



MONTANA RESOURCES LLP

DATA REPORT FOR TSP AND DUSTFALL MONITORING STATIONS IN BUTTE, MONTANA QUARTER 2, 2025

Prepared for:



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CERTIFICATION OF DATA INTEGRITY

Bison Engineering, Inc. certifies the data in this report is an accurate summary of the air quality and meteorological conditions measured at the Greeley School ambient monitoring site. Every reasonable effort was made to obtain accurate and representative data and to comply with the procedures set forth in the project-specific *Quality Assurance Project Plan (QAPP)*, *State of Montana Ambient Air Monitoring Program Quality Assurance Project Plan (April 2013)*, and the Environmental Protection Agency's *Volume II: Ambient Air Quality Program (January 2017)*


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EXECUTIVE SUMMARY

This report summarizes the results of ambient monitoring conducted by Bison Engineering Inc. on behalf of Montana Resources LLP. Monitoring for Total Suspended Particulate (TSP) and trace metals was conducted at locations on Pine St and Walnut St in Butte, Montana. Additionally, Dustfall monitoring was conducted at the Pine St and Walnut St sites, and at the former Greeley School site.

Monitoring results are presented in detail in this report. Summary findings – including comparisons to ambient standards and health-based exposure Guidelines – are presented in the Tables below.

A. Trace Element Results (TSP)

	As (ng/m ³)	Cd (ng/m ³)	Cu (ng/m ³)	Mn (ng/m ³)	Mo (ng/m ³)	Pb (ng/m ³)	Zn (ng/m ³)
Pine St – Mean Conc.	1.4	0.13	71	17	4.0	3.4	28
Walnut St – Mean Conc.	1.3	0.12	24	11	1.3	2.2	18
Lifetime Exposure Guideline (ng/m³)	15	10	2,000	50	400	150	47,619

B. Particulate Mass Results (TSP)

	Pine St (µg/m ³)	Walnut St (µg/m ³)
Mean TSP Concentration	27	21
EPA Annual Standard	75¹	
Maximum TSP Concentration	54	42
EPA 24-Hour Standard	260¹	

¹Ambient TSP standards are no longer in effect

C. Dustfall Monitoring Results

	Greeley School DF (g/m ² /30 days)	Pine Street DF (g/m ² /30 days)	Walnut Street DF (g/m ² /30 days)
Average	6.3	7.3	6.8
Montana Standard	10		

1.0 INTRODUCTION

Particulate monitoring has been conducted in the Greeley School area for many years, since the days of the Anaconda Company operation during the 1970s. Montana Department of Environmental Quality (MDEQ) and Butte-Silver Bow (BSB) County are currently performing the following monitoring:

- Continuous monitoring for PM₁₀ using a Met One Model 1020 Beta Attenuation Monitor (BAM-1020).
- Continuous monitoring for PM_{2.5} using a second Met One BAM-1020.
- Episodic monitoring for PM_{2.5} using a BGI Model PQ-200 sampler. This sampler collects particulate matter on a filter over a 24-hour period, which is subsequently analyzed gravimetrically to determine the average airborne PM_{2.5} concentration during the sampling period. The filter is then analyzed by an EPA laboratory for trace elements and mineralized compounds. This episodic sampling is performed every six days, concurrent with EPA's national one-in-six-day sampling schedule.
- The Greeley School site includes meteorological instruments that measure wind speed, wind direction and temperature.

MDEQ/BSB's monitoring provides continuous, real-time hourly PM_{2.5} and PM₁₀ concentrations, as well as PM_{2.5} chemical composition data. In March 2019 and at Montana Resources' (MR) request, Bison Engineering Inc. (Bison) installed additional collocated monitoring equipment at the Greeley School:

- Total Suspended Particulate Sampler: A Met One E-Sampler that continuously measures hourly total suspended particulate (TSP) concentrations using a nephelometric technique that relates light scattering to ambient particulate concentration. Additionally, the sampler includes a filter that is analyzed for total particulate mass and trace elements. Prior to this study, no ongoing TSP monitoring was being performed,
- PM₁₀ Particulate Sampler: A BGI Model PQ-200 sampler that collects 24-hour inhalable particulate (PM₁₀) samples on a filter, concurrent with the EPA one-in-six-day sampling schedule. The filter is analyzed for particulate mass and for selected trace elements. The MDEQ BAM-1020 that is used for PM₁₀ hourly monitoring does not produce a filter suitable for chemical analysis.

The Bison data have been presented in quarterly reports since the first quarter of 2019. With few exceptions, the trace element data have shown airborne concentrations below the Guideline values shown in Section 4.0 of this report. However, citizens in the area between the Greeley school and MTR have expressed concerns about airborne particulate and the

associated trace element concentrations, as well as the composition of settled dust that residents have observed.

In response, MTR contracted Bison to perform additional monitoring as described below:

- BGI Model PQ-200 samplers are being used to collect 24-hour TSP samples on filters, concurrent with the EPA one-in-six-day sampling schedule. The filters are analyzed for particulate mass and for selected trace elements. These samplers were deployed at 2616 Pine Street and 1910 Walnut Street, with the first samples collected on July 11, 2023.
- Monthly Dustfall sampling was initiated on August 4, 2023, at the Pine Street and Walnut Street sites, and also at the existing Greeley School site. This sampling involves exposing a 15 cm diameter bucket to ambient conditions for a period of approximately 30 days, and then analyzing the collected particulate for total mass and trace elements. From these results, monthly particulate and trace element deposition rates are calculated.
- All sample collection duties are performed by Bison. Gravimetric analysis of TSP filters is also performed by Bison, while chemical analysis of those filters is performed by the Energy Laboratory Billings, MT facility. Both gravimetric and chemical analyses of the Dustfall samples are performed by the Energy Laboratory Helena facility.

Monitoring locations are depicted in Figure 1.

Figure 1: Butte Ambient Monitoring Locations



2.0 TSP SAMPLING DATA

The National Ambient Air Quality Standards (NAAQS) for TSP were first promulgated in 1971. The TSP standards were superseded by PM₁₀ standards in 1987, and additional particulate standards have been enacted since. Although no longer a criteria pollutant, TSP monitoring is appropriate for the objectives of the expanded monitoring since residents' concerns arose from visual observations of **total** particulate, rather than a particular size fraction.

Normally, TSP samples are collected for a period of 24 hours on the National EPA 6th-day sampling schedule. However, starting in December 2023 it was discovered that snow easily blows into the BGI PQ-200 TSP sampling heads and accumulates on the sampling filters – to the extent that it compromises the integrity of the sample. Additionally, in early January it was discovered that sufficient windblown snow accumulation on the filter could cause a sampling failure due to an overpressure error. Starting in January 2024, samples were scheduled for dates when snow was not expected. They were scheduled as close to the National 6th-day schedule as possible but constrained by expected weather conditions. Similarly, sample retrieval was often expedited to minimize the possibility of windblown snow accumulating following exposure. During the second quarter of 2025, one sampling event was shifted to avoid this issue, as listed below:

6 th -Day Date	Sample Date
Apr 01	Apr 02

Table 1 summarizes the TSP data collected during the second quarter of 2025. The arithmetic average quarterly TSP concentrations were 27 µg/m³ at the Pine St site and 21 µg/m³ at the Walnut St site. These values represent 36 percent and 28 percent of the historical geometric mean annual standard (75 µg/m³)¹, respectively. The maximum TSP concentration of 54 µg/m³ at Pine St and 42 µg/m³ at Walnut St both occurred on April 19. Those maximum daily values were 21 percent and 16 percent of the historical 24-hour standard (260 µg/m³)², respectively.

Data used to calculate average TSP concentrations from gravimetric analysis are presented in Appendix A. Chemical analysis results for the TSP filters are presented in Section 4.0 of this report.

