44.97	*8.60E-04*	*5.74E-04*	3.10E-03	*5.74E-04*	4.03E-01	3.15E-01	*8.60E-04*	1.96E-02	*8.60E-04*	*2.87E-03*	*1.43E-03*	1.17E-02
07-Aug-19	--	43.99	*8.51E-04*	*5.68E-04*	3.06E-03	*5.68E-04*	4.09E-01	3.86E-01	*8.51E-04*	1.24E-02	*8.51E-04*	*2.84E-03*	*1.42E-03*	1.53E-02
13-Aug-19	--	16.36	*8.40E-04*	*5.60E-04*	*1.40E-03*	*5.60E-04*	2.47E-01	1.70E-01	*8.40E-04*	4.54E-03	*8.40E-04*	*2.80E-03*	*1.40E-03*	9.24E-03
19-Aug-19	7.33	44.34	*8.79E-04*	*5.86E-04*	*1.46E-03*	*5.86E-04*	2.16E-01	4.01E-01	*8.79E-04*	1.45E-02	*8.79E-04*	*2.93E-03*	*1.46E-03*	1.31E-02
25-Aug-19	5.85	22.09	*8.52E-04*	*5.68E-04*	3.01E-03	*5.68E-04*	2.07E-01	1.84E-01	2.33E-03	5.91E-03	*8.52E-04*	*2.84E-03*	*1.42E-03*	1.24E-02
31-Aug-19	2.29	9.24	*8.55E-04*	*5.70E-04*	*1.43E-03*	*5.70E-04*	2.45E-01	1.34E-01	*8.55E-04*	6.04E-03	*8.55E-04*	*2.85E-03*	*1.43E-03*	9.29E-03
06-Sep-19	*0.32*	25.27	*8.39E-04*	*5.59E-04*	*1.40E-03*	*5.59E-04*	2.57E-01	1.03E-01	*8.39E-04*	2.96E-03	*8.39E-04*	*2.80E-03*	*1.40E-03*	6.82E-03
12-Sep-19	0.76	3.74	*8.49E-04*	*5.66E-04*	*1.42E-03*	*5.66E-04*	1.39E-01	2.55E-02	*8.49E-04*	8.49E-04	*8.49E-04*	*2.83E-03*	*1.42E-03*	8.04E-03
18-Sep-19	5.60	41.15	*8.60E-04*	*5.73E-04*	3.32E-03	*5.73E-04*	1.32E-01	2.81E-01	*8.60E-04*	1.42E-02	*8.60E-04*	*2.87E-03*	*1.43E-03*	1.78E-02
24-Sep-19	0.81	25.11	*8.66E-04*	*5.77E-04*	*1.44E-03*	*5.77E-04*	2.10E-01	1.59E-01	*8.66E-04*	1.10E-02	*8.66E-04*	*2.89E-03*	*1.44E-03*	7.10E-03
30-Sep-19	*0.31*	3.17	*8.96E-04*	*5.98E-04*	*1.49E-03*	*5.98E-04*	2.04E-01	2.51E-02	*8.96E-04*	5.98E-04	*8.96E-04*	*2.99E-03*	*1.49E-03*	3.11E-03
Geometric mean	1.97	23.70	8.60E-04	5.88E-04	2.01E-03	5.73E-04	2.59E-01	1.49E-01	9.16E-04	6.74E-03	8.60E-04	2.87E-03	1.43E-03	1.11E-02
Arithmetic mean	3.52	30.21	8.60E-04	5.91E-04	2.16E-03	5.73E-04	2.75E-01	1.88E-01	9.52E-04	9.27E-03	8.60E-04	2.87E-03	1.43E-03	1.22E-02
Max. concentration	13.24	46.49	8.96E-04	8.62E-04	3.32E-03	5.98E-04	4.61E-01	4.01E-01	2.33E-03	1.96E-02	8.96E-04	2.99E-03	1.49E-03	1.85E-02
Min. concentration	0.31	3.17	8.39E-04	5.59E-04	1.40E-03	5.59E-04	1.32E-01	2.51E-02	8.39E-04	5.98E-04	8.39E-04	2.80E-03	1.40E-03	3.11E-03
90th percentile	7.04	44.65	8.78E-04	5.92E-04	3.19E-03	5.85E-04	4.06E-01	3.50E-01	8.87E-04	1.56E-02	8.78E-04	2.93E-03	1.46E-03	1.79E-02
95th percentile	9.99	45.43	8.84E-04	6.77E-04	3.17E-03	5.89E-04	4.04E-01	3.90E-01	1.33E-03	1.61E-02	8.84E-04	2.95E-03	1.47E-03	1.81E-02
CAAQS	28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
No. > CAAQS value*	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
AAQC	N/A	120	0.3	0.025	0.5	0.1	50	4	0.5	0.4	0.2	10	2	120
No. > AAQC	0	0	0	0	0	0	0	0	0	0	0	0	0	0
No. of valid samples	13	16	16	16	16	16	16	16	16	16	16	16	16	16
No. samples < mdl	2	0	16	16	9	16	0	0	15	0	16	16	16	0
Detection limit (µg)	15	2300	3	2	5	2	4	20	3	1	3	10	5	5
Half detection limit (µg)	7.5	1150	1.5	1	2.5	1	2	10	1.5	0.5	1.5	5	2.5	2.5
% < detection limit	14	0	100	100	56	100	0	0	94	0	100	100	100	0
% valid data	81	100	100	100	100	100	100	100	100	100	100	100	100	100

Notes:
All non detectable results were reported as 1/2 detection limit and are denoted by italics & underlining (If samples had differing detection limits, the highest is displayed here)

N/A: Not applicable —: Invalid Sample

Canadian Ambient Air Quality Standard, 24-hour standard

APPENDIX A-2

TOTAL DUSTFALL SAMPLING RESULTS

newgold™ Rainy River

Tait Road Monitoring Results for Dustfall (Third Quarter 2019)
(results expressed in g/m^2/30days)

Month	No. Exposure Days	Dustfall (insoluble)	Dustfall (soluble)	Dustfall (total)
July	31	2.31	1.53	3.84
August	33	3.03	1.62	4.65
September	27	0.51	0.54	1.02
			Arithmetic mean	3.17
			Max. concentration	4.65
			Min. concentration	1.02
			AAQC	7
			No. > AAQC value**	0
			No. of valid samples	3
			% Valid data	100
			No. samples < mdl	0
			Detection limit*	0.30
			Half detection limit	0.17

Gallinger Road Monitoring Results for Dustfall (Third Quarter 2019)
(results expressed in g/m^2/30days)

Month	No. Exposure Days	Dustfall (insoluble)	Dustfall (soluble)	Dustfall (total)
July	--	--	--	--
August	33	1.26	0.75	2.01
September	27	0.96	0.75	1.71
			Arithmetic mean	1.86
			Max. concentration	2.01
			Min. concentration	1.71
			AAQC	7
			No. > AAQC value**	0
			No. of valid samples	2
			% Valid data	67
			No. samples < mdl	0
			Detection limit*	0.30
			Half detection limit	0.17

Notes:

All statistics were calculated using 1/2DL for values reported as <DL

All non detectable results were reported as 1/2 detection limit and are denoted by italics and underlining

N/A: Not applicable N/R: No Results Available —: Invalid Sample

*If samples had differing detection limits, the highest is displayed here

**Ontario Ambient Air Quality Criteria, 30-day standard

APPENDIX A-3

SO_2 AND NO_2 PASSIVE SAMPLING RESULTS

newgold™ Rainy River

Monitoring Results for Passive SO_2 and NO_2 (Third Quarter 2019)
(results expressed in µg/m^3)

	Tait Road	
Month	**SO_2**	**NO_2**
July	*0.13*	0.56
August	*0.13*	0.94
September	*0.13*	1.32
Arithmetic mean	0.13	0.94
Max. concentration	0.13	1.32
Min. concentration	0.13	0.56
AAQC* (24-hr AAQC converted to equivalent 30 day average)	N/A	78 µg/m3
Alberta Ambient Air Quality Objectives 2013	30 µg/m3	N/A
No. of valid samples	3	3
No. samples < mdl	3	0
Detection limit	0.26	0.19
Half detection limit	0.13	0.09

Monitoring Results for Passive SO_2 and NO_2 (Third Quarter 2019)
(results expressed in µg/m^3)

	Gallinger Road	
Month	**SO_2**	**NO_2**
July	*0.13*	1.13
August	*0.13*	1.69
September	*0.13*	1.13
Arithmetic mean	0.13	1.32
Max. concentration	0.13	1.69
Min. concentration	0.13	1.13
AAQC* (24-hr AAQC converted to equivalent 30 day average)	N/A	78 µg/m3
Alberta Ambient Air Quality Objectives 2013	30 µg/m3	N/A
No. of valid samples	3	3
No. samples < mdl	3	0
Detection limit	0.26	0.19
Half detection limit	0.13	0.09

Notes:

All statistics were calculated using 1/2DL for values reported as <DL

All non detectable results were reported as 1/2 detection limit and are denoted by italics and underlining

All results reported by the lab in parts per billion (ppb) and are converted to µg/m3 assuming 101.23kPA and 25C

N/A: Not applicable N/R: No Results Available —: Invalid Sample

*Ontario Ambient Air Quality Criteria

APPENDIX B

NOTICES OF EXCEEDANCE FOR Q3 2019

newgold™ Rainy River

November 1, 2019

Matt Hoffmeister & Jason Tittlemier
Senior Environmental Officers
Ministry of the Environment, Conservation & Parks
Kenora Area Office
Kenora, ON

SUBJECT: AMBIENT AIR QUALITY – JULY TOTAL DUSTFALL EXCEEDANCE

Dear Mr. Hoffmeister, Mr. Tittlemier;

On November 1st, it was determined that the thirty-day averaging period for total dustfall at the Gallinger Road (North) Air Quality Station exceeded the Ontario Ambient Air Quality Criteria (AAQC) 30-day standard for the month of July.

Dustfall samples are collected each calendar month (+/- 5 days of a 30-day period) as per Rainy River Mine's Ambient Air Quality Monitoring Plan, accepted by MECP on November 9, 2016. For the month of July, the sample result was 9.00 g/m^2/30days, with the AAQC 30-day standard being 7 g/m^2/30days.

Upon further analysis of the laboratory results, it was determined that 7.05 g/m^2/30-day of the total dustfall was volatile (organic) matter. Tables 1, 2 & 3 outline the laboratory results for this sample. As seen in Figure 1, the dustfall jar for the month of July collected at least one large intact insect as well as other organic influences. As a result, the elevated total dustfall is likely cause by these organic sources.

Table 1. July Total Dustfall Laboratory Results (Gallinger Road Station)	
Parameter	**Result (g/m^2/30-day)**
Total Dustfall	9.00
Total Fixed (non-organic)	1.95
Total Volatile (organic)	7.05

Table 2. July Soluble Dustfall Laboratory Results (Gallinger Road Station)	
Parameter	**Result (g/m^2/30-day)**
Soluble Dustfall	4.23
Soluble Fixed (non-organic)	1.20
Soluble Volatile (organic)	3.03

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Table 3. July Insoluble Dustfall Laboratory Results (Gallinger Road Station)	
Parameter	**Result (g/m^2/30-day)**
Insoluble Dustfall	4.77
Insoluble Fixed (non-organic)	0.72
Insoluble Volatile (organic)	4.05

Figure 1. July Dustfall Jar illustrating organic influences.

Attached find the Notification of Exceedance form (NOE) as per our ECA approval number 0412-A2LR4V. Once you have had the chance to review this document and attachment, please contact the undersigned with any questions or concerns.

Respectfully,

Kelsea Hunsperger
Environmental Specialist
kelsea.hunsperger@newgold.com
(807) 482-0900 ext. 8328

Ontario

Ministry of the Environment and Climate Change

Notification of Exceedance – Local Air Quality Regulation

General Information

Information requested in this notification form is collected under the authority of the *Environmental Protection Act*, R.S.O. 1990 (EPA) and Ontario Regulation 419/05: Air Pollution – Local Air Quality (the Regulation) made under the EPA and will be used to collect information relating to a measured or modelled air-related exceedance as required by s.25(9), s.28(1) and s.30(3) of the Regulation. The Ministry of the Environment and Climate Change (Ministry) may also request additional information.

1. Questions regarding completion and submission of this notification form should be directed to your local Ministry District Office. A list of these District Offices (including fax numbers) is available on the Ministry Internet site at http://www.ontario.ca/environment-and-energy/ministry-environment-and-climate-change-district-locator. A copy of this form may be acquired through the Ministry public web site http://www.ontario.ca/environment-and-energy/rules-air-quality-and-pollution or by contacting any Ministry office.

2. For notification under s.25(9) or s.28(1), the completed notification form should be sent, as soon as practicable, to the local Ministry District Office which has jurisdiction over the area in which the facility is located. A list of these District Offices (including fax numbers) is available on the Ministry Internet site at http://www.ontario.ca/environment-and-energy/ministry-environment-and-climate-change-district-locator.

3. For notification under s.30(3), the completed notification form should be immediately faxed to the local Ministry District Office which has jurisdiction over the area which the facility is located. A list of these District Offices (including fax numbers) is available on the Ministry Internet site at http://www.ontario.ca/environment-and-energy/ministry-environment-and-climate-change-district-locator. If the exceedance is determined outside of the business hours of the District Office then the completed notification form should be faxed to the Spills Action Center (1-800-268-6061).

4. Information on this form may be claimed as confidential but will be subject to the *Freedom of Information and Protection of Privacy Act* (FOIPPA) and the EBR. If you do not claim confidentiality at the time of submitting the information, the MOECC Ministry may make the information available to the public without further notice to you.

Instructions

This form should be used to notify the Ministry of a measured or modelled air-related exceedance. Notification is required under the Regulation and failure to notify the Ministry constitutes an offence under the Regulation and the EPA.

The publication titled “Air Contaminants Benchmarks (ACB) List: Standards, guidelines and screening levels for assessing point of impingement concentrations of air contaminants” contains two types of benchmarks: Benchmark 1 values (standards and guidelines) and Benchmark 2 values (screening levels). This list is available on the Internet site at https://www.ontario.ca/page/air-contaminants-benchmarks-list-standards-guidelines-and-screening-levels-assessing-point. This form is to be used to notify the Ministry of an exceedance of a Benchmark 1 value. If a concentration of a contaminant exceeds a Benchmark 1 value that is based on a guideline value, it is an indication that discharges of the contaminant may cause an adverse effect. If a concentration of a contaminant exceeds a Benchmark 2 value, it may be an indication that discharges of the contaminant may cause an adverse effect – further assessment should be undertaken to determine if an adverse effect may occur. If so, this form should be used to notify the Ministry.

This form may be used for notification of exceedances of more than one contaminant; Table 1 (or equivalent) should be completed for modelled exceedances. Table 2 should be completed for measured exceedances. If this notification is made pursuant to s. 30 then this form must be submitted immediately.

Note: The Ministry publishes a separate list of Ontario’s Ambient Air Quality Criteria (AAQCs) which can be found on our website http://www.ontario.ca/document/ontarios-ambient-air-quality-criteria-sorted-contaminant-name. AAQCs are intended to address general air quality, not contributions of a contaminant to air quality from a facility. Hence, the notification requirements under the Regulation do not apply to AAQCs.

Regulatory Authority

Exceedance of a Benchmark 1 Value (Standard or Guideline)

"28. (1) A person who discharges or causes or permits the discharge of a contaminant shall, as soon as practicable, notify a provincial officer in writing if,

(a) the person uses an approved dispersion model to predict concentrations of the contaminant that result from the discharges and,

i. the use of the model indicates that discharges of the contaminant may result in a contravention of section 19 or 20, or

ii. sections 19 and 20 do not apply to discharges of the contaminant and the use of the model indicates that discharges of the contaminant may cause an adverse effect;

(b) measurements of air samples indicate that discharges of the contaminant may result in a contravention of section 19 or 20; or

(c) sections 19 and 20 do not apply to discharges of the contaminant and measurements of air samples indicate that discharges of the contaminant may cause an adverse effect. …"

3. The emission rate that, for the relevant averaging period, is derived from a combination of a method that complies with paragraph 1 or 2 and ambient monitoring, according to a plan approved by the Director as likely to provide an accurate reflection of emissions.

"25. (9) A person who is required under subsection (8) to complete the update of a report not later than March 31 in a year shall, as soon as practicable after that date, notify a provincial officer in writing if the person has started to use an approved dispersion model with respect to a contaminant for the purpose of completing the update but has not yet complied with section 12, and,

(a) the use of the model indicates that discharges of the contaminant may result in a contravention of section 19 or 20; or

(b) sections 19 and 20 do not apply to discharges of the contaminant and the use of the model indicates that discharges of the contaminant may cause an adverse effect. …"

Exceedance of an Upper Risk Threshold

"30. (1) A person who discharges or causes or permits the discharge of a contaminant listed in Schedule 6 into the air shall comply with subsections (3) and (4) if there is reason to believe, based on any relevant information, that discharges of the contaminant may result in,

(a) the concentration of the contaminant exceeding the half hour upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement, if section 19 applies to the person in respect of the contaminant; or

(b) the other time period upper risk threshold set out for that contaminant in Schedule 6 at a point of impingement, if section 20 applies to the person in respect of the contaminant.

(1.1) The two items in Schedule 6 that set out upper risk thresholds for total reduced sulphur (TRS) compounds specify the facilities to which they apply.

(2) Without limiting the generality of subsection (1), the reference in that subsection to relevant information includes relevant information from predictions of a dispersion model, including,

(a) an approved dispersion model or other dispersion model; or

(b) a dispersion model that is not used in accordance with this Regulation.