¹ Both the annual and 24-hour TSP standards were revoked in 1987. The annual standard was calculated as a geometric mean of all daily values in a single year. The 24-hour standard was determined as the 2nd highest recorded value per year (on an assumed one-day-in-six schedule)

² *Ibid.*

Table 1: Summary of TSP Monitoring Data for Quarter 2, 2025

Pine Street		Walnut Street	
Sample Collection Date (2025) ²	TSP ¹ (µg/m ³)	Sample Collection Date (2025) ²	TSP ¹ (µg/m ³)
Apr 02	38	Apr 02	18
Apr 07	40	Apr 07	30
Apr 13	20	Apr 13	16
Apr 19	54	Apr 19	42
Apr 25	26	Apr 25	15
May 01	18	May 01	22
May 07	17	May 07	16
May 13	7	May 13	9
May 19	18	May 19	15
May 25	28	May 25	31
May 31	35	May 31	15
Jun 06	27	Jun 06	17
Jun 12	31	Jun 12	24
Jun 18	31	Jun 18	24
Jun 24	19	Jun 24	17
Jun 30	19	Jun 30	26
Arithmetic Average	27	Arithmetic Average	21
Single Day Maximum	54	Single Day Maximum	42
Historical 24-Hour Standard ³	260		
Historical Geometric Mean Annual Standard ⁴	75		

¹All values at local temperature and pressure (LTP).

²Samples were collected from midnight to midnight (± 10 minutes) on a single calendar day unless noted otherwise.

³ Ibid.

⁴ Ibid.

3.0 DUSTFALL SAMPLING DATA

Dustfall monitoring was initiated at the Walnut, Pine and Greeley sites on August 4, 2023. Samples were collected over the following time periods at each site during the second quarter of 2025:

- March 31 to April 29
- April 29 to May 30
- May 30 to June 29

Samples were collected using ASTM Method D1739-98R17. Each sampling event was started by placing clean, dry dustfall buckets at each site. They were then exposed to ambient conditions for approximately 30 days. No water was added to the buckets prior to deployment, although they collected any rain or snow that fell during the sampling period. Following collection, they were submitted to the Energy Lab Helena facility. Samples were visually inspected for insects or other non-dustfall detritus. Wet masses of each sample were collected, as received. Samples with insects present were passed through a No. 10 (2mm) sieve, removing the insects but allowing the dust and liquid to pass through. Sieves were rinsed with laboratory reagent water to ensure no dust was lost on the sieve. Samples were then air dried on a clean non-porous plastic to remove moisture. The dry weight of each sample was then recorded using the plastic as a tared mass. Collected dust was transferred to a digestion vessel using digestion reagents to ensure all dust was removed from the plastic; and digested for total metals analysis.

Table 2 summarizes the dustfall monitoring results for the second quarter of 2025. All monthly dustfall results were below the Montana Dustfall standard of 10 g/m²/30 days. The maximum value was 8.1 g/m²/30 days for the Pine St dustfall sample collected March 31 – April 29. The quarterly averages for all three sites were well below the standard.

Table 2: Summary of Dustfall Monitoring Data for Quarter 2, 2025

Sample Collection Date (2025)	Greeley School DF (g/m²/30 days)	Pine Street DF (g/m²/30 days)	Walnut Street DF (g/m²/30 days)
Mar 31 to Apr 29	6.0	8.1	6.6
Apr 29 to May 30	5.3	6.3	6.7
May 30 to Jun 29	7.5	7.4	7.2
Average	6.3	7.3	6.8
Maximum	7.5	8.1	7.2
Montana Standard ⁵	10		

Chemical analysis results for the Dustfall samples are presented in Section 5.0.

⁵ ARM 17.8.220

4.0 CHEMICAL ANALYSIS DATA – TSP SAMPLES

Following gravimetric analysis, the particulate samples were submitted to Energy Laboratories, Inc. (ELI) in Billings, Montana, for elemental analysis including arsenic, cadmium, copper, lead, manganese, molybdenum and zinc. This analyte list may be subject to modification as results from this monitoring are obtained, and as other information becomes available.

All TSP samples were digested and then analyzed by ICP-MS using EPA Method E200.8. Laboratory results are presented in Appendix B and are reported in units of micrograms (μg) per filter. Sixteen TSP samples collected from both the Walnut Street and Pine Street sites during the second quarter were analyzed for trace elements, as well as five Field Blanks and five filter lot blanks (Lab Blanks).

Tables 3a and 3b summarize the total particulate mass and ELI analytical results for samples collected during the second quarter. Detectable results were usually obtained for copper, lead, manganese, molybdenum and zinc. Results for arsenic and cadmium were usually non-detectable. Table 3c shows the Field Blank and Lab Blank results associated with the second quarter samples. The bottom row of Table 3c shows the range of laboratory Method Blank (MB) Method Detection Limits (MDL) during the quarter. Field Blank, Lab (filter) Blank and MB concentrations for the second quarter were at or below the MDL, with the following exceptions:

- Very low levels of copper (less than twice the laboratory MDL) were detected in two Field blanks.
- Low levels of manganese were detected in one Laboratory Blank, two Field Blanks and in one laboratory Method Blank.
- Low levels of molybdenum were detected in one Laboratory Blank, three Field Blanks and in two laboratory Method Blanks.

Tables 4a and 4b show the calculated airborne concentration of each trace element over the indicated sampling periods. To facilitate data interpretation, the number of leading zeroes in the results has been minimized by expressing results in units of **nanograms** (ng) per cubic meter rather than micrograms.

All quarterly average trace element concentrations at Pine Street were well below the respective lifetime exposure Guideline values. The closest approach was for manganese, with the average of 17 ng/m^3 representing 34 percent of the lifetime exposure Guideline of 50 ng/m^3 . Individual trace element concentrations for the Pine Street site were also below the suggested Guideline values.

All quarterly average trace element concentrations at Walnut Street were also well below the respective Guideline values. The closest approach was for manganese, with the quarterly

average of 11 ng/m³ representing 22 percent of the Guideline value of 50 ng/m³. Individual trace element concentrations for the Walnut Street site were also below the suggested Guideline values.

Table 5 shows the sources of the “Guideline” values used for these analyses, and their derivations.⁶ Additionally, Table 5 shows the approximate airborne concentration corresponding to each MDL range listed in Table 4c.

Laboratory results are included in Appendix B. A detailed table showing commonly accepted values from regulatory agencies and reputable private organizations is provided in Appendix D.

⁶ The guideline values were updated (starting with the Greeley School 4th quarter report 2020) to be consistent with those from the Montana Department of Public Health and Human Services (MDPHHS). Guidelines for copper and molybdenum are lower than those used in previous quarterly reports. Although MDPHHS suggested a higher guideline for manganese, the lower previously reported value was retained. Guidelines for arsenic, cadmium, lead and zinc are unchanged.

Table 3a: Summary of Analytical Results – TSP Pine Street

DATE	PART MASS (µg)	As (µg)	Cd (µg)	Cu (µg)	Mn (µg)	Mo (µg)	Pb (µg)	Zn (µg)
04/02	922	ND	ND	2.1	0.45	0.15	0.086	0.72
04/07	953	ND	ND	2.6	0.79	0.11	0.13	0.99
04/13	474	ND	ND	1.5	0.21	0.078	0.053	1.1
04/19	1309	ND	0.0070	4.8	0.85	0.42	0.20	1.4
04/25	618	ND	ND	1.1	0.38	0.060	0.079	0.51
05/01	441	ND	ND	1.1	0.84	0.091	0.054	0.47
05/07	399	ND	ND	0.74	0.45	0.056	0.045	0.44
05/13	168	ND	ND	0.58	ND	0.048	ND	ND
05/19	444	ND	ND	1.7	0.22	0.069	0.071	0.40
05/25	673	ND	ND	1.0	0.30	0.063	0.067	0.48
05/31	837	ND	ND	2.3	0.38	0.066	0.12	0.71
06/06	646	ND	ND	2.3	0.26	0.078	0.086	0.59
06/12	757	0.069	ND	1.6	0.32	0.077	0.10	0.91
06/18	735	ND	ND	0.74	0.32	0.027	0.083	0.60
06/24	458	ND	ND	1.3	0.25	0.034	ND	0.60
06/30	457	ND	ND	1.7	0.41	0.14	0.082	0.49

All values expressed as micrograms per filter. ND denotes not detected.

Table 3b: Summary of Analytical Results – TSP Walnut Street

DATE	PART MASS (µg)	As (µg)	Cd (µg)	Cu (µg)	Mn (µg)	Mo (µg)	Pb (µg)	Zn (µg)
04/02	432	ND	ND	0.69	0.26	0.044	0.051	0.63
04/07	705	ND	ND	0.84	0.43	0.044	0.072	0.63
04/13	371	ND	ND	0.31	ND	0.0094	ND	ND
04/19	985	ND	ND	0.94	0.51	0.034	0.093	0.65
04/25	346	ND	ND	0.28	0.24	0.012	0.064	0.39
05/01	529	ND	ND	0.47	0.33	0.048	0.051	0.36
05/07	371	ND	ND	0.62	0.33	0.042	0.069	0.45
05/13	209	ND	ND	ND	ND	0.0088	ND	ND
05/19	365	ND	ND	0.37	ND	0.015	ND	ND
05/25	733	ND	ND	0.68	0.27	0.032	0.058	0.40
05/31	353	ND	ND	0.54	ND	0.021	0.045	ND
06/06	407	ND	ND	0.68	0.26	0.020	0.11	0.43
06/12	577	ND	ND	0.59	0.23	0.030	0.050	0.42
06/18	563	ND	ND	0.70	0.32	0.046	ND	0.91
06/24	410	ND	ND	0.52	0.19	0.019	0.050	0.42
06/30	607	ND	ND	0.72	0.46	0.059	0.054	0.38

All values expressed as micrograms per filter. ND denotes not detected.

Table 3c: Summary of Analytical Results – Blanks

DATE	PART MASS (µg)	As (µg)	Cd (µg)	Cu (µg)	Mn (µg)	Mo (µg)	Pb (µg)	Zn (µg)
05/01-LB	4	ND	ND	ND	0.29	0.014	ND	ND
04/08-FFB	3	ND	ND	ND	ND	0.0059	ND	ND
05/08-FFB	67	ND	ND	ND	0.23	0.0086	ND	ND
06/01-LB	7	ND	ND	ND	0.19	ND	ND	ND
06/20-LB	5	ND	ND	ND	ND	ND	ND	ND
06/01-FFB	150	ND	ND	0.38	ND	0.0091	ND	ND
06/26-FFB	23	ND	ND	ND	ND	ND	ND	ND
08/11-LB	3	ND	ND	ND	ND	ND	ND	ND
08/25-LB	-10	ND	ND	ND	ND	ND	ND	ND
07/19-FFB	5	ND	ND	0.28	ND	ND	ND	ND
Lab Method Blank MDL Range		0.06	0.004- 0.006	0.2	0.2	0.005- 0.006	0.04	0.3

All values expressed as micrograms per filter. ND denotes not detected.
 LB denotes laboratory filter blank. FFB denotes field filter blank.

Table 4a: Summary of Airborne Trace Element Concentrations – TSP Pine Street

DATE	Sample Volume (m³)	As (ng/m³)	Cd (ng/m³)	Cu (ng/m³)	Mn (ng/m³)	Mo (ng/m³)	Pb (ng/m³)	Zn (ng/m³)
04/02	24.05	ND	ND	87	19	6.2	3.6	30
04/07	24.05	ND	ND	110	33	4.6	5.4	41
04/13	24.05	ND	ND	62	8.7	3.2	2.2	46
04/19	24.05	ND	0.29	200	35	17	8.3	58
04/25	24.05	ND	ND	46	16	2.5	3.3	21
05/01	24.05	ND	ND	46	35	3.8	2.2	20
05/07	24.05	ND	ND	31	19	2.3	1.9	18
05/13	24.05	ND	ND	24	ND	2.0	ND	ND
05/19	24.05	ND	ND	71	9.1	2.9	3.0	17
05/25	24.05	ND	ND	42	12	2.6	2.8	20
05/31	24.05	ND	ND	96	16	2.7	5.0	30
06/06	24.05	ND	ND	96	11	3.2	3.6	25
06/12	24.05	2.9	ND	67	13	3.2	4.2	38
06/18	24.05	ND	ND	31	13	1.1	3.5	25
06/24	24.05	ND	ND	54	10	1.4	ND	25
06/30	24.05	ND	ND	71	17	5.8	3.4	20
Mean (ng/m ³) *		1.4	0.13	71	17	4.0	3.4	28
Guideline (ng/m ³) **		15	10	2,000	50	400	150	47,619

*Rather than treat non detectable (ND) data as zero, the mean was calculated using ½ of the detectable value (Table 5) for the parameter and date in question.

**The guideline values, except lead (Pb), are applicable to a lifetime or chronic exposure. The lead (Pb) guideline is an ambient air quality standard applicable to a 3-month average. The quarterly average lead concentration of 3.4 ng/m³ was 2 percent of the guideline value; non-detect lead concentrations were set at ½ of the lead detection limit for the sample group in question.

Table 4b: Summary of Airborne Trace Element Concentrations – TSP Walnut Street

DATE	Sample Volume (m ³)	As (ng/m ³)	Cd (ng/m ³)	Cu (ng/m ³)	Mn (ng/m ³)	Mo (ng/m ³)	Pb (ng/m ³)	Zn (ng/m ³)
04/02	23.71	ND	ND	29	11	1.9	2.2	27
04/07	23.71	ND	ND	35	18	1.9	3.0	27
04/13	23.71	ND	ND	13	ND	0.40	ND	ND
04/19	23.71	ND	ND	40	22	1.4	3.9	27
04/25	23.71	ND	ND	12	10	0.51	2.7	16
05/01	23.71	ND	ND	20	14	2.0	2.2	15
05/07	23.71	ND	ND	26	14	1.8	2.9	19
05/13	23.71	ND	ND	ND	ND	0.37	ND	ND
05/19	23.71	ND	ND	16	ND	0.63	ND	ND
05/25	23.71	ND	ND	29	11	1.3	2.4	17
05/31	23.71	ND	ND	23	ND	0.89	1.9	ND
06/06	23.71	ND	ND	29	11	0.84	4.6	18
06/12	23.71	ND	ND	25	10	1.3	2.1	18
06/18	23.71	ND	ND	30	13	1.9	ND	38
06/24	23.71	ND	ND	22	8.0	0.80	2.1	18
06/30	23.71	ND	ND	30	19	2.5	2.3	16
Mean (ng/m ³) *		1.3	0.12	24	11	1.3	2.2	18
Guideline (ng/m ³) **		15	10	2,000	50	400	150	47,619

*Rather than treat non detectable (ND) data as zero, the mean was calculated using ½ of the detectable value (Table 5) for the parameter and date in question.

**The guideline values, except lead (Pb), are applicable to a lifetime or chronic exposure. The lead (Pb) guideline is an ambient air quality standard applicable to a 3-month average. The quarterly average lead concentration of 2.2 ng/m³ was 1 percent of the guideline value; non-detect lead concentrations were set at ½ of the lead detection limit for the sample group in question.