(3) If subsection (1) applies to a discharge, the person who discharged or caused or permitted the discharge of the contaminant shall immediately notify the Director in writing. …"

Section 1 - Ministry of the Environment and Climate Change District Office Information	
Date Form Submitted (yyyy/mm/dd) 2019/11/01	Date Exceedance Determined (yyyy/mm/dd) 2019/11/01

MOECC District Office	District Office Fax Number
Kenora Area Office	

Supporting information attached? ☑ Yes ☐ No If yes, number of pages 1

Section 2 - Facility and Site Information

Name of Person Making the Notification

Last Name	First Name
Hunsperger	Kelsea

Business Name (the name under which the entity is operating or trading - also referred to as trade name)
New Gold Inc.

Business Number

Business Activity Description (a description of the business endeavour, this may include products sold, services provided, equipment used, etc.)
Gold Mining

Site Name	MOECC District Office
Rainy River Mine	Kenora Area Office

Primary North American Industry Classification System (NAICS) Code
212220

☐ Section 19 (Schedule 2) applies ☐ Section 20 (Schedule 3) applies

Other NAICS Code

Civic Address

Unit Number	Street Number	Street Name	PO Box
	24	Marr Road	P0W1A0

Survey Address

Lot and Concession: used to indicate location within a subdivided township and consists of a lot number and a concession number.

Part and Reference: used to indicate location within an unsubdivided township or unsurveyed territory, and consists of a part and a reference plan number indicating the location within that plan. Attach copy of the plan.

Lot	Concession	Part	Reference Plan

Non Address Information (includes any additional information to clarify requestor's physical location)

Municipality/Unorganized Township or Territory Upper Tier/District	Postal Code
Chapple/Rainy River	

Telephone Number ext.	Fax Number	Mobile Number	Email Address

Geo Reference

Description of location	Map Datum	Zone	Accuracy Estimate	Geo-Referencing Method	UTM Easting	UTM Northing
Rural Property	NAD83	15U	+/- 5m	GIS	426537	5411220

Environmental Compliance Approval (ECA) Number(s) and/or Environmental Activity and Sector Registry (EASR) Number(s) – attach a separate list if more space is required

1 ECA 0412-A2LR4V 2 _____ 3 _____

4 _____ 5 _____ 6 _____

Section 3 - Type of Notification – Table 1 or Table 2 should be completed and submitted with this notification

☑ This is a notification under subsection 28(1) – Notice to Provincial Officer as a result of modelling or measurements (select all that apply)

- ☑ Exceedance of Benchmark 1 Value (Standard)
- ☐ Exceedance of Benchmark 1 Value (Guideline)
- ☐ Exceedance of Benchmark 2 Value (determined discharge may cause adverse effect)
- ☐ Other (explain)

☐ This is a notification under subsection 25(9) – Notice to Provincial Officer as a result an update of an Emission Summary and Dispersion Modelling Report (ESDM) (select all that apply)

- ☐ Exceedance of Benchmark 1 Value (Standard)
- ☐ Exceedance of Benchmark 1 Value (Guideline)
- ☐ Exceedance of Benchmark 2 Value (determined discharge may cause adverse effect)
- ☐ Other (explain)

Date that Refinement (see section 12 of the regulation) is anticipated to be complete (yyyy/mm/dd)

☐ This is a notification under subsection 30(3) – Notice to the Director as a result of an exceedance of Upper Risk Threshold (URT) (Schedule 6)

☐ Yes ☐ No

Section 4 - Follow-Up Action

Section 28 Notifications

Will an Abatement Plan be submitted to the Ministry within 30 days of this notice as per s.29?

☐ Yes ☑ No If No, please provide the following

Type of Previously Submitted Abatement Plan	Date Submitted under s.29 of the Regulation (yyyy/mm/dd)
Assessing for Contamination	

Subsection 30(3) Notifications for URT Exceedance

Has an ESDM Report been prepared in accordance with s.30(4) and submitted to the Ministry?

☐ Yes ☐ No If No, what is the anticipated submission date for the ESDM* (yyyy/mm/dd)?

*Note: ESDM Report must be submitted within three months of the discharge

Section 5 - Model Based Assessment – please complete this section if notifying of a modelled exceedance (complete Table 1)

Was an ESDM Report prepared in accordance with s.26 of the Regulation?

☐ Yes ☐ No

If yes, was the ESDM Report prepared to fulfill (select all that apply)

- ☐ s.22 of the Regulation - Application for ECA under s. 20.2 of the *Environmental Protection Act*
- ☐ s.9 of the EPA – Condition of an ECA (e.g. ECA with Limited Operational Flexibility)
- ☐ s.23 of the Regulation - Requirement for Schedule 4 and 5 sector facilities
- ☐ s.24 of the Regulation - Notice issued by Director
- ☐ s.25 of the Regulation - Requirement for updating ESDM Report
- ☐ s.30(4) of the Regulation – Required as result of URT exceedance
- ☐ s.33(1) of the Regulation – Required as part of a request for a site-specific standard

☐ s.11 (1) of Ontario Regulation 1/17 – Registrations under Part II.2 of the Act – Activities Requiring Assessment of Air Emissions (Air Emissions EASR Regulation)

☐ Other (please specify) _____

What approved dispersion model was used? Include version number (select all that apply)

☐ Appendix to Reg. 346 ☐ AERMOD ☐ ASHRAE ☐ SCREEN 3

☐ Other (please specify) (if other, provide copy of section 7 notice) _____

Was the approved dispersion model refined as required by s.12 of the Regulation (i.e. operating conditions, emission rates)?

☐ Yes ☐ No

What meteorological data was used?

☐ Regional Data ☐ Regional data refined, in consultation with the EMRB, to reflect local land use conditions

☐ Local or Site-Specific Data ☐ Data from a computational method

Did you receive approval under s. 13 for the Meteorological Data? ☐ Yes ☐ No

Have you modelled a concentration at a Point of Impingement (POI) other than the maximum POI? (please include figure showing maximum POI location)

☐ Yes ☐ No

If Yes, specify additional locations (i.e., land use) at which the exceedence may occur (select all that apply – please include figure showing additional modelled locations):

☐ Health Care ☐ Seniors Residence/Long Term Care Facility ☐ Child Care Facility ☐ Educational Facility

☐ Dwelling

☐ Location Specified by the Director (explain) _____

☐ Other Location (explain) _____

Section 6 - Measurement Based Assessment – please complete this section if notifying of a measured **exceedance**

(Complete Table 2 or equivalent)

Type of Monitor / Measurement Type	Date of Exceedance (yyyy/mm/dd)	Duration of Exceedance
Dustfall Jar	2019/08/02	30-day average

Is the monitoring approved by the Ministry?

☑ Yes ☐ No If yes, please describe the approval Ambient Air Quality Monitoring Plan approved Nov. 9, 2016

Monitoring Reference Number: (if available)

Specify the location (i.e., land use) at which the exceedence did occur (select all that apply):

☐ Health Care ☐ Seniors Residence/Long Term Care Facility ☐ Child Care Facility ☐ Educational Facility

☐ Dwelling

☐ Location Specified by the Director (explain) _____

☑ Other Location (explain) Gallinger Road Station

Section 7 - Statement of Company Official

I, the undersigned hereby declare that, to the best of my knowledge:

- The information contained herein and the information submitted is complete and accurate in every way and I am aware of the penalties against providing false information as per s.184 (2) of the *Environmental Protection Act*.
- I have been authorized to act on behalf of the company identified in this form for the purpose of providing this notification of exceedance under the Regulation to the Ministry of the Environment and Climate Change.
- I have used the most recent notification form (as obtained from the Ministry Internet site at http://www.ontario.ca/environment-and-energy/rules-air-quality-and-pollution or from my local Ministry District Office and I have included all necessary information required by the Regulation and identified on this form.

Name of Signing Authority	Title
Kelsea Hunsperger	Environmental Specialist

Telephone Number	Fax Number	Mobile Number	Email Address
807 482-0900 ext.8328			kelsea.hunsperger@newgold.com

Signature	Date (yyyy/mm/dd)
	2019/11/01

Address Information

Same as Site Physical Address? ☑ Yes ☐ No (If no, please provide signing authority mailing address information below)

Civic Address

Unit Number	Street Number	Street Name	PO Box
	24	Marr Road	P0W1A0

Delivery Designator: If signing authority mailing address is a Rural Route, Suburban Service, Mobile Route or General Delivery (i.e., RR#3)

Municipality/Unorganized Township or Territory	County/District	Province/State	Country	Postal Code
Chapple/Rainy River				

Table 1 - Information About Modelled Exceedance

Contaminant [a]	CAS [b] Number	Air Dispersion Model Used (include version number)	Maximum POI [c] Concentration ($\mu g/m^3$)	Averaging Period (hours)(minute/ hour/day/ annual)	Ministry Limit ($\mu g/m^3$) or URT ($\mu g/m^3$)	Limiting Effect	Schedule 2, Schedule 3, Guideline, Schedule 6 URT or Other (specify) [d]	Benchmark 1, Benchmark 2, or No Benchmark [e] (specify)	Percentage of Ministry Limit or URT

Provide additional information as needed (e.g. Location of Maximum POI Concentrations (e.g. UTM, street address, land use at Maximum POI if known, etc.)

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

(d) Schedule 2 = section 19 applies; Schedule 3 = section 20 applies

(e) If a B2 value is exceeded, the regulation requires potential adverse effects to be assessed. If it is determined that an adverse effect may occur for the contaminant in question, this should be included in the table

Table 2 - Information About Measured Exceedance

Contaminant [a]	CAS [b] Number	Type of Assessment (Measurement Method)	Maximum POI [c] Concentration (µg/m^3)	Averaging Period (minute/ hour/day/ annual)	Ministry Limit (µg/m3) or URT (µg/m^3)	Limiting Effect	Schedule 2, Schedule 3, Guideline, Schedule 6 URT, or Other (specify)	Benchmark 1, Benchmark 2, or No Benchmark [d] (specify)	Percentage of Ministry Limit or URT

* For additional measurement locations / sampling times, please include additional tables

** If you are reporting more than one exceedence, include the time of the exceedence in the contaminant column

Notes:

(a) Proper Chemical Name should be given (Abbreviations, acronyms, numeric codes, trade names and mixtures NOT ACCEPTABLE).

(b) CAS Number : Chemical Abstracts Services Number (UNIQUE Identifier for a chemical)

(c) POI Concentration : Point of Impingement Concentration

(d) Schedule 2 = section 19 applies; Schedule 3 = section 20 applies

(e) If a B2 value is exceeded, the regulation requires potential adverse effects to be assessed. If it is determined that an adverse effect may occur for the contaminant in question, this should be included in the table

APPENDIX C

MECP AUDIT RECORD – SEPTEMBER 18, 2019

Ministry of the Environment
435 James Street South.
Suite 331
Thunder Bay, ON P7E 6S7

Ministère de l'Environnement
435, rue James sud
Bureau 331
Thunder Bay, ON P7E 6S7

Ontario

Fax/télécopieur: (807) 475-1754
Phone/ téléphone: (807) 475-1205

Northern Region Technical Support Section – Thunder Bay

September 23, 2019

Kelsea Hunsperger
Environmental Specialist

New Gold Inc.
Rainy River Project
5967 Highway 11/71, P.O. Box 5, Emo
Ontario, Canada, P0W IE0
M: (807) 707-3058

Dear Ms. Hunsperger:

Re: Air Monitoring Station Audit – Non-Continuous Monitors

On September 18th 2019 your company's station [s] were audited. Attached is a copy of the Audit record, below is a summary of the results:

1. Tait Road (Station #62054)

Sampler Type	Sampler S/N	% Error	Criteria Met
PQ200 PM2.5	1751	0.4% Low	Yes
TSP Tisch	2362/3105	4.75% High	Yes
Dustfall Jars	N/A	N/A	Yes

2. Galllinger Road (Station #62055)

Sampler Type	Sampler S/N	% Error	Criteria Met
PQ200 PM2.5	1752	0.6% High	Yes
TSP Tisch	3291	6.5% High	Yes
* Dustfall Jars*	N/A	N/A	Yes

*NOTE Gallinger Road station vegetation inside the gated station needs to be cleared out.

If you have any questions, do not hesitate to call.
Yours truly,

Jim Stachowich
Senior Environmental Officer
Air, Pesticides and Environmental Planning
Technical Support Section
Northern Region

c: Sylvie St.Jean Newgold Inc.
c: Jason Tittlemier Senior Environmental Officer, Kenora District Office, MOE
c: File AQ 06 13 Thunder Bay/NewGold Inc./62054/62055/2019/Qtr#2

Ontario
Ministry of the Environment

Non-Continuous Instrumentation
Dustfall
Site Audit

Dustfall Site Audit			
Site Name/Address:	NEW GOLD TAIT ROAD		
City/Town:	CHAPLEAU MUNICIPALITY		
Site ID #: 62054	Operator/Representative:		
Date (yr/mm/dd): 2019/09/18	Auditor: JIM STACHOWICH		

Criteria	Requirements	Observed	Criteria Met? YES	NO
Sampler height	3 m above ground		✓	
Distance from Obstructions	270° arc of unrestricted airflow & wind from point source quadrant must be included in arc		✓	
	No overhead obstructions (hydro telephone wires) to interfere with particle deposition		✓	
Distance from trees	Should be > 20 m from drip line of trees		✓	
Distance from road	No nearby unpaved roads & parking lot		✓	
Rooftop installation	Avoid building wake effect		✓	
	No nearby chimney or flues that could emit particles (soot/coal)		✓	
Bracket installation	Should be level & jar must be level in bracket		✓	
Ground cover	Should have vegetative cover		✓	
Liner	4 mil liner must be used			✓ YES

Comments/observations and overall audit opinion:

NO LINERS USED IN DUSTFALL JARS.
JARS ARE SCALED & SENT FOR ANALYSIS.

Action Required (Auditor):	Signature:
NONE	<original signed by>
Action Taken (Auditee):	Signature: <original signed by>

00180

Ontario Ministry of the Environment

Atmospheric Analyser Audit Particulate

Site Information

Date (YYYY MM DD): 2019 09 18	Company: New Gold Tait Road		
Station/Site No.: 62054	Location Address		
Calibrator make: Tri-Cal TC-5		Instrument serial #: 1751	Instrument make: PQ200
Calibrator Serial No.: 64		Pollutant: PM2.5	
Accuracy (GPS)		Zone	
Easting		Northing	
+/- 10% Objective/Citeria Met: ☑ Yes ☐ No			
Audit performed by (Name and Signature): Jim Strathwork <original signed by>			

Results

Calibration Orifice and Equation - Manometer		
Calibration orifice number:	Manometer type:	Manometer S/N:
	S = slope of the calibration orifice	
	I = intercept of the calibration orifice	
Ambient Temperature: Inst 22.8, Tri Cal 23.3	Ambient Pressure: Inst 718mm Hg, Tri Cal 0960mb	

Audit Results	Required flow	
Manometer reading (in.of water)	Hi-vol & PM	40 cfm
True flow calculated result: $\sqrt{MR} \times S+1$	PAH	30 cfm
Percent error = (true flow value - required flow) x 100 / required flow	Dioxins	8 cfm
Leak Test: $\frac{16.63 - 16.7}{16.7} \times 100 = \downarrow 0.4\%$	47 mm	16.7 L/M
Temperature Correction = SQRT [298/(273+/-Ta)]	Ta = AMBIENT TEMP °C	

Remarks

No further required

Signature (Witness): <original signed by>	Name: Kelsea Hunsperger	Title: Environmental Specialist

Has the instrument been restored to service? ☐ Yes ☐ No

COPY 1

1999 (12/07)

00181

Ontario Ministry of the Environment

Atmospheric Analyser Audit Particulate

Site Information

Date (YYYY MM DD): 2019 09 18	Company: New Gold Tailings		
Station/Site No: 69084	Location Address: Chapple Municipality		
Calibrator make		Instrument serial #: 2362/3105	Instrument make: Tisch
Calibrator Serial No.		Pollutant: TSP	
Accuracy (GPS)		Zone	
Easting		Northing	
+/- 10% Objective/Citeria Met	☑ Yes ☐ No		
Audit performed by (Name and Signature)	<original signed by>		

Results

Calibration Orifice and Equation - Manometer		
Calibration orifice number: 41	Manometer type: Air-Neotronics	Manometer S/N: 1200676
17.60	S = slope of the calibration orifice	
6.25	I = intercept of the calibration orifice	
Ambient Temperature 22.8°C	Ambient Pressure 0984 MB	

Audit Results		Required flow	
Manometer reading (in.of water)	5.4	Hi-vol & PM	40 cfm (circled)
True flow calculated result: $\sqrt{MR} \times S+1$	41.9	PAH	30 cfm
Percent error = (true flow value - required flow) x 100 / required flow	4.75% ↑	Dioxins	8 cfm
Leak Test		47 mm	16.7 L/M
Temperature Correction = SQRT [298/(273+/-Ta)]		Ta = AMBIENT TEMP °C	

Remarks: Northern Recovery-		
Signature <original signed by>	Name: Kelsea Hunsperger	Title: Environmental Specialist
Has the instrument been restored to service? ☐ Yes ☐ No		

COPY 1

Ontario
Ministry of the Environment

Non-Continuous Instrumentation
Dustfall
Site Audit

Trinity Consultants Office in Toronto

Dustfall Site Audit			
Site Name/Address: New Gold Gallinger Road			
City/Town: Chapple Municipality			
Site ID #: 62055	Operator/Representative: New Gold		
Date (yr/mm/dd): 2019/09/18	Auditor: Jim Stockhouse <original signed by>		

Criteria	Requirements	Observed	Criteria Met? YES	Criteria Met? NO
Sampler height	3 m above ground		✓	
Distance from Obstructions	270° arc of unrestricted airflow & wind from point source quadrant must be included in arc		✓	
	No overhead obstructions (hydro telephone wires) to interfere with particle deposition		✓	
Distance from trees	Should be > 20 m from drip line of trees		✓	
Distance from road	No nearby unpaved roads & parking lot		✓	
Rooftop installation	Avoid building wake effect		✓	
	No nearby chimney or flues that could emit particles (soot/coal)		✓	
Bracket installation	Should be level & jar must be level in bracket		✓	
Ground cover	Should have vegetative cover			✓
Liner	4 mil liner must be used			✓ Xxx

Comments/observations and overall audit opinion:

Yes Dust Fall Jar Is Capped + Sent off For Analysis

Action Required (Auditor):	Signature:
Nothing Required	<original signed by>

Action Taken (Auditee):	Signature:
<original signed by>	<original signed by>

00183

Ontario Ministry of the Environment

Atmospheric Analyser Audit Particulate

Site Information

Date (YYYY MM DD): 2019 09 18	Company: NewGold Gallington Road		
Station/Site No.: 62055	Location Address: Chapples Municipality		
Calibrator make: BGI Tri-Cal		Instrument serial #: 1752	Instrument make: BGI PQ-200
Calibrator Serial No.: TC-5 s/n 64		Pollutant: Pm 2.5	
Accuracy (GPS)		Zone	
Easting		Northing	
+/- 10% Objective/Citeria Met ☑ Yes ☐ No			
Audit performed by (Name and Signature): Jim Stratlowak <original signed by>			

Results

Calibration Orifice and Equation - Manometer		
Calibration orifice number:	Manometer type:	Manometer S/N:
	S = slope of the calibration orifice	
	I = intercept of the calibration orifice	
Ambient Temperature: Tri Cal 26.0°C Inst 25°C	Ambient Pressure: Tri Cal 0958mb Inst 719 mmHg	

Audit Results		Required flow
Manometer reading (in.of water)	Hi-vol & PM	40 cfm
True flow calculated result: $\sqrt{MR} \times S+1$	PAH	30 cfm
Percent error = (true flow value - required flow) x 100 / required flow	Dioxins	8 cfm
Leak Test: $\frac{16.8 - 16.7}{16.7} \times 100 \approx 0.6\%$	47 mm	16.7 L/M

Temperature Correction = SQRT [298/(273+/-Ta)] Ta = AMBIENT TEMP °C

Remarks

Nothing Unusual.