Table 5: Summary of Airborne Trace Element Concentration Guidelines (ng/m³)

Analyte	Dose/ Risk ^A	Source	Description	Time Period	Detectable TSP ^D
Arsenic (inorganic)	15	EPA / DPHHS ^F	RfC ^B	Lifetime	2.50
Cadmium	10	ATSDR / DPHHS ^F	Non-cancer / CV ^F	Chronic	0.17-0.25
	200	IRIS	Cancer	Chronic	
Copper	2,000	DPHHS ^F / Michigan DEQ	RfC ^B	Chronic	8.33
Lead	150	EPA / ATSDR / DPHHS ^F	National Ambient Air Quality Standard ^C	3-month	1.67
Manganese	50	EPA	RfC ^B	Lifetime	8.33
Molybdenum	11,905 (=500,000/42) ^E	CAL/OSHA, ACGIH	CAL/OSHA, ACGIH	Chronic ^E	0.21-0.25
	400	DPHHS ^F / Michigan DEQ	CV	Chronic	
Zinc	47,619 (=2,000,000/42) ^E	ACGIH TLV	ACGIH TLV	Chronic ^E	12.5

^A See Appendix D for definitions and listing of dose and risk assessment values reviewed to produce this summary table.

^B RfC = Reference Concentration (EPA) is an estimate (with uncertainty added) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime.

^C This standard is based on a three-month average.

^D Based on 24-hour sampling period and total sample volume of 24 m³. Range reflects maximum and minimum laboratory MDLs during Q2 2025.

^E This value derived by dividing the OSHA/NIOSH exposure limit by 42. This was done to include a factor of 10 to account for a general population, not just healthy adults and then including another factor of 4.2 to include a year-long exposure as opposed to 8 hours per day, 5 days a week and 52 weeks per year.

^F Reference information from letter and analysis by DPHHS (regarding Greeley School ambient data) to Butte-Silver Bow Health Department dated October 28,2020.

EPA = Environmental Protection Agency

ATSDR = Agency for Toxic Substances & Disease Registry

CV = "Comparison Value" – a term used by DPHHS (10/28/20 letter) to indicate an ATSDR (or other) guideline or reference value

DPHHS = Montana Department of Health and Human Services

RfC = Reference Concentration (see above)

RSL = EPA Regional Screening Levels (<https://www.epa.gov.gov/risk/regional-screening-levels-rsls-generic-tables>)

OSHA = Occupational Safety and Health Administration

ACGIH = American Congress of Governmental Industrial Hygienists

NIOSH= National Institute of Occupational Safety and Health

TLV = Threshold limit value

5.0 CHEMICAL ANALYSIS DATA – DUSTFALL SAMPLES

After each Dustfall sample was prepared as described in Section 3.0, the remaining particulate mass was transferred to a digestion vessel using digestion reagents to ensure that all dust was removed from the plastic and digested for total metals analysis. The digestate was analyzed using EPA Method SW6020 “Inductively Coupled Plasma - Mass Spectrometry.”

Laboratory results are presented in Appendix C and are reported in units of milligrams per kilogram (mg/kg) in the captured particulate, along with the total dried particulate mass. Nine Dustfall samples collected from the Walnut Street, Pine Street and Greeley School sites during the second quarter of 2025 were analyzed for trace elements. Three Field Blanks also were analyzed.

Tables 6a through 6c present the Dustfall analysis data for the second quarter. Each Table shows the sample collection information, amount of particulate captured from each sample, and the concentrations of seven parameters in the particulate mass on a mg/kg basis. Finally, each table shows a calculated deposition rate for each parameter in units of milligrams per square meter per 30-days (g/m²/30-days).

All 30-day total particulate deposition rates were at or below the MAAQS of 10 g/m²/30-days.⁷ The highest observed deposition rate of 8.1 g/m²/30-days occurred at the Pine Street site between March 31 and April 29, 2025. Quarterly average deposition rates were below the MAAQS at all three sites.

⁷ It should be noted that the sampling procedure and analysis were conducted with quality in mind, they were not necessarily conducted in strict accordance with the specific methods outlined in the Montana standard (ARM17.8.220).

Table 6a: Dustfall Results for March 31 – April 29, 2025**Sample Collection Information**

	Greeley School	Pine Street	Walnut Street	Field Blank
Start Date	03/31/25	03/31/25	03/31/25	
End Date	04/29/25	04/29/25	04/29/25	
Days of Exposure	29	29	29	
Dry Particulate Weight (g)	0.1033	0.1380	0.1122	-0.0010
Dustfall (g/m²/30-days)	6.0	8.1	6.6	-0.1

Trace Element Concentration in Particulate (mg/kg)

Analyte	Greeley School	Pine Street	Walnut Street	Field Blank
As	24	32	23	ND
Cd	2	2	2	ND
Cu	2,890	2,900	2,470	0.4
Pb	102	114	85	ND
Mn	549	622	497	ND
Mo	918	807	604	ND
Zn	562	577	518	ND

Trace Element Deposition Rate (mg/m²/30-days)

Analyte	Greeley School	Pine Street	Walnut Street	Field Blank
As	0.15	0.26	0.15	ND
Cd	0.01	0.02	0.01	ND
Cu	17.48	23.43	16.22	0.00
Pb	0.62	0.92	0.56	ND
Mn	3.32	5.02	3.26	ND
Mo	5.55	6.52	3.97	ND
Zn	3.40	4.66	3.40	ND

Table 6b: Dustfall Results for April 29 – May 30, 2025**Sample Collection Information**

	Greeley School	Pine Street	Walnut Street	Field Blank
Start Date	04/29/25	04/29/25	04/29/25	
End Date	05/30/25	05/30/25	05/30/25	
Days of Exposure	31	31	31	
Dry Particulate Weight (g)	0.0976	0.1147	0.1230	0.0000
Dustfall (g/m²/30-days)	5.3	6.3	6.7	0.0

Trace Element Concentration in Particulate (mg/kg)

Analyte	Greeley School	Pine Street	Walnut Street	Field Blank
As	20	24	19	ND
Cd	2	2	2	ND
Cu	2,040	3,000	1,980	ND
Pb	69	102	79	ND
Mn	405	477	549	0.1
Mo	876	976	611	ND
Zn	448	558	488	ND

Trace Element Deposition Rate (mg/m²/30-days)

Analyte	Greeley School	Pine Street	Walnut Street	Field Blank
As	0.11	0.15	0.13	ND
Cd	0.01	0.01	0.01	ND
Cu	10.90	18.84	13.34	ND
Pb	0.37	0.64	0.53	ND
Mn	2.16	3.00	3.70	0.00
Mo	4.68	6.13	4.12	ND
Zn	2.39	3.51	3.29	ND

Table 6c: Dustfall Results for May 30 – June 29, 2025**Sample Collection Information**

	Greeley School	Pine Street	Walnut Street	Field Blank
Start Date	05/30/25	05/30/25	05/30/25	
End Date	06/29/25	06/29/25	06/29/25	
Days of Exposure	30	30	30	
Dry Particulate Weight (g)	0.1329	0.1311	0.1268	-0.0004
Dustfall (g/m²/30-days)	7.5	7.4	7.2	0.0

Trace Element Concentration in Particulate (mg/kg)

Analyte	Greeley School	Pine Street	Walnut Street	Field Blank
As	15	16	12	ND
Cd	1	2	1	ND
Cu	1,690	2,030	1,270	1
Pb	57	55	54	0.3
Mn	312	357	330	0.4
Mo	562	631	397	ND
Zn	368	383	339	2

Trace Element Deposition Rate (mg/m²/30-days)

Analyte	Greeley School	Pine Street	Walnut Street	Field Blank
As	0.11	0.12	0.09	ND
Cd	0.01	0.01	0.01	ND
Cu	12.71	15.06	9.11	0.00
Pb	0.43	0.41	0.39	0.00
Mn	2.35	2.65	2.37	0.00
Mo	4.23	4.68	2.85	ND
Zn	2.77	2.84	2.43	0.00

6.0 CALIBRATION DATA

Calibration checks of the BGI TSP samplers are performed in at least two months of each quarter. In the third month, an audit is performed by a different person using different calibration standards. Routine monthly verification checks were performed on the TSP samplers on April 29, May 21 and June 9.⁸

Table 7 summarizes the verification checks performed each month and the applicable acceptance criteria. In the event of unsatisfactory results, corrective actions are performed as specified in the rightmost column. Table 8 summarizes the results of the calibration checks performed during the second quarter, as well as any corrective actions. Detailed verification check results are shown in Appendix E. Appendix F presents certifications for flow calibration standards used during the quarter.

Table 7: Summary of Montana Resources – Pine St and Walnut St Sites Calibration/ Audit Activities and Acceptance Criteria

Activity	Acceptance Criteria / Actions	
<i>TSP Sampler Calibration Checks</i>		
Flow Verification	±4%	Multipoint recalibration if flow error exceeds ±4%
Leak Check	Investigate / correct if vacuum drop exceeds 4 cm of water in 2 minutes	
Temperature Verification	±2.0°C	Multipoint recalibration if error exceeds ±2.0°C
Pressure	±10 mmHg	Adjust calibration if error exceeds ±10 mmHg
<i>Other</i>		
TSP Inlet Head	Disassemble and clean	

⁸ The calibration checks performed on July 7 also are shown to demonstrate data validity through the end of the second quarter.

Table 8: Summary of Quarter 2, 2025 Calibration Verification Results

Date	Calibration Check	Results	Limits	Actions
04/29/2025	BGI TSP Flow Verification (A)	-6.0%	±4%	C
Pine Street	BGI TSP Flow Verification (B)	+6.4%	±4%	C
	BGI Ambient Temperature	-0.2°C	±2.0°C	
	BGI Filter Temperature	+0.3°C	±2.0°C	
	BGI Ambient Pressure	-0.2 mm Hg	±10 mmHg	
	BGI Leak Test (pressure drop)	0 cm H ₂ O	≤4 cm H ₂ O	
04/29/2025	BGI TSP Flow Verification (A)	+2.0%	±4%	D
Walnut Street	BGI TSP Flow Verification (B)	-2.0%	±4%	D
	BGI Ambient Temperature	-0.6°C	±2.0°C	
	BGI Filter Temperature	+0.3°C	±2.0°C	
	BGI Ambient Pressure	+1.3 mm Hg	±10 mmHg	
	BGI Leak Test (pressure drop)	1 cm H ₂ O	≤4 cm H ₂ O	
05/21/2025	BGI TSP Flow Verification (A)	+0.1%	±4%	
Pine Street	BGI TSP Flow Verification (B)	-0.1%	±4%	
	BGI Ambient Temperature	-0.6°C	±2.0°C	
	BGI Filter Temperature	+0.2°C	±2.0°C	
	BGI Ambient Pressure	-0.2 mm Hg	±10 mmHg	
	BGI Leak Test (pressure drop)	0 cm H ₂ O	≤4 cm H ₂ O	
05/21/2025	BGI TSP Flow Verification (A)	-3.1%	±4%	E
Walnut Street	BGI TSP Flow Verification (B)	+3.2%	±4%	E
	BGI Ambient Temperature	-0.5°C	±2.0°C	
	BGI Filter Temperature	+0.6°C	±2.0°C	
	BGI Ambient Pressure	+0.3 mm Hg	±10 mmHg	
	BGI Leak Test (pressure drop)	1 cm H ₂ O	≤4 cm H ₂ O	
06/09/2025	BGI TSP Flow Verification (A)	-3.0%	±4%	
Pine Street	BGI TSP Flow Verification (B)	+3.1%	±4%	
	BGI Ambient Temperature	-0.3°C	±2.0°C	
	BGI Filter Temperature	+0.1°C	±2.0°C	
	BGI Ambient Pressure	-0.7 mm Hg	±10 mmHg	
	BGI Leak Test (pressure drop)	1 cm H ₂ O	≤4 cm H ₂ O	
06/09/2025	BGI TSP Flow Verification (A)	-1.2%	±4%	
Walnut Street	BGI TSP Flow Verification (B)	+1.2%	±4%	
	BGI Ambient Temperature	-0.3°C	±2.0°C	
	BGI Filter Temperature	-0.4°C	±2.0°C	
	BGI Ambient Pressure	-0.2 mm Hg	±10 mmHg	
	BGI Leak Test (pressure drop)	1 cm H ₂ O	≤4 cm H ₂ O	

Date	Calibration Check	Results	Limits	Actions
07/07/2025	BGI TSP Flow Verification (A)	-3.4%	±4%	
Pine Street	BGI TSP Flow Verification (B)	+3.5%	±4%	
	BGI Ambient Temperature	-0.8°C	±2.0°C	
	BGI Filter Temperature	+0.6°C	±2.0°C	
	BGI Ambient Pressure	-1.2 mm Hg	±10 mmHg	
	BGI Leak Test (pressure drop)	1 cm H ₂ O	≤4 cm H ₂ O	
07/07/2025	BGI TSP Flow Verification (A)	-1.3%	±4%	F
Walnut Street	BGI TSP Flow Verification (B)	+1.3%	±4%	F
	BGI Ambient Temperature	-1.1°C	±2.0°C	
	BGI Filter Temperature	-0.6°C	±2.0°C	
	BGI Ambient Pressure	+0.3 mm Hg	±10 mmHg	
	BGI Leak Test (pressure drop)	1 cm H ₂ O	≤4 cm H ₂ O	
Codes: A = Difference of reported flow from reference standard flow. B = Difference of reference standard flow from design flow of 16.7 LPM. C = Performed multipoint flow calibration. Operating flow left at 16.72 LPM D = Performed multipoint flow calibration. Operating flow left at 16.68 LPM E = Performed multipoint flow calibration. Operating flow left at 16.68 LPM F = Main PC Board replaced after calibration check				

7.0 QUARTERLY AUDIT/CALIBRATION RESULTS

An audit is performed once in each full calendar quarter. The checks and acceptance criteria are identical to those for monthly calibrations (see Table 7). The primary difference is that the audits are performed by a different person, using different calibration standards. Calibration adjustments then are made as necessary, based on the as-found audit results. The second quarter audit was performed on June 9, 2025, at both sites. Results for both TSP samplers were satisfactory as shown in Table 9.