Sign	Name	Title
<original signed by>	Kelsea Hunsperger	Environmental Specialist

Has the instrument been restored to service? ☐ Yes ☐ No

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1999 (12/07)

00182

Ontario Ministry of the Environment

Atmospheric Analyser Audit Particulate

Site Information

Date (YYYY MM DD) 2019 09 18	Company New Gold		
Station/Site No. 62055	Location Address Chapple Municipality Gallinger Road TRS02		
Calibrator make		Instrument serial # 5291	Instrument make Tisch TE-5007 S/N 4035
Calibrator Serial No.		Pollutant TSP	
Accuracy (GPS)		Zone	
Easting		Northing	
+/- 10% Objective/Citeria Met ☐ Yes ☐ No			
Audit performed by (Name and Signature) Jim Stachowich <original signed by>			

Results

Calibration Orifice and Equation - Manometer		
Calibration orifice number: 41	Manometer type: Air-Nicotronics	Manometer S/N: 1200076
17.66	S = slope of the calibration orifice	
0.25	I = intercept of the calibration orifice	

Ambient Temperature 25.9 Ambient Pressure 0958 mB

Audit Results		Required flow	
Manometer reading (in.of water)	5.6	Hi-vol & PM	40 cfm (circled)
True flow calculated result: $\sqrt{MR} \times S+1$	42.6	PAH	30 cfm
Percent error = (true flow value 42.6 - required flow 40) x 100 / required flow 40	↑6.5%	Dioxins	8 cfm
Leak Test		47 mm	16.7 L/M

Temperature Correction = SQRT [298/(273+/-Ta)] Ta = AMBIENT TEMP °C

Remarks

Nothing Required other than cut down vegetation inside station setup = SS

Signature (Witness)	Name	Title
<original signed by>	Kelsea Humsperger	Environmental Specialist

Has the instrument been restored to service? ☐ Yes ☐ No

COPY 1

1999 (12/07)

APPENDIX D

LABORATORY RESULTS – CERTIFICATES OF ANALYSIS

Your P.O. #: 4500022601
Your Project #: TC111504.2015.6
Site#: 2019/07/02 - 2019/08/02
Site Location: NEW GOLD - EMO, ON

Attention: GARNET CORNELL

NEW GOLD INC.
EMO, ON
5967 HIGHWAY 11/71
PO BOX 5
EMO, ON
CANADA P0W 1E0

Report Date: 2019/08/30
Report #: R2774645
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: B970779
Received: 2019/08/26, 14:00

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2019/08/27	2019/08/30	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2019/08/28	2019/08/30	PTC SOP-00149	Passive SO2 in ATM

Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Levi Manchak, Project Manager SR
Email: Levi.MANCHAK@bvlabs.com
Phone# (780)378-8542

==========

BV Labs has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B970779
Report Date: 2019/08/30

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

RESULTS OF CHEMICAL ANALYSES OF AIR

BV Labs ID		WJ1229	WJ1230		
Sampling Date		2019/07/02	2019/07/02		
	UNITS	RRP SOUTH	RRP NORTH	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	0.3	0.6	0.1	9563624
Calculated SO2	ppb	0.1	<0.1	0.1	9565740
RDL = Reportable Detection Limit					

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B970779
Report Date: 2019/08/30

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

GENERAL COMMENTS

Travel blank result for SO2 exceeded acceptance criteria of >RDL. Possible contamination may have occurred. Sample results have been blank subtracted.

Results relate only to the items tested.

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B970779
Report Date: 2019/08/30

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9563624	YL6	Spiked Blank	Calculated NO2			98	%	90 - 110
9563624	YL6	Method Blank	Calculated NO2		<0.1		ppb	
9565740	OZ	Spiked Blank	Calculated SO2			101	%	90 - 110
9565740	OZ	Method Blank	Calculated SO2		<0.1		ppb	

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

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

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B970779
Report Date: 2019/08/30

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).

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Linda Lin, Supervisor, Centre for Passive Sampling Technology

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Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

Your P.O. #: 4500022601
Your Project #: TC111504.2015.6
Site#: 2019/08/02 - 2019/09/04
Site Location: NEW GOLD - EMO, ON

Attention: GARNET CORNELL

NEW GOLD INC.
EMO, ON
5967 HIGHWAY 11/71
PO BOX 5
EMO, ON
CANADA P0W 1E0

Report Date: 2019/09/23
Report #: R2784791
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: B976568
Received: 2019/09/12, 11:10

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2019/09/13	2019/09/23	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2019/09/16	2019/09/23	PTC SOP-00149	Passive SO2 in ATM

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Levi Manchak, Project Manager SR
Email: Levi.MANCHAK@bvlabs.com
Phone# (780)378-8542

==========

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Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B976568
Report Date: 2019/09/23

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

RESULTS OF CHEMICAL ANALYSES OF AIR

BV Labs ID		WL9622	WL9623		
Sampling Date		2019/08/02	2019/08/02		
	UNITS	RRP SOUTH	RRP NORTH	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	0.5	0.9	0.1	9586540
Calculated SO2	ppb	<0.1	<0.1	0.1	9590307
RDL = Reportable Detection Limit					

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B976568
Report Date: 2019/09/23

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

GENERAL COMMENTS

Results relate only to the items tested.

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B976568
Report Date: 2019/09/23

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9586540	SS6	Spiked Blank	Calculated NO2			101	%	90 - 110
9586540	SS6	Method Blank	Calculated NO2		<0.1		ppb	
9590307	OZ	Spiked Blank	Calculated SO2			106	%	90 - 110
9590307	OZ	Method Blank	Calculated SO2		<0.1		ppb	

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

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

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B976568
Report Date: 2019/09/23

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

VALIDATION SIGNATURE PAGE

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Linda Lin, Supervisor, Centre for Passive Sampling Technology

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Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

Your P.O. #: 4500022601
Your Project #: TC111504.2015.6
Site#: 2019/09/04 - 2019/10/01
Site Location: NEW GOLD - EMO, ON

Attention: GARNET CORNELL

NEW GOLD INC.
EMO, ON
5967 HIGHWAY 11/71
PO BOX 5
EMO, ON
CANADA P0W 1E0

Report Date: 2019/10/18
Report #: R2797975
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BV LABS JOB #: B985803
Received: 2019/10/07, 11:25

Sample Matrix: Air
Samples Received: 2

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
NO2 Passive Analysis	2	2019/10/09	2019/10/18	PTC SOP-00148	Passive NO2 in ATM
SO2 Passive Analysis	2	2019/10/11	2019/10/18	PTC SOP-00149	Passive SO2 in ATM

Results relate only to the items tested.

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Levi Manchak, Project Manager SR
Email: Levi.MANCHAK@bvlabs.com
Phone# (780)378-8542

==========

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Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B985803
Report Date: 2019/10/18

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

RESULTS OF CHEMICAL ANALYSES OF AIR

BV Labs ID		WQ7151	WQ7152		
Sampling Date		2019/09/04	2019/09/04		
	UNITS	RRP SOUTH	RRP NORTH	RDL	QC Batch
Passive Monitoring					
Calculated NO2	ppb	0.7	0.6	0.1	9621619
Calculated SO2	ppb	<0.1	<0.1	0.1	9625034
RDL = Reportable Detection Limit					

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B985803
Report Date: 2019/10/18

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

GENERAL COMMENTS

Travel blank result for SO2 exceeded acceptance criteria of >RDL. Possible contamination may have occurred. Sample results have been blank subtracted.

Results relate only to the items tested.

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B985803
Report Date: 2019/10/18

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

QUALITY ASSURANCE REPORT

QA/QC Batch	Init	QC Type	Parameter	Date Analyzed	Value	Recovery	UNITS	QC Limits
9621619	YL6	Spiked Blank	Calculated NO2			99	%	90 - 110
9621619	YL6	Method Blank	Calculated NO2		<0.1		ppb	
9625034	OZ	Spiked Blank	Calculated SO2			100	%	90 - 110
9625034	OZ	Method Blank	Calculated SO2		<0.1		ppb	

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

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

Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

BV Labs Job #: B985803
Report Date: 2019/10/18

NEW GOLD INC.
Client Project #: TC111504.2015.6
Site Location: NEW GOLD - EMO, ON
Your P.O. #: 4500022601
Sampler Initials: KH

VALIDATION SIGNATURE PAGE

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Bureau Veritas Laboratories Edmonton: 6744 - 50th Street T6B 3M9 Telephone(780) 378-8500 FAX(780) 378-8699

New Gold Inc. Rainy River Project
ATTN: Kelsea Hunsperger
5967 Highway 11/71
P.O. Box 5
Emo ON P0W 1E0

Date Received: 14-AUG-19
Report Date: 30-AUG-19 08:47 (MT)
Version: FINAL

Client Phone: 807-482-0900

Certificate of Analysis

Lab Work Order #: L2328815

Project P.O. #: 4500018623
Job Reference: AIR QUALITY MONITORING
C of C Numbers:
Legal Site Desc:

<original signed by>

Claire Kocharakkal, B.Sc.
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2328815-1 NORTH-TSP-249							
Sampled By: Client on 02-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	75800		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.7		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	801		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	422		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	29.0		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	31.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-2 SOUTH-TSP-249							
Sampled By: Client on 02-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	69800		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.3		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	72.5		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	504		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	26.3		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	16.3		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-3 NORTH-TSP-250							
Sampled By: Client on 08-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	81100		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	581		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	202		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	18.2		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	28.1		5.0	ug	23-AUG-19	26-AUG-19	R4777288

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2328815-4 SOUTH-TSP-250							
Sampled By: Client on 08-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	88600		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.7		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	61.2		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	455		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	27.2		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	30.2		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-5 NORTH-TSP-251							
Sampled By: Client on 14-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	60400		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.2		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	612		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	218		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	13.0		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	19.4		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-6 SOUTH-TSP-251							
Sampled By: Client on 14-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	56600		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.4		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	45.9		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	396		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	16.7		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	13.7		5.0	ug	23-AUG-19	26-AUG-19	R4777288

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2328815-7 NORTH-TSP-252							
Sampled By: Client on 20-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	68100		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	590		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	255		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	14.2		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	31.3		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-8 SOUTH-TSP-252							
Sampled By: Client on 20-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	58100		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.1		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	44.3		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	358		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	17.1		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	20.5		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-9 NORTH-TSP-253							
Sampled By: Client on 26-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	69000		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.1		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	433		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	345		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	22.1		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	31.6		5.0	ug	23-AUG-19	26-AUG-19	R4777288

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2328815-10 SOUTH-TSP-253							
Sampled By: Client on 26-JUL-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	54200		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.3		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	33.3		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	302		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	19.2		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	17.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-11 NORTH-TSP-254							
Sampled By: Client on 01-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	78400		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	5.4		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	702		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	549		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	34.2		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	20.4		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-12 SOUTH-TSP-254							
Sampled By: Client on 01-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	71400		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	6.1		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	50.0		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	756		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	32.9		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	15.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2328815-13 TSP-TRAVEL BLANK							
Sampled By: Client on 01-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	15900		2300	ug		22-AUG-19	R4764910
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Cadmium (Cd)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Cobalt (Co)	<2.0		2.0	ug	23-AUG-19	26-AUG-19	R4777288
Chromium (Cr)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Copper (Cu)	<4.0		4.0	ug	23-AUG-19	26-AUG-19	R4777288
Iron (Fe)	24		20	ug	23-AUG-19	26-AUG-19	R4777288
Manganese (Mn)	<1.0		1.0	ug	23-AUG-19	26-AUG-19	R4777288
Nickel (Ni)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Lead (Pb)	<3.0		3.0	ug	23-AUG-19	26-AUG-19	R4777288
Selenium (Se)	<10		10	ug	23-AUG-19	26-AUG-19	R4777288
Vanadium (V)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
Zinc (Zn)	<5.0		5.0	ug	23-AUG-19	26-AUG-19	R4777288
L2328815-14 NORTH-PM2.5-249							
Sampled By: Client on 02-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	101		15	ug		21-AUG-19	R4764888
L2328815-15 SOUTH-PM2.5-249							
Sampled By: Client on 02-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	98		15	ug		21-AUG-19	R4764888
L2328815-16 NORTH-PM2.5-250							
Sampled By: Client on 08-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	318		15	ug		21-AUG-19	R4764888
L2328815-17 SOUTH-PM2.5-250							
Sampled By: Client on 08-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	383		15	ug		21-AUG-19	R4764888
L2328815-18 NORTH-PM2.5-251							
Sampled By: Client on 14-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	36		15	ug		21-AUG-19	R4764888
L2328815-19 SOUTH-PM2.5-251							
Sampled By: Client on 14-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	144		15	ug		21-AUG-19	R4764888
L2328815-20 NORTH-PM2.5-252							
Sampled By: Client on 20-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2328815-20 NORTH-PM2.5-252							
Sampled By: Client on 20-JUL-19							
Matrix: 47mm Filter							
Total particulate	67		15	ug		21-AUG-19	R4764888
L2328815-21 SOUTH-PM2.5-252							
Sampled By: Client on 20-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	167		15	ug		21-AUG-19	R4764888
L2328815-22 NORTH-PM2.5-253							
Sampled By: Client on 26-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	23		15	ug		21-AUG-19	R4764888
L2328815-23 SOUTH-PM2.5-253							
Sampled By: Client on 26-JUL-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	127		15	ug		21-AUG-19	R4764888
L2328815-24 NORTH-PM2.5-254							
Sampled By: Client on 01-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	29		15	ug		21-AUG-19	R4764888
L2328815-25 SOUTH-PM2.5-254							
Sampled By: Client on 01-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	135		15	ug		21-AUG-19	R4764888
L2328815-26 PM2.5-TRAVEL BLANK							
Sampled By: Client on 01-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	<15		15	ug		21-AUG-19	R4764888
L2328815-27 NORTH-DUSTFALL							
Sampled By: Client on 02-AUG-19							
Matrix: Dustfall							
Dustfalls-Total, Soluble, Insoluble +FV							
Total Dustfall	3.00		0.10	mg/dm2.day		20-AUG-19	R4764090
Total Insoluble Dustfall	1.59		0.10	mg/dm2.day		20-AUG-19	R4764090
Total Soluble Dustfall	1.41		0.10	mg/dm2.day		20-AUG-19	R4764090
Fixed Dustfall	0.65		0.10	mg/dm2.day		20-AUG-19	R4764090
Fixed Insoluble Dustfall	0.24		0.10	mg/dm2.day		20-AUG-19	R4764090
Fixed Soluble Dustfall	0.40		0.10	mg/dm2.day		20-AUG-19	R4764090
Volatile Dustfall	2.35		0.10	mg/dm2.day		20-AUG-19	R4764090
Volatile Insoluble Dustfall	1.35		0.10	mg/dm2.day		20-AUG-19	R4764090
Volatile Soluble Dustfall	1.01		0.10	mg/dm2.day		20-AUG-19	R4764090
Total Metals in Dustfalls by ICPMS							
Aluminum (Al)-Total	0.00275		0.000044	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Interval			1	days		20-AUG-19	R4759937
Antimony (Sb)-Total	0.0000040		0.0000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2328815-27 NORTH-DUSTFALL							
Sampled By: Client on 02-AUG-19							
Matrix: Dustfall							
Total Metals in Dustfalls by ICPMS							
Arsenic (As)-Total	0.0000036		0.0000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Barium (Ba)-Total	0.000126		0.0000007 3	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Beryllium (Be)-Total	<0.0000073		0.0000073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Bismuth (Bi)-Total	<0.0000073		0.0000073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Boron (B)-Total	<0.00015		0.00015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Cadmium (Cd)-Total	0.00000268		0.0000007 3	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Calcium (Ca)-Total	0.0437		0.00029	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Chromium (Cr)-Total	<0.0000073		0.0000073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Cobalt (Co)-Total	0.0000033		0.0000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Copper (Cu)-Total	0.000227		0.0000073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Lead (Pb)-Total	0.00000630		0.0000007 3	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Iron (Fe)-Total	0.00340		0.00044	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Lithium (Li)-Total	<0.000073		0.000073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Magnesium (Mg)-Total	0.0163		0.000073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Manganese (Mn)-Total	0.000707		0.0000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Molybdenum (Mo)-Total	0.0000230		0.0000007 3	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Nickel (Ni)-Total	0.0000367		0.0000073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Phosphorus (P)-Total	0.0724		0.00073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Potassium (K)-Total	0.115		0.00073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Selenium (Se)-Total	<0.000015		0.000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Silicon (Si)-Total	0.00567		0.00073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Silver (Ag)-Total	0.00000038		0.0000001 5	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Sodium (Na)-Total	0.00375		0.00073	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Strontium (Sr)-Total	0.0000638		0.0000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Thallium (Tl)-Total	<0.0000015		0.0000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Tin (Sn)-Total	<0.0000015		0.0000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Titanium (Ti)-Total	<0.00015		0.00015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Uranium (U)-Total	<0.00000015		0.0000001 5	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Vanadium (V)-Total	<0.000015		0.000015	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Zinc (Zn)-Total	0.00139		0.000044	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
L2328815-28 SOUTH-DUSTFALL							
Sampled By: Client on 02-AUG-19							
Matrix: Dustfall							
Dustfalls-Total, Soluble, Insoluble +FV							
Total Dustfall	1.28		0.10	mg/dm2.day		20-AUG-19	R4764090
Total Insoluble Dustfall	0.77		0.10	mg/dm2.day		20-AUG-19	R4764090
Total Soluble Dustfall	0.51		0.10	mg/dm2.day		20-AUG-19	R4764090
Fixed Dustfall	0.68		0.10	mg/dm2.day		20-AUG-19	R4764090
Fixed Insoluble Dustfall	0.56		0.10	mg/dm2.day		20-AUG-19	R4764090
Fixed Soluble Dustfall	0.12		0.10	mg/dm2.day		20-AUG-19	R4764090
Volatile Dustfall	0.60		0.10	mg/dm2.day		20-AUG-19	R4764090
Volatile Insoluble Dustfall	0.21		0.10	mg/dm2.day		20-AUG-19	R4764090
Volatile Soluble Dustfall	0.39		0.10	mg/dm2.day		20-AUG-19	R4764090
Total Metals in Dustfalls by ICPMS							
Aluminum (Al)-Total	0.00568		0.000032	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Interval			1	days		20-AUG-19	R4759937