Table 9: Quarter 2, 2025 Audit Results

BGI PQ200 TSP Sampler – Performance Audit			
Date: 06/09/2025	Time: 1245-1300	Sampler Serial Number: 90133 – Pine St	
Performed By: Daniel Bitz		Observer: Steve Heck	
Ref Std: Swift 25.0 SN D16202		Certification Date: 07-15-2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Audit (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	624	623.7	+0.3
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Audit (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	27.1	27.1	0.0
Filter Temperature	29.6	29.5	+0.1
Leak Check (must be ≤ 4 cm drop)			
Vacuum Readings (cm H2O)	Start 143	End 142	Pass Fail
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Audit (b)	% Difference $100*(a - b)/b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	16.56	+0.8%
Reading (liters per minute)	Audit (b)	Design Flow Rate Standard (c)	% Difference $100*(b-16.7)/16.7$ (must be $\leq \pm 5\%$)
Difference from design flow rate	16.56	16.7	-0.8%
Comments:			

BGI PQ200 TSP Sampler – Performance Audit			
Date: 06/09/2025	Time: 1330-1345	Sampler Serial Number: 90129 – Walnut St	
Performed By: Daniel Bitz		Observer: Steve Heck	
Ref Std: Swift 25.0 SN D16202		Certification Date: 07-15-2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Audit (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	625	624.3	+0.7
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Audit (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	28.6	29.5	-0.9
Filter Temperature	30.6	30.2	+0.4
Leak Check (must be ≤ 4 cm drop)			
Vacuum Readings (cm H2O)	Start 141	End 141	Pass Fail
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Audit (b)	% Difference $100 \cdot (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	16.40	+1.8%
Reading (liters per minute)	Audit (b)	Design Flow Rate Standard (c)	% Difference $100 \cdot (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Difference from design flow rate	16.40	16.7	-1.8%
Comments:			

8.0 DATA COMPLETENESS

Data recovery statistics for the particulate filter samples are presented in Table 10. The typical quarterly data recovery goal for TSP filter samples is ≥ 80 percent for both the gravimetric and trace element analyses. The actual data recovery was 100 percent for the TSP gravimetric and trace element analyses at both the Pine St and Walnut St sites.

Dustfall sampling involves no active instrumentation; it merely requires exposure of a 15-cm diameter open container for a period of approximately 30-days. It would therefore be highly unusual for any scheduled sample not to be collected and analyzed. Three rounds of ~30-day sampling at the Greeley School, Pine Street and Walnut Street sites were possible during the second quarter of 2025 – for a total of nine possible samples. All nine samples were collected as scheduled, giving a data recovery of 100 percent.

Table 10: Quarterly Data Completeness Summary – Filter Analysis Data

Montana Resources LLP			
Parameter	Readings Possible	Valid Results	Percent Recovery
April 2025			
TSP – Pine St / Gravimetric	5	5	100.0
TSP – Pine St / Trace Elements	35	35	100.0
TSP – Walnut St / Gravimetric	5	5	100.0
TSP – Walnut St / Trace Elements	35	35	100.0
Total	80	80	100.0
May 2025			
TSP – Pine St / Gravimetric	6	6	100.0
TSP – Pine St / Trace Elements	42	42	100.0
TSP – Walnut St / Gravimetric	6	6	100.0
TSP – Walnut St / Trace Elements	42	42	100.0
Total	96	96	100.0
June 2025			
TSP – Pine St / Gravimetric	5	5	100.0
TSP – Pine St / Trace Elements	35	35	100.0
TSP – Walnut St / Gravimetric	5	5	100.0
TSP – Walnut St / Trace Elements	35	35	100.0
Total	80	80	100.0
Quarter 2, 2025			
TSP – Pine St / Gravimetric	16	16	100.0
TSP – Pine St / Trace Elements	112	112	100.0
TSP – Walnut St / Gravimetric	16	16	100.0
TSP – Walnut St / Trace Elements	112	112	100.0
Total	256	256	100.0

9.0 COMPARISON TO AMBIENT AIR QUALITY STANDARDS

This study is not intended to determine compliance with the NAAQS⁹ or the Montana ambient air quality standards¹⁰ (MAAQS). Nonetheless, a generalized comparison is possible. The filter-based TSP data collected indicate ambient TSP concentrations well below the historical 24-hour standard of 260 $\mu\text{g}/\text{m}^3$ and the historical annual geometric average standard of 75 $\mu\text{g}/\text{m}^3$. ***Note that all TSP standards were superseded by PM₁₀ standards in 1987.***¹¹

Similarly, the lead concentrations analyzed from the exposed TSP filters indicate quarterly average airborne concentrations well below the 0.15 $\mu\text{g}/\text{m}^3$ ambient NAAQS based on a 3-month average of the 24-hour samples. The MAAQS is 1.5 $\mu\text{g}/\text{m}^3$ and is based on a 90-day rolling average of 24-hour samples. The TSP samples presented herein were collected for 24-hour periods, at a much lower sampling rate (16.7 liters per minute) compared to the standard method (≥ 40 standard cubic feet per minute). Nonetheless, the results indicate quarterly average ambient lead concentrations well below the MAAQS and NAAQS. Table 11 summarizes these comparisons through the second quarter of 2025.

Additionally, the analyses presented in Section 4.0 indicate that average airborne concentrations of the other six trace elements were below the suggested guidelines presented in Table 5.

Finally, the MAAQS for Dustfall specifies a particulate deposition rate not to exceed 10 $\text{g}/\text{m}^2/30\text{-days}$. All dustfall results for the second quarter were below that value. There is no NAAQS for Dustfall.

⁹ 40 CFR 50 *et seq.*

¹⁰ ARM 17.8.201 *et seq.*

¹¹ 52 FR 24634, July 1, 1987

Table 11: Summary of Airborne Concentration vs. NAAQS

Analyte	Location	Observed Concentration (µg/m ³)	Averaging Period	Ambient Standard (µg/m ³)	Authority
TSP	Pine St	52 ¹	24-hour (max)	260 ³	NAAQS
	Walnut St	42 ¹			
TSP	Pine St	27	Annual Average	75 ³	NAAQS
	Walnut St	21			
Pb	Pine St	0.003 ²	90-day	1.50	MAAQS
	Walnut St	0.002 ²	3-month	0.15	NAAQS
Analyte	Location	Deposition Rate Average (g/m ² /30-days)	Averaging Period	Ambient Standard (g/m ² /30-days)	Authority
Dustfall	Greeley Sch.	6.3	30-days	10	MAAQS
	Pine St	7.3			
	Walnut St	6.8			

¹ This value was the maximum 24-hour value from the filter-based TSP sampler.

² This value was the quarterly average from the filter-based TSP sampler. Non-detect results were set to ½ of the applicable detection limit when calculating the average.

³ The historical TSP standard shown for comparison purposes is no longer in effect. NAAQS standard for TSP was based on geometric mean and MAAQS on arithmetic average. Values shown represent arithmetic averages for monitoring period of Quarter 2, 2025, based on gravimetric filter analysis.

APPENDIX A: GRAVIMETRIC ANALYSIS DATA

Quarter 2, 2025 Filter Analysis Results - TSP - Pine St

FILTER	TYPE	DATE	AVG FLOW LPM	HOURS	SAMPLE VOLUME (M3)	PRE WEIGHT (MG)	PRE-WEIGHT DATE	POST WEIGHT (MG)	POST-WEIGHT DATE	PART MASS (MG)	CONC (UG/M3)
C1104704	TSP	04/02	16.70	24:00	24.05	119.722	21-Mar	120.644	23-Apr	0.922	38
C1104746	TSP	04/07	16.70	24:00	24.05	120.074	21-Mar	121.027	23-Apr	0.953	40
C1104748	TSP	04/13	16.70	24:00	24.05	116.463	21-Mar	116.937	23-Apr	0.474	20
C1104726	TSP	04/19	16.70	24:00	24.05	120.381	4-Apr	121.690	21-May	1.309	54
C1104729	TSP	04/25	16.70	24:00	24.05	118.701	4-Apr	119.319	21-May	0.618	26
C1104732	TSP	05/01	16.70	24:00	24.05	120.722	4-Apr	121.163	21-May	0.441	18
C1104733	TSP	05/07	16.70	24:00	24.05	120.807	4-Apr	121.206	21-May	0.399	17
C1108766	TSP	05/13	16.70	24:00	24.05	123.589	1-May	123.757	13-Jun	0.168	7
C1108770	TSP	05/19	16.70	24:00	24.05	124.458	1-May	124.902	13-Jun	0.444	18
C1108772	TSP	05/25	16.70	24:00	24.05	123.008	1-May	123.681	13-Jun	0.673	28
C1108774	TSP	05/31	16.70	24:00	24.05	121.884	1-May	122.721	13-Jun	0.837	35
C1108756	TSP	06/06	16.70	24:00	24.05	122.426	30-May	123.072	21-Jul	0.646	27
C1108758	TSP	06/12	16.70	24:00	24.05	122.478	30-May	123.235	21-Jul	0.757	31
C1108760	TSP	06/18	16.70	24:00	24.05	126.087	30-May	126.822	21-Jul	0.735	31
C1108762	TSP	06/24	16.70	24:00	24.05	124.474	30-May	124.932	21-Jul	0.458	19
C1062667	TSP	06/30	16.70	24:00	24.05	123.664	24-Jun	124.121	14-Aug	0.457	19