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2328815-28 SOUTH-DUSTFALL							
Sampled By: Client on 02-AUG-19							
Matrix: Dustfall							
Total Metals in Dustfalls by ICPMS							
Antimony (Sb)-Total	0.0000014		0.0000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Arsenic (As)-Total	0.0000040		0.0000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Barium (Ba)-Total	0.0000904		0.0000005 4	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Beryllium (Be)-Total	<0.0000054		0.0000054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Bismuth (Bi)-Total	<0.0000054		0.0000054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Boron (B)-Total	<0.00011		0.00011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Cadmium (Cd)-Total	0.00000063		0.0000005 4	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Calcium (Ca)-Total	0.0275		0.00022	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Chromium (Cr)-Total	0.0000113		0.0000054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Cobalt (Co)-Total	0.0000043		0.0000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Copper (Cu)-Total	0.0000655		0.0000054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Lead (Pb)-Total	0.00000842		0.0000005 4	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Iron (Fe)-Total	0.00728		0.00032	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Lithium (Li)-Total	<0.000054		0.000054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Magnesium (Mg)-Total	0.00901		0.000054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Manganese (Mn)-Total	0.000478		0.0000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Molybdenum (Mo)-Total	0.00000117		0.0000005 4	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Nickel (Ni)-Total	0.0000232		0.0000054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Phosphorus (P)-Total	0.00593		0.00054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Potassium (K)-Total	0.0102		0.00054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Selenium (Se)-Total	<0.000011		0.000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Silicon (Si)-Total	0.00854		0.00054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Silver (Ag)-Total	0.00000015		0.0000001 1	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Sodium (Na)-Total	0.00257		0.00054	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Strontium (Sr)-Total	0.0000744		0.0000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Thallium (Tl)-Total	<0.0000011		0.0000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Tin (Sn)-Total	<0.0000011		0.0000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Titanium (Ti)-Total	0.00019		0.00011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Uranium (U)-Total	0.00000034		0.0000001 1	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Vanadium (V)-Total	0.000014		0.000011	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228
Zinc (Zn)-Total	<0.00029	DLB	0.00029	mg/dm2.day	20-AUG-19	20-AUG-19	R4761228

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.
DLB	Detection Limit Raised. Analyte detected at comparable level in Method Blank.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
AIR VOLUME-HIVOL-BU	Filter	Air volume (m3)	USEPA IO3.1
DUSTFALLS-ALL-DM2-VA	Dustfall	Dustfalls-Total, Soluble, Insoluble +FV	BC LAB MANUAL - PARTICULATE

This analysis is carried out using procedures modified from British Columbia Environmental Manual "Particulate."
Particulates or "Dustfalls" are determined gravimetrically. Total Insoluble and Soluble Dustfalls are determined by filtering a sample through a 0.45 um membrane filter and drying the filter and filtrate at 104 C, followed by ignition at 550 C. The remaining residue after 550 C represents the fixed portion and the weight lost on ignition represents the volatile portion. The sum of all fixed and volatile portions on both Insoluble and Soluble portions represents Total Dustfalls.

MET+IC/SOLID-CALC-BU	Filter	Metals + Anions + Cations / Solids Ratio	Calculation
MET-DUST(DM2)-MS-VA	Dustfall	Total Metals in Dustfalls by ICPMS	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). Instrumental analysis is by inductively coupled plasma - mass spectrometry (EPA Method 6020A).

MET-IO3.5-MS-BU	Filter	Metals on High Volume Filter by ICPMS	IO3.5

After weighing (if required), hivol filters are sub-sampled and leached with nitric acid to extract available metal analytes. After dilution, the extracts are submitted to the ICPMS instrument for analysis.

PART-EC6.08-GRAV-BU	Filter	Particulate ENV Canada 6.08 microbalance	ENV CAN 6.08

The particulate matter collected onto tare-weighed 47mm Teflon Disc filter media is desiccated then brought to a constant weight on an analytical balance. Results are presented in ug (per filter). An air volume can be included to allow for reporting in ug/m3.

PART-HIVOL-GRAV-BU	Filter	Particulate on High Volume Filter	USEPA IO3.1

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
BU	ALS ENVIRONMENTAL - BURLINGTON, ONTARIO, CANADA
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Client: New Gold Inc. Rainy River Project
5967 Highway 11/71 P.O. Box 5
Emo ON P0W 1E0
Contact: Kelsea Hunsperger

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-IO3.5-MS-BU	**Filter**							
Batch R4777288								
WG3143626-3 DUP		**L2328815-1**						
Arsenic (As)		<3.0	<3.0	RPD-NA	ug	N/A	20	26-AUG-19
Cadmium (Cd)		<2.0	<2.0	RPD-NA	ug	N/A	20	26-AUG-19
Cobalt (Co)		<2.0	<2.0	RPD-NA	ug	N/A	20	26-AUG-19
Chromium (Cr)		5.7	<5.0	RPD-NA	ug	N/A	20	26-AUG-19
Copper (Cu)		801	693		ug	14	20	26-AUG-19
Iron (Fe)		422	379		ug	11	25	26-AUG-19
Manganese (Mn)		29.0	24.8		ug	15	20	26-AUG-19
Nickel (Ni)		<3.0	<3.0	RPD-NA	ug	N/A	20	26-AUG-19
Lead (Pb)		<3.0	<3.0	RPD-NA	ug	N/A	20	26-AUG-19
Selenium (Se)		<10	<10	RPD-NA	ug	N/A	20	26-AUG-19
Vanadium (V)		<5.0	<5.0	RPD-NA	ug	N/A	20	26-AUG-19
Zinc (Zn)		31.0	23.3	J	ug	7.7	10	26-AUG-19
WG3143626-2 LCS								
Arsenic (As)			94.6		%		80-120	26-AUG-19
Cadmium (Cd)			94.2		%		80-120	26-AUG-19
Cobalt (Co)			99.0		%		80-120	26-AUG-19
Chromium (Cr)			94.9		%		80-120	26-AUG-19
Copper (Cu)			104.0		%		80-120	26-AUG-19
Iron (Fe)			98.4		%		80-120	26-AUG-19
Manganese (Mn)			96.3		%		80-120	26-AUG-19
Nickel (Ni)			94.9		%		80-120	26-AUG-19
Lead (Pb)			96.4		%		80-120	26-AUG-19
Selenium (Se)			98.9		%		80-120	26-AUG-19
Vanadium (V)			95.1		%		80-120	26-AUG-19
Zinc (Zn)			97.5		%		80-120	26-AUG-19
WG3143626-1 MB								
Arsenic (As)			<3.0		ug		3	26-AUG-19
Cadmium (Cd)			<2.0		ug		2	26-AUG-19
Cobalt (Co)			<2.0		ug		2	26-AUG-19
Chromium (Cr)			<5.0		ug		5	26-AUG-19
Copper (Cu)			6.1	A	ug		4	26-AUG-19
Iron (Fe)			<20		ug		20	26-AUG-19
Manganese (Mn)			<1.0		ug		1	26-AUG-19
Nickel (Ni)			<3.0		ug		3	26-AUG-19
Lead (Pb)			<3.0		ug		3	26-AUG-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-IO3.5-MS-BU	**Filter**							
Batch R4777288								
WG3143626-1 MB								
Selenium (Se)			<10		ug		10	26-AUG-19
Vanadium (V)			<5.0		ug		10	26-AUG-19
Zinc (Zn)			<5.0		ug		5	26-AUG-19
COMMENTS: Cu observed in the method blank above the LOR. Data for this analyte may be biased slightly high as a result of this background contribution. PE 29-Aug-19								
WG3143626-4 MS		**L2328815-1**						
Arsenic (As)			96.0		%		75-125	26-AUG-19
Cadmium (Cd)			95.5		%		75-125	26-AUG-19
Cobalt (Co)			100.3		%		75-125	26-AUG-19
Chromium (Cr)			95.4		%		75-125	26-AUG-19
Copper (Cu)			N/A	MS-B	%		-	26-AUG-19
Iron (Fe)			N/A	MS-B	%		-	26-AUG-19
Manganese (Mn)			88.6		%		75-125	26-AUG-19
Nickel (Ni)			95.4		%		75-125	26-AUG-19
Lead (Pb)			92.3		%		75-125	26-AUG-19
Selenium (Se)			99.3		%		75-125	26-AUG-19
Vanadium (V)			97.5		%		75-125	26-AUG-19
Zinc (Zn)			89.6		%		75-125	26-AUG-19
PART-EC6.08-GRAV-BU	**Filter**							
Batch R4764888								
WG3140663-2 DUP		**L2328815-14**						
Total particulate		101	96		ug	5.1	25	21-AUG-19
WG3140663-1 MB								
Total particulate			<15		ug		15	21-AUG-19
PART-HIVOL-GRAV-BU	**Filter**							
Batch R4764910								
WG3140675-3 DUP		**L2328815-1**						
Total particulate		75800	75500		ug	0.4	25	22-AUG-19
WG3140675-1 MB								
Total particulate			<100		ug		100	22-AUG-19
DUSTFALLS-ALL-DM2-VA	**Dustfall**							
Batch R4764090								
WG3137627-1 MB								
Total Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19
Total Insoluble Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19
Total Soluble Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
DUSTFALLS-ALL-DM2-VA	**Dustfall**							
Batch R4764090								
WG3137627-1 MB								
Fixed Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19
Fixed Insoluble Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19
Fixed Soluble Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19
Volatile Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19
Volatile Insoluble Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19
Volatile Soluble Dustfall			<0.10		mg/dm2.day		0.1	20-AUG-19
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4761228								
WG3136891-2 LCS								
Aluminum (Al)-Total			92.6		%		80-120	20-AUG-19
Antimony (Sb)-Total			93.2		%		80-120	20-AUG-19
Arsenic (As)-Total			99.7		%		80-120	20-AUG-19
Barium (Ba)-Total			96.2		%		80-120	20-AUG-19
Beryllium (Be)-Total			85.8		%		80-120	20-AUG-19
Bismuth (Bi)-Total			90.1		%		80-120	20-AUG-19
Boron (B)-Total			94.5		%		80-120	20-AUG-19
Cadmium (Cd)-Total			94.9		%		80-120	20-AUG-19
Calcium (Ca)-Total			85.3		%		80-120	20-AUG-19
Chromium (Cr)-Total			94.3		%		80-120	20-AUG-19
Cobalt (Co)-Total			91.6		%		80-120	20-AUG-19
Copper (Cu)-Total			92.5		%		80-120	20-AUG-19
Lead (Pb)-Total			84.4		%		80-120	20-AUG-19
Iron (Fe)-Total			88.2		%		80-120	20-AUG-19
Lithium (Li)-Total			85.5		%		80-120	20-AUG-19
Magnesium (Mg)-Total			91.8		%		80-120	20-AUG-19
Manganese (Mn)-Total			95.5		%		80-120	20-AUG-19
Molybdenum (Mo)-Total			92.1		%		80-120	20-AUG-19
Nickel (Ni)-Total			92.2		%		80-120	20-AUG-19
Phosphorus (P)-Total			101.7		%		80-120	20-AUG-19
Potassium (K)-Total			91.6		%		80-120	20-AUG-19
Selenium (Se)-Total			95.5		%		80-120	20-AUG-19
Silicon (Si)-Total			98.4		%		80-120	20-AUG-19
Silver (Ag)-Total			85.4		%		80-120	20-AUG-19
Sodium (Na)-Total			98.0		%		80-120	20-AUG-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch	**R4761228**							
WG3136891-2	**LCS**							
Strontium (Sr)-Total			86.1		%		80-120	20-AUG-19
Thallium (Tl)-Total			82.7		%		80-120	20-AUG-19
Tin (Sn)-Total			92.5		%		80-120	20-AUG-19
Titanium (Ti)-Total			94.3		%		80-120	20-AUG-19
Uranium (U)-Total			84.6		%		80-120	20-AUG-19
Vanadium (V)-Total			94.3		%		80-120	20-AUG-19
Zinc (Zn)-Total			101.3		%		80-120	20-AUG-19
WG3136891-1	**MB**							
Aluminum (Al)-Total			<0.000079		mg/dm2.day		0.000079	20-AUG-19
Antimony (Sb)-Total			<0.0000026		mg/dm2.day		0.0000026	20-AUG-19
Arsenic (As)-Total			<0.0000026		mg/dm2.day		0.0000026	20-AUG-19
Barium (Ba)-Total			0.0000013	B	mg/dm2.day		0.0000013	20-AUG-19
Beryllium (Be)-Total			<0.000013		mg/dm2.day		0.000013	20-AUG-19
Bismuth (Bi)-Total			<0.000013		mg/dm2.day		0.000013	20-AUG-19
Boron (B)-Total			<0.00026		mg/dm2.day		0.00026	20-AUG-19
Cadmium (Cd)-Total			<0.0000013		mg/dm2.day		0.0000013	20-AUG-19
Calcium (Ca)-Total			0.00150	B	mg/dm2.day		0.00052	20-AUG-19
Chromium (Cr)-Total			<0.000013		mg/dm2.day		0.000013	20-AUG-19
Cobalt (Co)-Total			<0.0000026		mg/dm2.day		0.0000026	20-AUG-19
Copper (Cu)-Total			<0.000013		mg/dm2.day		0.000013	20-AUG-19
Lead (Pb)-Total			<0.0000013		mg/dm2.day		0.0000013	20-AUG-19
Iron (Fe)-Total			<0.00079		mg/dm2.day		0.00079	20-AUG-19
Lithium (Li)-Total			<0.00013		mg/dm2.day		0.00013	20-AUG-19
Magnesium (Mg)-Total			<0.00013		mg/dm2.day		0.00013	20-AUG-19
Manganese (Mn)-Total			<0.0000026		mg/dm2.day		0.0000026	20-AUG-19
Molybdenum (Mo)-Total			<0.0000013		mg/dm2.day		0.0000013	20-AUG-19
Nickel (Ni)-Total			<0.000013		mg/dm2.day		0.000013	20-AUG-19
Phosphorus (P)-Total			<0.0013		mg/dm2.day		0.0013	20-AUG-19
Potassium (K)-Total			<0.0013		mg/dm2.day		0.0013	20-AUG-19
Selenium (Se)-Total			<0.000026		mg/dm2.day		0.000026	20-AUG-19
Silicon (Si)-Total			<0.0013		mg/dm2.day		0.0013	20-AUG-19
Silver (Ag)-Total			<0.0000002		mg/dm2.day		0.00000026	20-AUG-19
Sodium (Na)-Total			<0.0013		mg/dm2.day		0.0013	20-AUG-19
Strontium (Sr)-Total			<0.0000026		mg/dm2.day		0.0000026	20-AUG-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4761228								
WG3136891-1 MB								
Thallium (Tl)-Total			<0.0000026		mg/dm2.day		0.0000026	20-AUG-19
Tin (Sn)-Total			<0.0000026		mg/dm2.day		0.0000026	20-AUG-19
Titanium (Ti)-Total			<0.00026		mg/dm2.day		0.00026	20-AUG-19
Uranium (U)-Total			<0.0000002		mg/dm2.day		0.00000026	20-AUG-19
Vanadium (V)-Total			<0.000026		mg/dm2.day		0.000026	20-AUG-19
Zinc (Zn)-Total			0.000176	MB-LOR	mg/dm2.day		0.000079	20-AUG-19

Quality Control Report

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.
J	Duplicate results and limits are expressed in terms of absolute difference.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes 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 pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

L2328815

Report To		Report Format / Distribution	Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
Company:	New Gold Inc. Rainy River Project	Report Format: ☑PDF ☑ Excel ☑ EDD (Digital)	R ☑ Regular (Standard TAT if received by 3pm - business days)
Contact:	Kelsea Hunsperger	Quality Control (QC) Report with Report ☑Yes ☐ No	P ☐ Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT
Address:	24 Marr Rd.	☐ Criteria on Report - provide details below if box checked	E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
City/Province:	Barwick ON	Select Distribution: ☑ Email ☐ Mail ☐ Fax	E2 ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
Postal Code:	P0W 1A0	Email 1 or Fax: rainyriver.labresults@newgold.com	Date and Time Required for all E&P TATs:
Phone:	807-482-0900 x8328		For tests that can not be performed according to the service level selected, you will be contacted.
		Email 2 yag.inviron@newgold.com	Analysis Request
Invoice To Same as Report ? ☑ Yes ☐ No		Invoice Distribution	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below
Copy of Invoice with Report? ☐ Yes ☐ No		Select Invoice Distribution: ☑ Email ☐ Mail ☐ Fax	
Company:		Email 1 or Fax: rainyriver.labresults@newgold.com	
Contact:		Email 2: Kelsea.hunsperger@newgold.com	
Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:		Approver ID: Cost Center:	
Job #:	Air Quality	GL Account:: Routing Code:	
PO / AFE:	4500018623	Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact: Claire Kockarakkal	Sampler:

Sample Ref (upload EDD)	Sample Identification and/or Coordinates (Description will appear on the report)	Filter ID	Date (dd-MMM-yy)	Time (hh:mm)	Sample Type	TSP and Metals	PM2.5	Dustfall incl. volatile	Number of Containers
122716	TSP	North-TSP-249	02-Jul-19	12:00	Air	x			
122717	TSP	South-TSP-249	02-Jul-19	12:00	Air	x			
122718	PM 2.5	North-PM2.5-249	02-Jul-19	12:00	Air		x		
122719	PM 2.5	South-PM2.5-249	02-Jul-19	12:00	Air		x		
122720	TSP	North-TSP-250	08-Jul-19	12:00	Air	x			
122721	TSP	South-TSP-250	08-Jul-19	12:00	Air	x			
122725	PM 2.5	North-PM2.5-250	08-Jul-19	12:00	Air		x		
122726	PM 2.5	South-PM2.5-250	08-Jul-19	12:00	Air		x		
122727	TSP	North-TSP-251	14-Jul-19	12:00	Air	x			
122734	TSP	South-TSP-251	14-Jul-19	12:00	Air	x			
122737	PM 2.5	North-PM2.5-251	14-Jul-19	12:00	Air		x		
122738	PM 2.5	South-PM2.5-251	14-Jul-19	12:00	Air		x		
122739	TSP	North-TSP-252	20-Jul-19	12:00	Air	x			
122740	TSP	South-TSP-252	20-Jul-19	12:00	Air	x			
122741	PM 2.5	North-PM2.5-252	20-Jul-19	12:00	Air		x		
122742	PM 2.5	South-PM2.5-252	20-Jul-19	12:00	Air		x		
122743	TSP	North-TSP-253	26-Jul-19	12:00	Air	x			
122744	TSP	South-TSP-253	26-Jul-19	12:00	Air	x			
122746	PM 2.5	North-PM2.5-253	26-Jul-19	12:00	Air		x		
122748	PM 2.5	South-PM2.5-253	26-Jul-19	12:00	Air		x		
122749	TSP	North-TSP-254	01-Aug-19	12:00	Air	x			
122750	TSP	South-TSP-254	01-Aug-19	12:00	Air	x			
122751	PM 2.5	North-PM2.5-254	01-Aug-19	12:00	Air		x		
122752	PM 2.5	South-PM2.5-254	01-Aug-19	12:00	Air		x		
122753	Dustfall - Tait Road (South)		02-Aug-19	12:00	Air			x	
122754	Dustfall - Gallinger Road		02-Aug-19	12:00	Air			x	
122755	TSP Travel Blank		01-Aug-19	12:00	Air	x			
122756	PM2.5 Travel Blank		01-Aug-19	12:00	Air		x		

Drinking Water (DW) Samples¹ (client use)	Special Instructions / Specify Criteria to add on report (client Use)	SAMPLE CONDITION AS RECEIVED (lab use only)
Are samples taken from a Regulated DW System? ☐ Yes ☑ No	MISA [Template NGSWMISA]	Frozen ☐ SIF Observations ☐ Yes ☐ No
Are samples for human drinking water use? ☐ Yes ☑ No		Ice packs ☐ Yes ☐ No Custody seal intact ☐ Yes ☐ No
		Cooling Initiated ☐
		INITIAL COOLER TEMPERATURES °C: 22.8°C | FINAL COOLER TEMPERATURES °C:

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
Kelsea Hunsperger	2019-08-15	9:15	JARav Bretan	14-May 2019	8:50			

New Gold Inc. Rainy River Project
ATTN: Kelsea Hunsperger
5967 Highway 11/71
P.O. Box 5
Emo ON P0W 1E0

Date Received: 13-SEP-19
Report Date: 11-OCT-19 13:24 (MT)
Version: FINAL

Client Phone: 807-482-0900

Certificate of Analysis

Lab Work Order #: L2346695

Project P.O. #: 4500018623
Job Reference: AIR QUALITY MONITORING
C of C Numbers:
Legal Site Desc:

<original signed by>

Claire Kocharakkal, B.Sc.
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2346695-1 NORTH-TSP-255							
Sampled By: Kelsea Hunsperger on 07-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	77500		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	5.4		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	720		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	680		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	21.9		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	27.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
L2346695-2 SOUTH-TSP-255							
Sampled By: Kelsea Hunsperger on 07-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	42800		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	46.4		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	374		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	9.3		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	8.9		5.0	ug	08-OCT-19	09-OCT-19	R4863671
L2346695-3 NORTH-TSP-256							
Sampled By: Kelsea Hunsperger on 13-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	29200		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	441		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	303		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	8.1		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	16.5		5.0	ug	08-OCT-19	09-OCT-19	R4863671

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2346695-4 SOUTH-TSP-256							
Sampled By: Kelsea Hunsperger on 13-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	99000		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	6.5		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	48.6		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	1270		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	47.3		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	31.9		5.0	ug	08-OCT-19	09-OCT-19	R4863671
L2346695-5 NORTH-TSP-257							
Sampled By: Kelsea Hunsperger on 19-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	75700		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	369		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	684		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	24.8		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	22.3		5.0	ug	08-OCT-19	09-OCT-19	R4863671
L2346695-6 SOUTH-TSP-257							
Sampled By: Kelsea Hunsperger on 19-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	67400		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	5.2		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	30.8		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	1180		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	28.8		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	10.1		5.0	ug	08-OCT-19	09-OCT-19	R4863671

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2346695-7 NORTH-TSP-258							
Sampled By: Kelsea Hunsperger on 25-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	38900		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	5.3		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	364		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	324		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	10.4		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	4.1		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	21.9		5.0	ug	08-OCT-19	09-OCT-19	R4863671
L2346695-8 SOUTH-TSP-258							
Sampled By: Kelsea Hunsperger on 25-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	22900		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	5.4		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	35.7		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	415		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	11.2		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	13.2		5.0	ug	08-OCT-19	09-OCT-19	R4863671
L2346695-9 NORTH-TSP-259							
Sampled By: Kelsea Hunsperger on 31-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	16200		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	429		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	235		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	10.6		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	16.3		5.0	ug	08-OCT-19	09-OCT-19	R4863671

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2346695-10 SOUTH-TSP-259							
Sampled By: Kelsea Hunsperger on 31-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	53100		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	5.5		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	35.8		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	914		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	23.6		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	11.9		5.0	ug	08-OCT-19	09-OCT-19	R4863671
L2346695-11 TSP-TRAVEL BLANK							
Sampled By: Kelsea Hunsperger on 31-AUG-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	<2300		2300	ug		08-OCT-19	R4861840
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Cadmium (Cd)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Cobalt (Co)	<2.0		2.0	ug	08-OCT-19	09-OCT-19	R4863671
Chromium (Cr)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Copper (Cu)	7.3		4.0	ug	08-OCT-19	09-OCT-19	R4863671
Iron (Fe)	25		20	ug	08-OCT-19	09-OCT-19	R4863671
Manganese (Mn)	<1.0		1.0	ug	08-OCT-19	09-OCT-19	R4863671
Nickel (Ni)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Lead (Pb)	<3.0		3.0	ug	08-OCT-19	09-OCT-19	R4863671
Selenium (Se)	<10		10	ug	08-OCT-19	09-OCT-19	R4863671
Vanadium (V)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
Zinc (Zn)	<5.0		5.0	ug	08-OCT-19	09-OCT-19	R4863671
L2346695-12 NORTH-PM2.5-255							
Sampled By: Kelsea Hunsperger on 07-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	<15		15	ug		08-OCT-19	R4861840
L2346695-13 SOUTH-PM2.5-255							
Sampled By: Kelsea Hunsperger on 07-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	57		15	ug		08-OCT-19	R4861840
L2346695-14 NORTH-PM2.5-256							
Sampled By: Kelsea Hunsperger on 13-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	19		15	ug		08-OCT-19	R4861840

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2346695-15 SOUTH-PM2.5-256							
Sampled By: Kelsea Hunsperger on 13-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	159		15	ug		08-OCT-19	R4861840
L2346695-16 NORTH-PM2.5-257							
Sampled By: Kelsea Hunsperger on 19-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	173		15	ug		08-OCT-19	R4861840
L2346695-17 SOUTH-PM2.5-257							
Sampled By: Kelsea Hunsperger on 19-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	174		15	ug		08-OCT-19	R4861840
L2346695-18 NORTH-PM2.5-258							
Sampled By: Kelsea Hunsperger on 25-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	138		15	ug		08-OCT-19	R4861840
L2346695-19 SOUTH-PM2.5-258							
Sampled By: Kelsea Hunsperger on 25-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	107		15	ug		08-OCT-19	R4861840
L2346695-20 NORTH-PM2.5-259							
Sampled By: Kelsea Hunsperger on 31-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	54		15	ug		08-OCT-19	R4861840
L2346695-21 SOUTH-PM2.5-259							
Sampled By: Kelsea Hunsperger on 31-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	77		15	ug		08-OCT-19	R4861840
L2346695-22 PM2.5-TRAVEL BLANK							
Sampled By: Kelsea Hunsperger on 31-AUG-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	72		15	ug		08-OCT-19	R4861840
L2346695-23 NORTH-DUSTFALL							
Sampled By: Kelsea Hunsperger on 04-SEP-19							
Matrix: Dustfall							
Dustfalls-Total, Soluble, Insoluble +FV							
Total Dustfall	0.67		0.10	mg/dm2.day		24-SEP-19	R4841351
Total Insoluble Dustfall	0.42		0.10	mg/dm2.day		24-SEP-19	R4841351
Total Soluble Dustfall	0.25		0.10	mg/dm2.day		24-SEP-19	R4841351
Fixed Dustfall	0.27		0.10	mg/dm2.day		24-SEP-19	R4841351
Fixed Insoluble Dustfall	0.23		0.10	mg/dm2.day		24-SEP-19	R4841351
Fixed Soluble Dustfall	<0.10		0.10	mg/dm2.day		24-SEP-19	R4841351
Volatile Dustfall	0.40		0.10	mg/dm2.day		24-SEP-19	R4841351

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2346695-23 NORTH-DUSTFALL							
Sampled By: Kelsea Hunsperger on 04-SEP-19							
Matrix: Dustfall							
Dustfalls-Total, Soluble, Insoluble +FV							
Volatile Insoluble Dustfall	0.19		0.10	mg/dm2.day		24-SEP-19	R4841351
Volatile Soluble Dustfall	0.21		0.10	mg/dm2.day		24-SEP-19	R4841351
Total Metals in Dustfalls by ICPMS							
Aluminum (Al)-Total	0.00507		0.000063	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Interval			1	days		19-SEP-19	R4825091
Antimony (Sb)-Total	0.0000027		0.0000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Arsenic (As)-Total	0.0000030		0.0000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Barium (Ba)-Total	0.0000596		0.0000010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Beryllium (Be)-Total	<0.000010		0.000010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Bismuth (Bi)-Total	<0.000010		0.000010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Boron (B)-Total	<0.00021		0.00021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Cadmium (Cd)-Total	<0.0000010		0.0000010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Calcium (Ca)-Total	0.0233		0.00042	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Chromium (Cr)-Total	0.000013		0.000010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Cobalt (Co)-Total	0.0000022		0.0000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Copper (Cu)-Total	<0.000052	DLB	0.000052	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Lead (Pb)-Total	<0.0000073	DLB	0.0000073	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Iron (Fe)-Total	0.00484		0.00063	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Lithium (Li)-Total	<0.00010		0.00010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Magnesium (Mg)-Total	0.00857		0.00010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Manganese (Mn)-Total	0.000330		0.0000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Molybdenum (Mo)-Total	0.0000021		0.0000010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Nickel (Ni)-Total	0.000028		0.000010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Phosphorus (P)-Total	0.0078		0.0010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Potassium (K)-Total	0.0129		0.0010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Selenium (Se)-Total	<0.000021		0.000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Silicon (Si)-Total	0.0076		0.0010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Silver (Ag)-Total	0.00000022		0.00000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Sodium (Na)-Total	0.0027		0.0010	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Strontium (Sr)-Total	0.0000458		0.0000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Thallium (Tl)-Total	<0.0000021		0.0000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Tin (Sn)-Total	<0.0000021		0.0000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Titanium (Ti)-Total	<0.00021		0.00021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Uranium (U)-Total	0.00000024		0.00000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Vanadium (V)-Total	<0.000021		0.000021	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Zinc (Zn)-Total	0.000281		0.000063	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
L2346695-24 SOUTH-DUSTFALL							
Sampled By: Kelsea Hunsperger on 04-SEP-19							
Matrix: Dustfall							
Dustfalls-Total, Soluble, Insoluble +FV							
Total Dustfall	1.55		0.10	mg/dm2.day		24-SEP-19	R4841351
Total Insoluble Dustfall	1.01		0.10	mg/dm2.day		24-SEP-19	R4841351
Total Soluble Dustfall	0.54		0.10	mg/dm2.day		24-SEP-19	R4841351
Fixed Dustfall	0.67		0.10	mg/dm2.day		24-SEP-19	R4841351
Fixed Insoluble Dustfall	0.54		0.10	mg/dm2.day		24-SEP-19	R4841351
Fixed Soluble Dustfall	0.12		0.10	mg/dm2.day		24-SEP-19	R4841351
Volatile Dustfall	0.88		0.10	mg/dm2.day		24-SEP-19	R4841351
Volatile Insoluble Dustfall	0.46		0.10	mg/dm2.day		24-SEP-19	R4841351
Volatile Soluble Dustfall	0.42		0.10	mg/dm2.day		24-SEP-19	R4841351

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2346695-24 SOUTH-DUSTFALL							
Sampled By: Kelsea Hunsperger on 04-SEP-19							
Matrix: Dustfall							
Total Metals in Dustfalls by ICPMS							
Aluminum (Al)-Total	0.00455		0.0000501	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Interval			1	days		19-SEP-19	R4825091
Antimony (Sb)-Total	<0.0000017		0.0000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Arsenic (As)-Total	0.0000026		0.0000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Barium (Ba)-Total	0.0000575		0.00000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Beryllium (Be)-Total	<0.0000084		0.0000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Bismuth (Bi)-Total	<0.0000084		0.0000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Boron (B)-Total	<0.00017		0.00017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Cadmium (Cd)-Total	<0.00000084		0.00000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Calcium (Ca)-Total	0.0266		0.00033	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Chromium (Cr)-Total	0.0000128		0.0000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Cobalt (Co)-Total	0.0000051		0.0000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Copper (Cu)-Total	<0.000059	DLB	0.000059	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Lead (Pb)-Total	<0.0000050	DLB	0.0000050	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Iron (Fe)-Total	0.00599		0.00050	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Lithium (Li)-Total	<0.000084		0.000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Magnesium (Mg)-Total	0.00945		0.000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Manganese (Mn)-Total	0.000355		0.0000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Molybdenum (Mo)-Total	0.00000180		0.00000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Nickel (Ni)-Total	0.0000232		0.0000084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Phosphorus (P)-Total	0.0243		0.00084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Potassium (K)-Total	0.0373		0.00084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Selenium (Se)-Total	<0.000017		0.000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Silicon (Si)-Total	0.00717		0.00084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Silver (Ag)-Total	<0.00000017		0.00000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Sodium (Na)-Total	0.0105		0.00084	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Strontium (Sr)-Total	0.000103		0.0000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Thallium (Tl)-Total	<0.0000017		0.0000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Tin (Sn)-Total	<0.0000017		0.0000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Titanium (Ti)-Total	<0.00017		0.00017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Uranium (U)-Total	0.00000022		0.00000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Vanadium (V)-Total	<0.000017		0.000017	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668
Zinc (Zn)-Total	0.000216		0.000050	mg/dm2.day	19-SEP-19	19-SEP-19	R4824668

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
DLB	Detection Limit Raised. Analyte detected at comparable level in Method Blank.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
AIR VOLUME-HIVOL-BU	Filter	Air volume (m3)	USEPA IO3.1
DUSTFALLS-ALL-DM2-VA	Dustfall	Dustfalls-Total, Soluble, Insoluble +FV	BC LAB MANUAL - PARTICULATE

This analysis is carried out using procedures modified from British Columbia Environmental Manual "Particulate."
Particulates or "Dustfalls" are determined gravimetrically. Total Insoluble and Soluble Dustfalls are determined by filtering a sample through a 0.45 um membrane filter and drying the filter and filtrate at 104 C, followed by ignition at 550 C. The remaining residue after 550 C represents the fixed portion and the weight lost on ignition represents the volatile portion. The sum of all fixed and volatile portions on both Insoluble and Soluble portions represents Total Dustfalls.