Quarter 2, 2025 Filter Analysis Results - TSP - Walnut St

FILTER	TYPE	DATE	AVG FLOW LPM	HOURS	SAMPLE VOLUME (M3)	PRE WEIGHT (MG)	PRE-WEIGHT DATE	POST WEIGHT (MG)	POST-WEIGHT DATE	PART MASS (MG)	CONC (UG/M3)
C1104705	TSP	04/02	16.70	23:40	23.71	116.341	21-Mar	116.773	23-Apr	0.432	18
C1104747	TSP	04/07	16.70	23:40	23.71	120.097	21-Mar	120.802	23-Apr	0.705	30
C1104749	TSP	04/13	16.70	23:40	23.71	121.930	21-Mar	122.301	23-Apr	0.371	16
C1104727	TSP	04/19	16.70	23:40	23.71	117.883	4-Apr	118.868	21-May	0.985	42
C1104730	TSP	04/25	16.70	23:40	23.71	121.729	4-Apr	122.075	21-May	0.346	15
C1104731	TSP	05/01	16.70	23:40	23.71	121.392	4-Apr	121.921	21-May	0.529	22
C1104734	TSP	05/07	16.70	23:40	23.71	119.326	4-Apr	119.697	21-May	0.371	16
C1108768	TSP	05/13	16.70	23:40	23.71	124.442	1-May	124.651	13-Jun	0.209	9
C1108769	TSP	05/19	16.70	23:40	23.71	124.615	1-May	124.980	13-Jun	0.365	15
C1108771	TSP	05/25	16.70	23:40	23.71	123.371	1-May	124.104	13-Jun	0.733	31
C1108773	TSP	05/31	16.70	23:40	23.71	125.188	1-May	125.541	13-Jun	0.353	15
C1108757	TSP	06/06	16.70	23:40	23.71	122.813	30-May	123.220	21-Jul	0.407	17
C1108759	TSP	06/12	16.70	23:40	23.71	121.655	30-May	122.232	21-Jul	0.577	24
C1108761	TSP	06/18	16.70	23:40	23.71	122.005	30-May	122.568	21-Jul	0.563	24
C1108763	TSP	06/24	16.70	23:40	23.71	124.696	30-May	125.106	21-Jul	0.410	17
C1062666	TSP	06/30	16.70	23:40	23.71	123.613	24-Jun	124.220	14-Aug	0.607	26

Quarter 2, 2025 Filter Analysis Results - Pine & Walnut - Blanks

FILTER	TYPE	DATE*	PRE WEIGHT (MG)	PRE-WEIGHT DATE	POST WEIGHT (MG)	POST-WEIGHT DATE	PART MASS (MG)
C1104702	Lab	1-May	119.047	21-Mar	119.051	23-Apr	0.004
C1104750	Field	8-Apr	120.250	21-Mar	120.253	23-Apr	0.003
C1104735	Field	8-May	119.671	4-Apr	119.738	21-May	0.067
C1104728	Lab	1-Jun	116.991	4-Apr	116.998	21-May	0.007
C1108775	Lab	20-Jun	124.454	1-May	124.459	13-Jun	0.005
C1108767	Field	1-Jun	126.486	1-May	126.636	13-Jun	0.150
C1108764	Field	26-Jun	121.001	30-May	121.024	21-Jul	0.023
C1108765	Lab	11-Aug	124.370	30-May	124.373	21-Jul	0.003
C1062668	Lab	25-Aug	120.737	24-Jun	120.727	14-Aug	-0.010
C1062675	Field	19-Jul	121.309	24-Jun	121.314	14-Aug	0.005

*Denotes collection date for Field Blank, analysis date for Laboratory Blanks

APPENDIX B: LABORATORY ANALYSIS REPORTS - TSP



ANALYTICAL SUMMARY REPORT

May 08, 2025

Bison Engineering
3143 E Lyndale Ave
Helena, MT 59601-6401

Work Order: B25041935 Quote ID: B4795

Project Name: Montana Resources/Greely School PW

Energy Laboratories Inc Billings MT received the following 10 samples for Bison Engineering on 4/24/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25041935-001	Particulate Filter C1104701 Pine ST TSP	03/26/25 0:00	04/24/25	Air	Metals on air filter by ICP/ICPMS Nitric acid-extraction by 40CFR50G
B25041935-002	Particulate Filter C1104702 Lab Blank	03/21/25 16:20	04/24/25	Air	Same As Above
B25041935-003	Particulate Filter C1104703 Walnut ST TSP	03/26/25 0:00	04/24/25	Air	Same As Above
B25041935-004	Particulate Filter C1104704 Pine ST TSP	04/02/25 0:00	04/24/25	Air	Same As Above
B25041935-005	Particulate Filter C1104705 Walnut ST TSP	04/02/25 0:00	04/24/25	Air	Same As Above
B25041935-006	Particulate Filter C1104746 Pine ST TSP	04/07/25 0:00	04/24/25	Air	Same As Above
B25041935-007	Particulate Filter C1104747 Walnut ST TSP	04/07/25 0:00	04/24/25	Air	Same As Above
B25041935-008	Particulate Filter C1104748 Pine ST TSP	04/13/25 0:00	04/24/25	Air	Same As Above
B25041935-009	Particulate Filter C1104749 Walnut ST TSP	04/13/25 0:00	04/24/25	Air	Same As Above
B25041935-010	Particulate Filter C1104750 Field Blank	04/08/25 8:26	04/24/25	Air	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 So. 27th Street, Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



CLIENT: Bison Engineering
Project: Montana Resources/Greely School PW
Work Order: B25041935

Report Date: 05/08/25

CASE NARRATIVE

Per client request, results are based on the final concentration using 25 mL of extraction solution per filter.