MET-DUST(DM2)-MS-VA	Dustfall	Total Metals in Dustfalls by ICPMS	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). Instrumental analysis is by inductively coupled plasma - mass spectrometry (EPA Method 6020A).

MET-IO3.5-MS-BU	Filter	Metals on High Volume Filter by ICPMS	IO3.5

After weighing (if required), hivol filters are sub-sampled and leached with nitric acid to extract available metal analytes. After dilution, the extracts are submitted to the ICPMS instrument for analysis.

PART-EC6.08-GRAV-BU	Filter	Particulate ENV Canada 6.08 microbalance	ENV CAN 6.08

The particulate matter collected onto tare-weighed 47mm Teflon Disc filter media is desiccated then brought to a constant weight on an analytical balance. Results are presented in ug (per filter). An air volume can be included to allow for reporting in ug/m3.

PART-HIVOL-GRAV-BU	Filter	Particulate on High Volume Filter	USEPA IO3.1

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
BU	ALS ENVIRONMENTAL - BURLINGTON, ONTARIO, CANADA
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Client: New Gold Inc. Rainy River Project
5967 Highway 11/71 P.O. Box 5
Emo ON P0W 1E0
Contact: Kelsea Hunsperger

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-IO3.5-MS-BU	**Filter**							
Batch R4863671								
WG3185569-2 LCS								
Arsenic (As)			89.6		%		80-120	09-OCT-19
Cadmium (Cd)			95.8		%		80-120	09-OCT-19
Cobalt (Co)			91.8		%		80-120	09-OCT-19
Chromium (Cr)			90.4		%		80-120	09-OCT-19
Copper (Cu)			98.7		%		80-120	09-OCT-19
Iron (Fe)			94.2		%		80-120	09-OCT-19
Manganese (Mn)			91.2		%		80-120	09-OCT-19
Nickel (Ni)			91.4		%		80-120	09-OCT-19
Lead (Pb)			96.2		%		80-120	09-OCT-19
Selenium (Se)			96.6		%		80-120	09-OCT-19
Vanadium (V)			90.0		%		80-120	09-OCT-19
Zinc (Zn)			90.5		%		80-120	09-OCT-19
WG3185569-1 MB								
Arsenic (As)			<3.0		ug		3	09-OCT-19
Cadmium (Cd)			<2.0		ug		2	09-OCT-19
Cobalt (Co)			<2.0		ug		2	09-OCT-19
Chromium (Cr)			<5.0		ug		5	09-OCT-19
Copper (Cu)			<4.0		ug		4	09-OCT-19
Iron (Fe)			<20		ug		20	09-OCT-19
Manganese (Mn)			<1.0		ug		1	09-OCT-19
Nickel (Ni)			<3.0		ug		3	09-OCT-19
Lead (Pb)			<3.0		ug		3	09-OCT-19
Selenium (Se)			<10		ug		10	09-OCT-19
Vanadium (V)			<5.0		ug		10	09-OCT-19
Zinc (Zn)			<5.0		ug		5	09-OCT-19
PART-EC6.08-GRAV-BU	**Filter**							
Batch R4861840								
WG3185116-4 DUP		**L2346695-21**						
Total particulate		77	70		ug	9.5	25	08-OCT-19
WG3185116-3 MB								
Total particulate			<15		ug		15	08-OCT-19
PART-HIVOL-GRAV-BU	**Filter**							

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PART-HIVOL-GRAV-BU	**Filter**							
Batch R4861840								
WG3185116-2 DUP		**L2346695-1**						
Total particulate		77500	77400		ug	0.1	25	08-OCT-19
WG3185116-1 MB								
Total particulate			<100		ug		100	08-OCT-19
DUSTFALLS-ALL-DM2-VA	**Dustfall**							
Batch R4841351								
WG3171541-1 MB								
Total Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
Total Insoluble Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
Total Soluble Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
Fixed Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
Fixed Insoluble Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
Fixed Soluble Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
Volatile Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
Volatile Insoluble Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
Volatile Soluble Dustfall			<0.10		mg/dm2.day		0.1	24-SEP-19
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4824668								
WG3166362-3 DUP		**L2346695-23**						
Aluminum (Al)-Total		0.00507	0.00463		mg/dm2.day	9.1	20	19-SEP-19
Antimony (Sb)-Total		0.0000027	0.0000025		mg/dm2.day	8.7	20	19-SEP-19
Arsenic (As)-Total		0.0000030	0.0000030		mg/dm2.day	1.4	20	19-SEP-19
Barium (Ba)-Total		0.0000596	0.0000563		mg/dm2.day	5.8	20	19-SEP-19
Beryllium (Be)-Total		<0.000010	<0.000010	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Bismuth (Bi)-Total		<0.000010	<0.000010	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Boron (B)-Total		<0.00021	<0.00021	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Cadmium (Cd)-Total		<0.0000010	<0.000001C	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Calcium (Ca)-Total		0.0233	0.0222		mg/dm2.day	4.6	20	19-SEP-19
Chromium (Cr)-Total		0.000013	0.000010	J	mg/dm2.day	0.000003	0.00002	19-SEP-19
Cobalt (Co)-Total		0.0000022	0.0000021		mg/dm2.day	4.8	20	19-SEP-19
Copper (Cu)-Total		<0.000052	<0.000052	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Lead (Pb)-Total		<0.0000073	<0.0000073	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Iron (Fe)-Total		0.00484	0.00438		mg/dm2.day	10	20	19-SEP-19
Lithium (Li)-Total		<0.00010	<0.00010	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Magnesium (Mg)-Total		0.00857	0.00793		mg/dm2.day	7.8	20	19-SEP-19
Manganese (Mn)-Total		0.000330	0.000300		mg/dm2.day	9.5	20	19-SEP-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4824668								
WG3166362-3 DUP		**L2346695-23**						
Molybdenum (Mo)-Total		0.0000021	0.0000014	J	mg/dm2.day	0.000000	0.000002	19-SEP-19
Nickel (Ni)-Total		0.000028	0.000021	J	mg/dm2.day	0.000007	0.00002	19-SEP-19
Phosphorus (P)-Total		0.0078	0.0085		mg/dm2.day	9.0	20	19-SEP-19
Potassium (K)-Total		0.0129	0.0124		mg/dm2.day	4.0	20	19-SEP-19
Selenium (Se)-Total		<0.000021	<0.000021	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Silicon (Si)-Total		0.0076	0.0068		mg/dm2.day	11	20	19-SEP-19
Silver (Ag)-Total		0.00000022	<0.0000002	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Sodium (Na)-Total		0.0027	0.0026		mg/dm2.day	4.8	20	19-SEP-19
Strontium (Sr)-Total		0.0000458	0.0000425		mg/dm2.day	7.4	20	19-SEP-19
Thallium (Tl)-Total		<0.0000021	<0.0000021	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Tin (Sn)-Total		<0.0000021	<0.0000021	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Titanium (Ti)-Total		<0.00021	<0.00021	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Uranium (U)-Total		0.00000024	<0.0000002	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Vanadium (V)-Total		<0.000021	<0.000021	RPD-NA	mg/dm2.day	N/A	20	19-SEP-19
Zinc (Zn)-Total		0.000281	0.000239		mg/dm2.day	16	20	19-SEP-19
WG3166362-2 LCS								
Aluminum (Al)-Total			102.1		%		80-120	19-SEP-19
Antimony (Sb)-Total			103.1		%		80-120	19-SEP-19
Arsenic (As)-Total			98.0		%		80-120	19-SEP-19
Barium (Ba)-Total			100.8		%		80-120	19-SEP-19
Beryllium (Be)-Total			103.4		%		80-120	19-SEP-19
Bismuth (Bi)-Total			100.1		%		80-120	19-SEP-19
Boron (B)-Total			100.3		%		80-120	19-SEP-19
Cadmium (Cd)-Total			100.3		%		80-120	19-SEP-19
Calcium (Ca)-Total			98.8		%		80-120	19-SEP-19
Chromium (Cr)-Total			102.9		%		80-120	19-SEP-19
Cobalt (Co)-Total			99.0		%		80-120	19-SEP-19
Copper (Cu)-Total			101.1		%		80-120	19-SEP-19
Lead (Pb)-Total			96.4		%		80-120	19-SEP-19
Iron (Fe)-Total			93.0		%		80-120	19-SEP-19
Lithium (Li)-Total			101.1		%		80-120	19-SEP-19
Magnesium (Mg)-Total			103.5		%		80-120	19-SEP-19
Manganese (Mn)-Total			101.2		%		80-120	19-SEP-19
Molybdenum (Mo)-Total			98.9		%		80-120	19-SEP-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4824668								
WG3166362-2 LCS								
Nickel (Ni)-Total			100.6		%		80-120	19-SEP-19
Phosphorus (P)-Total			110.6		%		80-120	19-SEP-19
Potassium (K)-Total			103.8		%		80-120	19-SEP-19
Selenium (Se)-Total			99.1		%		80-120	19-SEP-19
Silicon (Si)-Total			101.0		%		80-120	19-SEP-19
Silver (Ag)-Total			94.5		%		80-120	19-SEP-19
Sodium (Na)-Total			101.8		%		80-120	19-SEP-19
Strontium (Sr)-Total			97.1		%		80-120	19-SEP-19
Thallium (Tl)-Total			91.9		%		80-120	19-SEP-19
Tin (Sn)-Total			99.0		%		80-120	19-SEP-19
Titanium (Ti)-Total			92.6		%		80-120	19-SEP-19
Uranium (U)-Total			100.6		%		80-120	19-SEP-19
Vanadium (V)-Total			100.6		%		80-120	19-SEP-19
Zinc (Zn)-Total			103.5		%		80-120	19-SEP-19
WG3166362-1 MB								
Aluminum (Al)-Total			0.000106	MB-LOR	mg/dm2.day		0.000079	19-SEP-19
Antimony (Sb)-Total			<0.0000026		mg/dm2.day		0.0000026	19-SEP-19
Arsenic (As)-Total			<0.0000026		mg/dm2.day		0.0000026	19-SEP-19
Barium (Ba)-Total			0.0000035	MB-LOR	mg/dm2.day		0.0000013	19-SEP-19
Beryllium (Be)-Total			<0.000013		mg/dm2.day		0.000013	19-SEP-19
Bismuth (Bi)-Total			<0.000013		mg/dm2.day		0.000013	19-SEP-19
Boron (B)-Total			<0.00026		mg/dm2.day		0.00026	19-SEP-19
Cadmium (Cd)-Total			<0.0000013		mg/dm2.day		0.0000013	19-SEP-19
Calcium (Ca)-Total			<0.00052		mg/dm2.day		0.00052	19-SEP-19
Chromium (Cr)-Total			<0.000013		mg/dm2.day		0.000013	19-SEP-19
Cobalt (Co)-Total			<0.0000026		mg/dm2.day		0.0000026	19-SEP-19
Copper (Cu)-Total			0.000076	MB-LOR	mg/dm2.day		0.000013	19-SEP-19
Lead (Pb)-Total			0.0000038	MB-LOR	mg/dm2.day		0.0000013	19-SEP-19
Iron (Fe)-Total			<0.00079		mg/dm2.day		0.00079	19-SEP-19
Lithium (Li)-Total			<0.00013		mg/dm2.day		0.00013	19-SEP-19
Magnesium (Mg)-Total			<0.00013		mg/dm2.day		0.00013	19-SEP-19
Manganese (Mn)-Total			<0.0000026		mg/dm2.day		0.0000026	19-SEP-19
Molybdenum (Mo)-Total			<0.0000013		mg/dm2.day		0.0000013	19-SEP-19
Nickel (Ni)-Total			<0.000013		mg/dm2.day		0.000013	19-SEP-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4824668								
WG3166362-1 MB								
Phosphorus (P)-Total			<0.0013		mg/dm2.day		0.0013	19-SEP-19
Potassium (K)-Total			<0.0013		mg/dm2.day		0.0013	19-SEP-19
Selenium (Se)-Total			<0.000026		mg/dm2.day		0.000026	19-SEP-19
Silicon (Si)-Total			<0.0013		mg/dm2.day		0.0013	19-SEP-19
Silver (Ag)-Total			<0.0000002		mg/dm2.day		0.00000026	19-SEP-19
Sodium (Na)-Total			<0.0013		mg/dm2.day		0.0013	19-SEP-19
Strontium (Sr)-Total			<0.0000026		mg/dm2.day		0.0000026	19-SEP-19
Thallium (Tl)-Total			<0.0000026		mg/dm2.day		0.0000026	19-SEP-19
Tin (Sn)-Total			<0.0000026		mg/dm2.day		0.0000026	19-SEP-19
Titanium (Ti)-Total			<0.00026		mg/dm2.day		0.00026	19-SEP-19
Uranium (U)-Total			<0.0000002		mg/dm2.day		0.00000026	19-SEP-19
Vanadium (V)-Total			<0.000026		mg/dm2.day		0.000026	19-SEP-19
Zinc (Zn)-Total			<0.000079		mg/dm2.day		0.000079	19-SEP-19

Quality Control Report

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes 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 pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Report To		Report Format / Distribution	Select Service Level Below (Rush Turnaround Time (TAT) is not available for all tests)
Company:	New Gold Inc. Rainy River Project	Report Format: ☑ PDF ☑ Excel ☑ EDD (Digital)	R ☑ Regular (Standard TAT if received by 3pm - business days)
Contact:	Kelsea Hunsperger	Quality Control (QC) Report with Report ☑ Yes ☐ No	P ☐ Priority (2-4 bus. days if received by 3pm) 50% surchaige - contact ALS to confirm TAT
Address:	24 Marr Rd.	☐ Criteria on Report - provide details below if box checked	E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
City/Province:	Barwick ON	Select Distribution: ☑ Email ☐ Mail ☐ Fax	E2 ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
Postal Code:	P0W 1A0	Email 1 or Fax: rainyriver.labresults@newgold.com	Date and Time Required for all E&P TATs:
Phone:	807-482-0900 x8328		For tests that can not be performed according to the service level selected, you will be contacted.
		Email 2 yag.environ@newgold.com	Analysis Request

Invoice To	Same as Report ? ☑ Yes ☐ No	Invoice Distribution	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below
	Copy of Invoice with Report? ☐ Yes ☐ No	Select Invoice Distribution: ☑ Email ☐ Mail ☐ Fax	
Company:		Email 1 or Fax: rainyriver.labresults@newgold.com	
Contact:		Email 2: Caleb.Vandenburg@amecfw.com	

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:	L2346695	Approver ID:	Cost Center:
Job #:	Air Quality	GL Account::	Routing Code:
PO / AFE:	4500018623	Activity Code:	
LSD:		Location:	

ALS Lab Work Order # (lab use only)		ALS Contact:	Claire Kocharakkal	Sampler:	Kelsea Hunsperger

Sample Ref (upload EDD)	Sample Identification and/or Coordinates (Description will appear on the report)	Filter ID	Date (dd-MMM-yy)	Time (hh:mm)	Sample Type	TSP and Metals	PM2.5	Dustfall incl. volatile	Number of Containers
122932	TSP	North-TSP-255	07-Aug-19	12:00	Air	x			
122933	TSP	South-TSP-255	07-Aug-19	12:00	Air	x			
122934	PM 2.5	North-PM2.5-255	07-Aug-19	12:00	Air		x		
122936	PM 2.5	South-PM2.5-255	07-Aug-19	12:00	Air		x		
122936	TSP	North-TSP-256	13-Aug-19	12:00	Air	x			
122937	TSP	South-TSP-256	13-Aug-19	12:00	Air	x			
122938	PM 2.5	North-PM2.5-256	13-Aug-19	12:00	Air		x		
122939	PM 2.5	South-PM2.5-256	13-Aug-19	12:00	Air		x		
122940	TSP	North-TSP-257	19-Aug-19	12:00	Air	x			
122941	TSP	South-TSP-257	19-Aug-19	12:00	Air	x			
122942	PM 2.5	North-PM2.5-257	19-Aug-19	12:00	Air		x		
122943	PM 2.5	South-PM2.5-257	19-Aug-19	12:00	Air		x		
122944	TSP	North-TSP-258	25-Aug-19	12:00	Air	x			
122945	TSP	South-TSP-258	25-Aug-19	12:00	Air	x			
122946	PM 2.5	North-PM2.5-258	25-Aug-19	12:00	Air		x		
122947	PM 2.5	South-PM2.5-258	25-Aug-19	12:00	Air		x		
122948	TSP	North-TSP-259	31-Aug-19	12:00	Air	x			
122949	TSP	South-TSP-259	31-Aug-19	12:00	Air	x			
122950	PM 2.5	North-PM2.5-259	31-Aug-19	12:00	Air		x		
122951	PM 2.5	South-PM2.5-259	31-Aug-19	12:00	Air		x		
122952	TSP Travel Blank		31-Aug-19	12:00	Air	x			
122953	PM2.5 Travel Blank		31-Aug-19	12:00	Air		x		
122954	Dustfall - Gallinger Road		04-Sep-19	12:00	Air			x	
122955	Dustfall - Tait Road (South)		04-Sep-19	12:00	Air			x	

Drinking Water (DW) Samples' (client use)	Special Instructions / Specify Criteria to add on report (client Use)	SAMPLE CONDITION AS RECEIVED (lab use only)
Are samples taken from a Regulated DW System? ☐ Yes ☑ No	MISA [Template NGSWMISA]	Frozen ☐ SIF Observations ☐ Yes ☐ No
Are samples for human drinking water use? ☐ Yes ☑ No		Ice packs ☐ Yes ☐ No Custody seal intact ☐ Yes ☐ No
		Cooling Initiated ☐
		INITIAL COOLER TEMPERATURES °C: 20.2°C | FINAL COOLER TEMPERATURES °C:

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
Kelsea Hunsperger	2019-09-10	10:00	ARROW PRETON	12-Sept-2019	9:00			

New Gold Inc. Rainy River Project
ATTN: Kelsea Hunsperger
5967 Highway 11/71
P.O. Box 5
Emo ON P0W 1E0

Date Received: 08-OCT-19
Report Date: 31-OCT-19 11:02 (MT)
Version: FINAL

Client Phone: 807-482-0900

Certificate of Analysis

Lab Work Order #: L2361505

Project P.O. #: 4500035097
Job Reference: AIR QUALITY MONITORING
C of C Numbers:
Legal Site Desc:

<original signed by>

Claire Kocharakkal, B.Sc.
Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2361505-1 NORTH-TSP-260							
Sampled By: Kelsea Hunsperger on 06-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	45200		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	459		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	184		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	5.3		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	12.2		5.0	ug	16-OCT-19	18-OCT-19	R4880370
L2361505-2 SOUTH-TSP-260							
Sampled By: Kelsea Hunsperger on 06-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	40300		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	24.1		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	289		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	6.6		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	7.2		5.0	ug	16-OCT-19	18-OCT-19	R4880370
L2361505-3 NORTH-TSP-261							
Sampled By: Kelsea Hunsperger on 12-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	6600		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	245		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	45		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	1.5		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	14.2		5.0	ug	16-OCT-19	18-OCT-19	R4880370

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2361505-4 SOUTH-TSP-261							
Sampled By: Kelsea Hunsperger on 12-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	41100		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	40.3		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	450		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	10.2		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	12.6		5.0	ug	16-OCT-19	18-OCT-19	R4880370
L2361505-5 NORTH-TSP-262							
Sampled By: Kelsea Hunsperger on 18-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	71800		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	5.8		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	230		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	491		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	24.8		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	31.1		5.0	ug	16-OCT-19	18-OCT-19	R4880370
L2361505-6 SOUTH-TSP-262							
Sampled By: Kelsea Hunsperger on 18-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	81500		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	7.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	57.6		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	527		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	25.7		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	29.1		5.0	ug	16-OCT-19	18-OCT-19	R4880370

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2361505-7 NORTH-TSP-263							
Sampled By: Kelsea Hunsperger on 24-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	42500		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	364		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	275		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	19.1		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	12.3		5.0	ug	16-OCT-19	18-OCT-19	R4880370
L2361505-8 SOUTH-TSP-263							
Sampled By: Kelsea Hunsperger on 24-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	29800		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	63.0		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	302		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	20.3		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	8.6		5.0	ug	16-OCT-19	18-OCT-19	R4880370
L2361505-9 NORTH-TSP-264							
Sampled By: Kelsea Hunsperger on 30-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	5300		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	342		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	42		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	1.0		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	5.2		5.0	ug	16-OCT-19	18-OCT-19	R4880370

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2361505-10 SOUTH-TSP-264							
Sampled By: Kelsea Hunsperger on 30-SEP-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	5400		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	50.0		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	58		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	1.6		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	5.6		5.0	ug	16-OCT-19	18-OCT-19	R4880370
L2361505-11 TSP-TRAVEL BLANK							
Sampled By: Kelsea Hunsperger on 01-OCT-19							
Matrix: Hi Vol Filter							
Miscellaneous Parameters							
Total particulate	50700		2300	ug		11-OCT-19	R4871967
Metals on High Volume Filter by ICPMS							
Arsenic (As)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Cadmium (Cd)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Cobalt (Co)	<2.0		2.0	ug	16-OCT-19	18-OCT-19	R4880370
Chromium (Cr)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Copper (Cu)	5.7		4.0	ug	16-OCT-19	18-OCT-19	R4880370
Iron (Fe)	23		20	ug	16-OCT-19	18-OCT-19	R4880370
Manganese (Mn)	1.1		1.0	ug	16-OCT-19	18-OCT-19	R4880370
Nickel (Ni)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Lead (Pb)	<3.0		3.0	ug	16-OCT-19	18-OCT-19	R4880370
Selenium (Se)	<10		10	ug	16-OCT-19	18-OCT-19	R4880370
Vanadium (V)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
Zinc (Zn)	<5.0		5.0	ug	16-OCT-19	18-OCT-19	R4880370
L2361505-12 NORTH-PM2.5-260							
Sampled By: Kelsea Hunsperger on 06-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	<15		15	ug		29-OCT-19	R4889088
L2361505-13 SOUTH-PM2.5-260							
Sampled By: Kelsea Hunsperger on 06-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	33		15	ug		29-OCT-19	R4889088
L2361505-14 NORTH-PM2.5-261							
Sampled By: Kelsea Hunsperger on 12-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	18		15	ug		29-OCT-19	R4889088

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2361505-15 SOUTH-PM2.5-261							
Sampled By: Kelsea Hunsperger on 12-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	<15		15	ug		29-OCT-19	R4889088
L2361505-16 NORTH-PM2.5-262							
Sampled By: Kelsea Hunsperger on 18-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	132		15	ug		29-OCT-19	R4889088
L2361505-17 SOUTH-PM2.5-262							
Sampled By: Kelsea Hunsperger on 18-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	109		15	ug		29-OCT-19	R4889088
L2361505-18 NORTH-PM2.5-263							
Sampled By: Kelsea Hunsperger on 24-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	19		15	ug		29-OCT-19	R4889088
L2361505-19 SOUTH-PM2.5-263							
Sampled By: Kelsea Hunsperger on 24-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	<15		15	ug		29-OCT-19	R4889088
L2361505-20 NORTH-PM2.5-264							
Sampled By: Kelsea Hunsperger on 30-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	<15		15	ug		29-OCT-19	R4889088
L2361505-21 SOUTH-PM2.5-264							
Sampled By: Kelsea Hunsperger on 30-SEP-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	<15		15	ug		29-OCT-19	R4889088
L2361505-22 PM2.5-TRAVEL BLANK							
Sampled By: Kelsea Hunsperger on 01-OCT-19							
Matrix: 47mm Filter							
Miscellaneous Parameters							
Total particulate	<15		15	ug		29-OCT-19	R4889088
L2361505-23 NORTH-DUSTFALL							
Sampled By: Kelsea Hunsperger on 01-OCT-19							
Matrix: Dustfall							
Dustfalls-Total, Soluble, Insoluble +FV							
Total Dustfall	0.57		0.11	mg/dm2.day		29-OCT-19	R4890382
Total Insoluble Dustfall	0.32		0.11	mg/dm2.day		29-OCT-19	R4890382
Total Soluble Dustfall	0.25		0.11	mg/dm2.day		29-OCT-19	R4890382
Fixed Dustfall	0.28		0.11	mg/dm2.day		29-OCT-19	R4890382
Fixed Insoluble Dustfall	0.15		0.11	mg/dm2.day		29-OCT-19	R4890382
Fixed Soluble Dustfall	0.13		0.11	mg/dm2.day		29-OCT-19	R4890382
Volatile Dustfall	0.28		0.11	mg/dm2.day		29-OCT-19	R4890382

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2361505-23 NORTH-DUSTFALL							
Sampled By: Kelsea Hunsperger on 01-OCT-19							
Matrix: Dustfall							
Dustfalls-Total, Soluble, Insoluble +FV							
Volatile Insoluble Dustfall	0.16		0.11	mg/dm2.day		29-OCT-19	R4890382
Volatile Soluble Dustfall	0.12		0.11	mg/dm2.day		29-OCT-19	R4890382
Total Metals in Dustfalls by ICPMS							
Aluminum (Al)-Total	0.00170		0.00017	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Interval			1	days		10-OCT-19	R4866551
Antimony (Sb)-Total	<0.0000058		0.0000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Arsenic (As)-Total	<0.0000058		0.0000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Barium (Ba)-Total	0.0000543		0.0000029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Beryllium (Be)-Total	<0.000029		0.000029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Bismuth (Bi)-Total	<0.000029		0.000029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Boron (B)-Total	<0.00058		0.00058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Cadmium (Cd)-Total	<0.0000029		0.0000029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Calcium (Ca)-Total	0.0164		0.0012	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Chromium (Cr)-Total	<0.000029		0.000029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Cobalt (Co)-Total	<0.0000058		0.0000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Copper (Cu)-Total	<0.000058	DLB	0.000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Lead (Pb)-Total	<0.000012	DLB	0.000012	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Iron (Fe)-Total	0.0018		0.0017	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Lithium (Li)-Total	<0.00029		0.00029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Magnesium (Mg)-Total	0.00445		0.00029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Manganese (Mn)-Total	0.000176		0.0000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Molybdenum (Mo)-Total	<0.0000029		0.0000029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Nickel (Ni)-Total	<0.000029		0.000029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Phosphorus (P)-Total	0.0161		0.0029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Potassium (K)-Total	0.0183		0.0029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Selenium (Se)-Total	<0.000058		0.000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Silicon (Si)-Total	<0.0029		0.0029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Silver (Ag)-Total	<0.00000058		0.00000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Sodium (Na)-Total	0.0063		0.0029	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Strontium (Sr)-Total	0.0000408		0.0000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Thallium (Tl)-Total	<0.0000058		0.0000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Tin (Sn)-Total	<0.0000058		0.0000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Titanium (Ti)-Total	<0.00058		0.00058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Uranium (U)-Total	<0.00000058		0.00000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Vanadium (V)-Total	<0.000058		0.000058	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Zinc (Zn)-Total	0.00046		0.00017	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
L2361505-24 SOUTH-DUSTFALL							
Sampled By: Kelsea Hunsperger on 01-OCT-19							
Matrix: Dustfall							
Dustfalls-Total, Soluble, Insoluble +FV							
Total Dustfall	0.34		0.11	mg/dm2.day		29-OCT-19	R4890382
Total Insoluble Dustfall	0.17		0.11	mg/dm2.day		29-OCT-19	R4890382
Total Soluble Dustfall	0.18		0.11	mg/dm2.day		29-OCT-19	R4890382
Fixed Dustfall	0.22		0.11	mg/dm2.day		29-OCT-19	R4890382
Fixed Insoluble Dustfall	<0.11		0.11	mg/dm2.day		29-OCT-19	R4890382
Fixed Soluble Dustfall	0.13		0.11	mg/dm2.day		29-OCT-19	R4890382
Volatile Dustfall	0.12		0.11	mg/dm2.day		29-OCT-19	R4890382
Volatile Insoluble Dustfall	<0.11		0.11	mg/dm2.day		29-OCT-19	R4890382
Volatile Soluble Dustfall	<0.11		0.11	mg/dm2.day		29-OCT-19	R4890382

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L2361505-24 SOUTH-DUSTFALL							
Sampled By: Kelsea Hunsperger on 01-OCT-19							
Matrix: Dustfall							
Total Metals in Dustfalls by ICPMS							
Aluminum (Al)-Total	0.00252		0.00016	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Interval			1	days		10-OCT-19	R4866551
Antimony (Sb)-Total	<0.0000055		0.0000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Arsenic (As)-Total	<0.0000055		0.0000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Barium (Ba)-Total	0.0000507		0.0000027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Beryllium (Be)-Total	<0.000027		0.000027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Bismuth (Bi)-Total	<0.000027		0.000027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Boron (B)-Total	<0.00055		0.00055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Cadmium (Cd)-Total	<0.0000027		0.0000027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Calcium (Ca)-Total	0.0188		0.0011	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Chromium (Cr)-Total	<0.000027		0.000027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Cobalt (Co)-Total	<0.0000055		0.0000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Copper (Cu)-Total	<0.000055	DLB	0.000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Lead (Pb)-Total	<0.0000055	DLB	0.0000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Iron (Fe)-Total	0.0027		0.0016	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Lithium (Li)-Total	<0.00027		0.00027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Magnesium (Mg)-Total	0.00466		0.00027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Manganese (Mn)-Total	0.000195		0.0000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Molybdenum (Mo)-Total	<0.0000027		0.0000027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Nickel (Ni)-Total	<0.000027		0.000027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Phosphorus (P)-Total	0.0121		0.0027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Potassium (K)-Total	0.0157		0.0027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Selenium (Se)-Total	<0.000055		0.000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Silicon (Si)-Total	0.0035		0.0027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Silver (Ag)-Total	<0.00000055		0.00000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Sodium (Na)-Total	0.0047		0.0027	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Strontium (Sr)-Total	0.0000522		0.0000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Thallium (Tl)-Total	<0.0000055		0.0000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Tin (Sn)-Total	<0.0000055		0.0000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Titanium (Ti)-Total	<0.00055		0.00055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Uranium (U)-Total	<0.00000055		0.00000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Vanadium (V)-Total	<0.000055		0.000055	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453
Zinc (Zn)-Total	<0.00016		0.00016	mg/dm2.day	10-OCT-19	10-OCT-19	R4867453

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier Key:

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.
DLB	Detection Limit Raised. Analyte detected at comparable level in Method Blank.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
AIR VOLUME-HIVOL-BU	Filter	Air volume (m3)	USEPA IO3.1
DUSTFALLS-ALL-DM2-VA	Dustfall	Dustfalls-Total, Soluble, Insoluble +FV	BC LAB MANUAL - PARTICULATE

This analysis is carried out using procedures modified from British Columbia Environmental Manual "Particulate."
Particulates or "Dustfalls" are determined gravimetrically. Total Insoluble and Soluble Dustfalls are determined by filtering a sample through a 0.45 um membrane filter and drying the filter and filtrate at 104 C, followed by ignition at 550 C. The remaining residue after 550 C represents the fixed portion and the weight lost on ignition represents the volatile portion. The sum of all fixed and volatile portions on both Insoluble and Soluble portions represents Total Dustfalls.

MET-DUST(DM2)-MS-VA	Dustfall	Total Metals in Dustfalls by ICPMS	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). Instrumental analysis is by inductively coupled plasma - mass spectrometry (EPA Method 6020A).

MET-IO3.5-MS-BU	Filter	Metals on High Volume Filter by ICPMS	IO3.5

After weighing (if required), hivol filters are sub-sampled and leached with nitric acid to extract available metal analytes. After dilution, the extracts are submitted to the ICPMS instrument for analysis.

PART-EC6.08-GRAV-BU	Filter	Particulate ENV Canada 6.08 microbalance	ENV CAN 6.08

The particulate matter collected onto tare-weighed 47mm Teflon Disc filter media is desiccated then brought to a constant weight on an analytical balance. Results are presented in ug (per filter). An air volume can be included to allow for reporting in ug/m3.

PART-HIVOL-GRAV-BU	Filter	Particulate on High Volume Filter	USEPA IO3.1

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
BU	ALS ENVIRONMENTAL - BURLINGTON, ONTARIO, CANADA
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.
mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg wwt - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Quality Control Report

Client: New Gold Inc. Rainy River Project
5967 Highway 11/71 P.O. Box 5
Emo ON P0W 1E0
Contact: Kelsea Hunsperger

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-IO3.5-MS-BU	**Filter**							
Batch R4880370								
WG3193770-2 LCS								
Arsenic (As)			93.6		%		80-120	18-OCT-19
Cadmium (Cd)			98.8		%		80-120	18-OCT-19
Cobalt (Co)			96.3		%		80-120	18-OCT-19
Chromium (Cr)			92.4		%		80-120	18-OCT-19
Copper (Cu)			92.9		%		80-120	18-OCT-19
Iron (Fe)			95.2		%		80-120	18-OCT-19
Manganese (Mn)			92.6		%		80-120	18-OCT-19
Nickel (Ni)			92.5		%		80-120	18-OCT-19
Lead (Pb)			97.8		%		80-120	18-OCT-19
Selenium (Se)			98.5		%		80-120	18-OCT-19
Vanadium (V)			92.6		%		80-120	18-OCT-19
Zinc (Zn)			94.0		%		80-120	18-OCT-19
WG3193770-1 MB								
Arsenic (As)			<3.0		ug		3	18-OCT-19
Cadmium (Cd)			<2.0		ug		2	18-OCT-19
Cobalt (Co)			<2.0		ug		2	18-OCT-19
Chromium (Cr)			<5.0		ug		5	18-OCT-19
Copper (Cu)			7.8	A	ug		4	18-OCT-19
Iron (Fe)			<20		ug		20	18-OCT-19
Manganese (Mn)			<1.0		ug		1	18-OCT-19
Nickel (Ni)			<3.0		ug		3	18-OCT-19
Lead (Pb)			<3.0		ug		3	18-OCT-19
Selenium (Se)			<10		ug		10	18-OCT-19
Vanadium (V)			<5.0		ug		10	18-OCT-19
Zinc (Zn)			<5.0		ug		5	18-OCT-19
COMMENTS: Cu observed in the method blank, significantly above the LOR. Data for this analyte is likely to be biased high as a result of this background. PE 23-Oct-19								
PART-EC6.08-GRAV-BU	**Filter**							
Batch R4889088								
WG3204738-3 DUP		**L2361505-12**						
Total particulate		<15	<15	RPD-NA	ug	N/A	25	29-OCT-19
WG3204738-1 MB								
Total particulate			<15		ug		15	29-OCT-19
WG3204738-2 MB								
Total particulate			<15		ug		15	29-OCT-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PART-HIVOL-GRAV-BU	**Filter**							
Batch R4871967								
WG3192664-2 DUP		**L2361505-1**						
Total particulate		45200	50600		ug	11	25	11-OCT-19
WG3192664-1 MB								
Total particulate			<100		ug		100	11-OCT-19
DUSTFALLS-ALL-DM2-VA	**Dustfall**							
Batch R4890382								
WG3204498-1 MB								
Total Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
Total Insoluble Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
Total Soluble Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
Fixed Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
Fixed Insoluble Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
Fixed Soluble Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
Volatile Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
Volatile Insoluble Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
Volatile Soluble Dustfall			<0.10		mg/dm2.day		0.1	29-OCT-19
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4867453								
WG3187611-2 LCS								
Aluminum (Al)-Total			96.9		%		80-120	10-OCT-19
Antimony (Sb)-Total			90.0		%		80-120	10-OCT-19
Arsenic (As)-Total			92.7		%		80-120	10-OCT-19
Barium (Ba)-Total			93.1		%		80-120	10-OCT-19
Beryllium (Be)-Total			91.9		%		80-120	10-OCT-19
Bismuth (Bi)-Total			96.0		%		80-120	10-OCT-19
Boron (B)-Total			95.4		%		80-120	10-OCT-19
Cadmium (Cd)-Total			91.4		%		80-120	10-OCT-19
Calcium (Ca)-Total			96.1		%		80-120	10-OCT-19
Chromium (Cr)-Total			91.7		%		80-120	10-OCT-19
Cobalt (Co)-Total			93.0		%		80-120	10-OCT-19
Copper (Cu)-Total			92.8		%		80-120	10-OCT-19
Lead (Pb)-Total			97.1		%		80-120	10-OCT-19
Iron (Fe)-Total			92.1		%		80-120	10-OCT-19
Lithium (Li)-Total			90.5		%		80-120	10-OCT-19
Magnesium (Mg)-Total			93.9		%		80-120	10-OCT-19
Manganese (Mn)-Total			95.3		%		80-120	10-OCT-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4867453								
WG3187611-2 LCS								
Molybdenum (Mo)-Total			97.0		%		80-120	10-OCT-19
Nickel (Ni)-Total			93.7		%		80-120	10-OCT-19
Phosphorus (P)-Total			94.6		%		80-120	10-OCT-19
Potassium (K)-Total			94.6		%		80-120	10-OCT-19
Selenium (Se)-Total			94.1		%		80-120	10-OCT-19
Silicon (Si)-Total			98.0		%		80-120	10-OCT-19
Silver (Ag)-Total			93.4		%		80-120	10-OCT-19
Sodium (Na)-Total			97.5		%		80-120	10-OCT-19
Strontium (Sr)-Total			96.2		%		80-120	10-OCT-19
Thallium (Tl)-Total			94.2		%		80-120	10-OCT-19
Tin (Sn)-Total			92.3		%		80-120	10-OCT-19
Titanium (Ti)-Total			94.7		%		80-120	10-OCT-19
Uranium (U)-Total			102.0		%		80-120	10-OCT-19
Vanadium (V)-Total			95.7		%		80-120	10-OCT-19
Zinc (Zn)-Total			88.1		%		80-120	10-OCT-19
WG3187611-1 MB								
Aluminum (Al)-Total			0.000081	B	mg/dm2.day		0.000079	10-OCT-19
Antimony (Sb)-Total			<0.0000026		mg/dm2.day		0.0000026	10-OCT-19
Arsenic (As)-Total			<0.0000026		mg/dm2.day		0.0000026	10-OCT-19
Barium (Ba)-Total			0.0000027	B	mg/dm2.day		0.0000013	10-OCT-19
Beryllium (Be)-Total			<0.000013		mg/dm2.day		0.000013	10-OCT-19
Bismuth (Bi)-Total			<0.000013		mg/dm2.day		0.000013	10-OCT-19
Boron (B)-Total			<0.00026		mg/dm2.day		0.00026	10-OCT-19
Cadmium (Cd)-Total			<0.0000013		mg/dm2.day		0.0000013	10-OCT-19
Calcium (Ca)-Total			<0.00052		mg/dm2.day		0.00052	10-OCT-19
Chromium (Cr)-Total			<0.000013		mg/dm2.day		0.000013	10-OCT-19
Cobalt (Co)-Total			<0.0000026		mg/dm2.day		0.0000026	10-OCT-19
Copper (Cu)-Total			0.000154	MB-LOR	mg/dm2.day		0.000013	10-OCT-19
Lead (Pb)-Total			0.0000027	MB-LOR	mg/dm2.day		0.0000013	10-OCT-19
Iron (Fe)-Total			<0.00079		mg/dm2.day		0.00079	10-OCT-19
Lithium (Li)-Total			<0.00013		mg/dm2.day		0.00013	10-OCT-19
Magnesium (Mg)-Total			<0.00013		mg/dm2.day		0.00013	10-OCT-19
Manganese (Mn)-Total			<0.0000026		mg/dm2.day		0.0000026	10-OCT-19
Molybdenum (Mo)-Total			<0.0000013		mg/dm2.day		0.0000013	10-OCT-19

Quality Control Report

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-DUST(DM2)-MS-VA	**Dustfall**							
Batch R4867453								
WG3187611-1 MB								
Nickel (Ni)-Total			<0.000013		mg/dm2.day		0.000013	10-OCT-19
Phosphorus (P)-Total			<0.0013		mg/dm2.day		0.0013	10-OCT-19
Potassium (K)-Total			<0.0013		mg/dm2.day		0.0013	10-OCT-19
Selenium (Se)-Total			<0.000026		mg/dm2.day		0.000026	10-OCT-19
Silicon (Si)-Total			<0.0013		mg/dm2.day		0.0013	10-OCT-19
Silver (Ag)-Total			<0.0000002		mg/dm2.day		0.00000026	10-OCT-19
Sodium (Na)-Total			<0.0013		mg/dm2.day		0.0013	10-OCT-19
Strontium (Sr)-Total			<0.0000026		mg/dm2.day		0.0000026	10-OCT-19
Thallium (Tl)-Total			<0.0000026		mg/dm2.day		0.0000026	10-OCT-19
Tin (Sn)-Total			<0.0000026		mg/dm2.day		0.0000026	10-OCT-19
Titanium (Ti)-Total			<0.00026		mg/dm2.day		0.00026	10-OCT-19
Uranium (U)-Total			<0.0000002		mg/dm2.day		0.00000026	10-OCT-19
Vanadium (V)-Total			<0.000026		mg/dm2.day		0.000026	10-OCT-19
Zinc (Zn)-Total			<0.000079		mg/dm2.day		0.000079	10-OCT-19

Quality Control Report

Legend:

Limit	ALS Control Limit (Data Quality Objectives)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
B	Method Blank exceeds ALS DQO. Associated sample results which are < Limit of Reporting or > 5 times blank level are considered reliable.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Hold Time Exceedances:

All test results reported with this submission were conducted within ALS recommended hold times.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes 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 pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

Report To	L2361505	**Report Format / Distribution**	**Select Service Level Below** (Rush Turnaround Time (TAT) is not available for all tests)
Company:	New Gold Inc. Rainy River Project	Report Format: ☑ PDF ☑ Excel ☑ EDD (Digital)	R ☑ Regular (Standard TAT if received by 3pm - business days)
Contact:	Kelsea Hunsperger	Quality Control (QC) Report with Report ☑ Yes ☐ No	P ☐ Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT
Address:	24 Marr Rd.	☐ Criteria on Report - provide details below if box checked	E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
City/Province:	Barwick ON	Select Distribution: ☑ Email ☐ Mail ☐ Fax	E2 ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
Postal Code:	P0W 1A0	Email 1 or Fax: rainyriver.labresults@newgold.com	Date and Time Required for all E&P TATs:
Phone:	807-482-0900 x3328		For tests that can not be performed according to the service level selected, you will be contacted.
		Email 2: yag.inwron@newgold.com	**Analysis Request**

Invoice To	Same as Report? ☑ Yes ☐ No	**Invoice Distribution**	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below
	Copy of Invoice with Report? ☐ Yes ☐ No	Select Invoice Distribution: ☑ Email ☐ Mail ☐ Fax	
Company:		Email 1 or Fax: rainyriver.labresults@newgold.com	
Contact:		Email 2: Caleb.Vandenburg@amecfw.com	

Project Information		**Oil and Gas Required Fields (client use)**	
ALS Quote #:		Approver ID:	Cost Center:
Job #:	Air Quality	GL Account:	Routing Code:
PO / AFE:	4500018623	Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact: Claire Kocharakkal	Sampler: Kelsea Hunsperger

Sample Ref (upload EDD)	Sample Identification and/or Coordinates (Description will appear on the report)	Filter ID	Date (dd-MMM-yy)	Time (hh:mm)	Sample Type	TSP and Metals	PM2.5	Dustfall incl. volatile	Number of Containers
123065	TSP	North-TSP-260	06-Sep-19	02:04	Air	x			
123066	TSP	South-TSP-260	06-Sep-19	02:04	Air	x			
123067	PM 2.5	North-PM2.5-260	06-Sep-19	02:04	Air		x		
123068	PM 2.5	South-PM2.5-260	06-Sep-19	02:04	Air		x		
123069	TSP	North-TSP-261	12-Sep-19	02:04	Air	x			
123071	PM 2.5	North-PM2.5-261	12-Sep-19	02:04	Air		x		
123072	TSP	South-TSP-261	12-Sep-19	02:04	Air	x			
123073	PM 2.5	South-PM2.5-261	12-Sep-19	02:04	Air		x		
123074	TSP	North-TSP-262	18-Sep-19	02:04	Air	x			
123075	TSP	South-TSP-262	18-Sep-19	02:04	Air	x			
123076	PM 2.5	North-PM2.5-262	18-Sep-19	02:04	Air		x		
123077	PM 2.5	South-PM2.5-262	18-Sep-19	02:04	Air		x		
123078	TSP	North-TSP-263	24-Sep-19	02:04	Air	x			
123079	TSP	South-TSP-263	24-Sep-19	02:04	Air	x			
123080	PM 2.5	North-PM2.5-263	24-Sep-19	02:04	Air		x		
123081	PM 2.5	South-PM2.5-263	24-Sep-19	02:04	Air		x		
123082	TSP	North-TSP-264	30-Sep-19	02:04	Air	x			
123083	TSP	South-TSP-264	30-Sep-19	02:04	Air	x			
123084	PM 2.5	North-PM2.5-264	30-Sep-19	02:04	Air		x		
123085	PM 2.5	South-PM2.5-264	30-Sep-19	02:04	Air		x		
123086	TSP Travel Blank		01-Oct-19	02:04	Air	x			
123087	PM2.5 Travel Blank		01-Oct-19	02:04	Air		x		
123088	Dustfall - Gallinger Road		01-Oct-19	02:04	Air			x	
123089	Dustfall - Tait Road (South)		01-Oct-19	02:04	Air			x	

Drinking Water (DW) Samples¹ (client use)	**Special Instructions / Specify Criteria to add on report (client Use)**	**SAMPLE CONDITION AS RECEIVED (lab use only)**
Are samples taken from a Regulated DW System? ☐ Yes ☑ No	MISA (Template NGSWMISA)	Frozen ☐ SIF Observations ☐ Yes ☐ No
Are samples for human drinking water use? ☐ Yes ☑ No		Ice packs ☐ Yes ☐ No Custody seal intact ☐ Yes ☐ No
		Cooling Initiated ☐
		INITIAL COOLER TEMPERATURES °C: 18.5°C I FINAL COOLER TEMPERATURES °C

SHIPMENT RELEASE (client use)			**INITIAL SHIPMENT RECEPTION (lab use only)**			**FINAL SHIPMENT RECEPTION (lab use only)**		
Released by: Kelsea Hunsperger	Date: 2019-10-01	Time: 15:40	Received by: Aaron Buxton	Date: 8-Oct-2019	Time: 10:30	Received by:	Date:	Time:

APPENDIX E

PQ200 & TE-5170 CALIBRATION SHEETS – Q3 2019

Site Information

Location: Rainy River Mine	**Site ID:** South	**Date:** 27-Sep-19
Sampler: E-5170 MFC	**Serial No:** 3150	**Tech:** Kelsea H.

Site Conditions

Barometric Pressure (in Hg):	28.26	**Corrected Pressure (mm Hg):**	718
Temperature (deg F):	46	**Temperature (deg K):**	281
Average Press. (in Hg):	28.26	**Corrected Average (mm Hg):**	718
Average Temp. (deg F):	45	**Average Temp. (deg K):**	280

Calibration Orifice

Make:	Tisch	**Qstd Slope:**	1.67950
Model:	TE-5028A	**Qstd Intercept:**	-0.02910
Serial#:	3662	**Date Certified:**	17-Jun-19

Calibration Information

Plate or Test #	H2O (in)	Qstd (m3/min)	I (chart)	IC (corrected)
1	5.20	1.376	52.0	52.05
2	4.80	1.323	50.0	50.05
3	4.25	1.246	48.0	48.05
4	3.90	1.194	46.0	46.05
5	3.40	1.116	44.0	44.04

Linear Regression

Slope: 30.7101
Intercept: 9.6218
Corr. Coeff: 0.9978
# of Observations: 5

Calculations

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg
For subsequent calculation of sampler flow:
1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure

Average I (chart): 44.0
Average Flow Calculation m3/min
1.122591099
Average Flow Calculation in CFM
39.6386917
Sample Time (Hrs): 24.0
Total Flow in m3/min
1616.531182
Total Flow in CFM
57079.71604

NOTE: Ensure calibration orifice has been certified within 12 months of use

PQ200 Calibration Sheet

Calibrated By: Kelsea Hunsperger / Kari Larson
Date: 2019/09/16
Site Name: New Gold Rainy River Mine
Site Location: Tait Road Station
PQ200 Serial Number: 1751
Calibrator Make: BGI
Calibrator Serial Number: 172457
NIST Certificate Expiry Date: April 30, 2020

System Clock Time:
Actual Time: 15:16
Displayed Time: 15:14
Displayed Year: 2019
Displayed Date: 16 Sep

Ambient Temperature (°C):
PQ200 Reading: 30.1
Actual Reading: 30.1
Difference (+/- 2°C): Yes
Temp Reset (Y/N): No

Ambient Barometric Pressure (mmHg):
PQ200 Reading: 723
Actual Reading: 724.5
Difference (+/- 10mmHg): Yes
Reset (Y/N): No

Flow Check (LPM):
Target Flow: 16.70
Measured Flow: 17.88
Difference (+/- 2%): No
3 Point Flow Calibration (Y/N): Yes

Inspection of Inlet/Seals/Filter:
Inlet Type: Good
Cleanliness of Inlet: Good
Glass Jar: Good
Glass Jar Gasket: Good
PM2.5 VSCC Inlet: Good
Filter Holder: Good
Filter Holder Seals: Good
Filter Tensioner: Good
Cleanliness of Fan Filter: Good

Comments/Recommendations: _____
_____
_____

TE-5170 Calibration Worksheet

Site Information

Location: Rainy River Mine	**Site ID:** North	**Date:** 27-Sep-19
Sampler: E-5170 MFC	**Serial No:** 3150	**Tech:** Kelsea H.

Site Conditions

Barometric Pressure (in Hg): 28.23	**Corrected Pressure (mm Hg):** 717
Temperature (deg F): 44	**Temperature (deg K):** 280
Average Press. (in Hg): 28.23	**Corrected Average (mm Hg):** 717
Average Temp. (deg F): 45	**Average Temp. (deg K):** 280

Calibration Orifice

Make: Tisch	**Qstd Slope:** 1.67950
Model: TE-5028A	**Qstd Intercept:** -0.02910
Serial#: 3662	**Date Certified:** 17-Jun-19

Calibration Information

Plate or Test #	H2O (in)	Qstd (m3/min)	I (chart)	IC (corrected)
1	7.70	1.674	50.0	50.15
2	7.20	1.620	48.0	48.14
3	6.40	1.528	46.0	46.14
4	5.70	1.443	44.0	44.13
5	5.30	1.392	42.0	42.12

Linear Regression

Slope: 26.8067
Intercept: 5.0820
Corr. Coeff: 0.9953
# of Observations: 5

Calculations

Qstd = 1/m[Sqrt(H2O(Pa/Pstd)(Tstd/Ta))-b]
IC = I[Sqrt(Pa/Pstd)(Tstd/Ta)]

Qstd = standard flow rate
IC = corrected chart response
I = actual chart response
m = calibrator Qstd slope
b = calibrator Qstd intercept
Ta = actual temperature during calibration (deg K)
Pa = actual pressure during calibration (mm Hg)
Tstd = 298 deg K
Pstd = 760 mm Hg
For subsequent calculation of sampler flow:
1/m((I)[Sqrt(298/Tav)(Pav/760)]-b)

m = sampler slope
b = sampler intercept
I = chart response
Tav = daily average temperature
Pav = daily average pressure

Average I (chart): 36.0
Average Flow Calculation m3/min
1.155602414
Average Flow Calculation in CFM
40.80432124
Sample Time (Hrs): 24.0
Total Flow in m3/min
1664.067476
Total Flow in CFM
58758.22258

NOTE: Ensure calibration orifice has been certified within 12 months of use

PQ200 Calibration Sheet

Calibrated By: Kelsea Hunsperger / Kari Larson
Date: 2019/09/16
Site Name: New Gold Rainy River Mine
Site Location: Gallinger Road Station
PQ200 Serial Number: 1752
Calibrator Make: BGI
Calibrator Serial Number: 172457
NIST Certificate Expiry Date: April 30, 2020

System Clock Time:
Actual Time: 14:43
Displayed Time: 14:41
Displayed Year: 2019
Displayed Date: 16 Sep

Ambient Temperature (°C):
PQ200 Reading: 29.5
Actual Reading: 29.7
Difference (+/- 2°C): Yes
Temp Reset (Y/N): No

Ambient Barometric Pressure (mmHg):
PQ200 Reading: 723
Actual Reading: 723.5
Difference (+/- 10mmHg): Yes
Reset (Y/N): No

Flow Check (LPM):
Target Flow: 16.70
Measured Flow: "Over"
Difference (+/- 2%): No
3 Point Flow Calibration (Y/N): Yes

Inspection of Inlet/Seals/Filter:
Inlet Type: Good
Cleanliness of Inlet: Good
Glass Jar: Good
Glass Jar Gasket: Good
PM2.5 VSCC Inlet: Good
Filter Holder: Good
Filter Holder Seals: Good
Filter Tensioner: Good
Cleanliness of Fan Filter: Good

Comments/Recommendations: _____
_____
_____