All "J" qualified analyte concentrations are below the laboratory minimum recommended Reporting Limit (RL) and above the lowest method detection limit (MDL)/Limit of Detection (LOD). Inorganic analytes reported with "J" qualifiers should be verified against the corresponding method blank and continuing calibration blanks. Inorganic "J" quantitations near the MDL/LOD may be suspect due to possible method background levels, sample matrix effects, and/or daily variability in instrument signal-to-noise levels.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104701 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-001
Collection Date: 03/26/25
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	0.059	ug/filter	J	1.0	0.058	E200.8	05/07/25 22:18 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 123		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 09:46 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 220		199348
Copper	4.2	ug/filter		1.0	0.16	E200.8	05/01/25 09:46 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 220		199348
Lead	0.17	ug/filter	J	1.0	0.042	E200.8	05/02/25 04:55 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 426		199348
Manganese	0.60	ug/filter	J	1.0	0.18	E200.8	05/02/25 04:55 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 426		199348
Molybdenum	0.30	ug/filter	J	1.0	0.0050	E200.8	05/02/25 04:55 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 426		199348
Zinc	1.0	ug/filter		1.0	0.30	E200.8	05/07/25 22:18 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 123		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104702 Lab Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-002
Collection Date: 03/21/25 16:20
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 22:24 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 124		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 09:52 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 221		199348
Copper	ND	ug/filter		1.0	0.16	E200.8	05/01/25 09:52 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 221		199348
Lead	ND	ug/filter		1.0	0.042	E200.8	05/01/25 09:52 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 221		199348
Manganese	0.29	ug/filter	J	1.0	0.18	E200.8	05/02/25 05:01 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 427		199348
Molybdenum	0.014	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:01 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 427		199348
Zinc	ND	ug/filter		1.0	0.30	E200.8	05/07/25 22:24 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 124		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104703 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-003
Collection Date: 03/26/25
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 22:30 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 125		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 09:58 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 222		199348
Copper	1.4	ug/filter		1.0	0.16	E200.8	05/01/25 09:58 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 222		199348
Lead	0.13	ug/filter	J	1.0	0.042	E200.8	05/02/25 05:06 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 428		199348
Manganese	0.66	ug/filter	J	1.0	0.18	E200.8	05/02/25 05:06 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 428		199348
Molybdenum	0.089	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:06 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 428		199348
Zinc	0.95	ug/filter	J	1.0	0.30	E200.8	05/07/25 22:30 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 125		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104704 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-004
Collection Date: 04/02/25
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 22:36 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 126		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 10:04 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 223		199348
Copper	2.1	ug/filter		1.0	0.16	E200.8	05/01/25 10:04 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 223		199348
Lead	0.086	ug/filter	J	1.0	0.042	E200.8	05/02/25 05:12 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 429		199348
Manganese	0.45	ug/filter	J	1.0	0.18	E200.8	05/02/25 05:12 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 429		199348
Molybdenum	0.15	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:12 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 429		199348
Zinc	0.72	ug/filter	J	1.0	0.30	E200.8	05/07/25 22:36 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 126		199348

Report Definitions: RL - Analyte Reporting Limit
J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104705 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-005
Collection Date: 04/02/25
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 22:42 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 127		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 10:09 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 224		199348
Copper	0.69	ug/filter	J	1.0	0.16	E200.8	05/02/25 05:18 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 430		199348
Lead	0.051	ug/filter	J	1.0	0.042	E200.8	05/02/25 05:18 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 430		199348
Manganese	0.26	ug/filter	J	1.0	0.18	E200.8	05/02/25 05:18 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 430		199348
Molybdenum	0.044	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:18 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 430		199348
Zinc	0.63	ug/filter	J	1.0	0.30	E200.8	05/07/25 22:42 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 127		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104746 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-006
Collection Date: 04/07/25
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 22:47 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 128		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 10:15 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 225		199348
Copper	2.6	ug/filter		1.0	0.16	E200.8	05/01/25 10:15 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 225		199348
Lead	0.13	ug/filter	J	1.0	0.042	E200.8	05/02/25 05:24 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 431		199348
Manganese	0.79	ug/filter	J	1.0	0.18	E200.8	05/02/25 05:24 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 431		199348
Molybdenum	0.11	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:24 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 431		199348
Zinc	0.99	ug/filter	J	1.0	0.30	E200.8	05/07/25 22:47 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 128		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104747 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-007
Collection Date: 04/07/25
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 22:53 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 129		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 10:33 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 228		199348
Copper	0.84	ug/filter	J	1.0	0.16	E200.8	05/02/25 05:30 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 432		199348
Lead	0.072	ug/filter	J	1.0	0.042	E200.8	05/02/25 05:30 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 432		199348
Manganese	0.43	ug/filter	J	1.0	0.18	E200.8	05/02/25 05:30 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 432		199348
Molybdenum	0.044	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:30 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 432		199348
Zinc	0.63	ug/filter	J	1.0	0.30	E200.8	05/07/25 22:53 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 129		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104748 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-008
Collection Date: 04/13/25
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 23:11 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 132		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 10:39 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 229		199348
Copper	1.5	ug/filter		1.0	0.16	E200.8	05/01/25 10:39 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 229		199348
Lead	0.053	ug/filter	J	1.0	0.042	E200.8	05/02/25 05:47 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 435		199348
Manganese	0.21	ug/filter	J	1.0	0.18	E200.8	05/02/25 05:47 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 435		199348
Molybdenum	0.078	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:47 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 435		199348
Zinc	1.1	ug/filter		1.0	0.30	E200.8	05/07/25 23:11 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 132		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104749 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-009
Collection Date: 04/13/25
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 23:17 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 133		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 10:44 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 230		199348
Copper	0.31	ug/filter	J	1.0	0.16	E200.8	05/02/25 05:53 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 436		199348
Lead	ND	ug/filter		1.0	0.042	E200.8	05/01/25 10:44 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 230		199348
Manganese	ND	ug/filter		1.0	0.18	E200.8	05/01/25 10:44 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 230		199348
Molybdenum	0.0094	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:53 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 436		199348
Zinc	ND	ug/filter		1.0	0.30	E200.8	05/07/25 23:17 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 133		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1104750 Field Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25041935-010
Collection Date: 04/08/25 08:26
Date Received: 04/24/25
Report Date: 05/08/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	05/07/25 23:22 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 134		199348
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	05/01/25 10:50 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 231		199348
Copper	ND	ug/filter		1.0	0.16	E200.8	05/01/25 10:50 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 231		199348
Lead	ND	ug/filter		1.0	0.042	E200.8	05/01/25 10:50 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 231		199348
Manganese	ND	ug/filter		1.0	0.18	E200.8	05/01/25 10:50 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 231		199348
Molybdenum	0.0059	ug/filter	J	1.0	0.0050	E200.8	05/02/25 05:59 / jks	04/29/25 10:48	40CFR50	ICPMS207-B_250430A : 437		199348
Zinc	ND	ug/filter		1.0	0.30	E200.8	05/07/25 23:22 / ae	04/29/25 10:48	40CFR50	ICPMS207-B_250507A : 134		199348

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25041935

Report Date: 05/08/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS207-B_250430A		
Lab ID: QCS	5	Initial Calibration Verification Standard							05/01/25 05:18	
Cadmium		0.0200	mg/L	0.0010	100	90	110			
Copper		0.0393	mg/L	0.010	98	90	110			
Lead		0.0386	mg/L	0.0010	97	90	110			
Manganese		0.199	mg/L	0.0050	100	90	110			
Molybdenum		0.0399	mg/L	0.0050	100	90	110			
Lab ID: CCV	5	Continuing Calibration Verification Standard							05/01/25 09:11	
Cadmium		0.0496	mg/L	0.0010	99	90	110			
Copper		0.0492	mg/L	0.010	98	90	110			
Lead		0.0494	mg/L	0.0010	99	90	110			
Manganese		0.0500	mg/L	0.0050	100	90	110			
Molybdenum		0.0503	mg/L	0.0050	101	90	110			
Lab ID: CCV	5	Continuing Calibration Verification Standard							05/01/25 10:21	
Cadmium		0.0506	mg/L	0.0010	101	90	110			
Copper		0.0494	mg/L	0.010	99	90	110			
Lead		0.0509	mg/L	0.0010	102	90	110			
Manganese		0.0499	mg/L	0.0050	100	90	110			
Molybdenum		0.0511	mg/L	0.0050	102	90	110			
Lab ID: QCS	5	Initial Calibration Verification Standard							05/02/25 03:10	
Cadmium		0.0204	mg/L	0.0010	102	90	110			
Copper		0.0387	mg/L	0.010	97	90	110			
Lead		0.0390	mg/L	0.0010	98	90	110			
Manganese		0.196	mg/L	0.0050	98	90	110			
Molybdenum		0.0408	mg/L	0.0050	102	90	110			
Lab ID: CCV	5	Continuing Calibration Verification Standard							05/02/25 04:26	
Cadmium		0.0517	mg/L	0.0010	103	90	110			
Copper		0.0494	mg/L	0.010	99	90	110			
Lead		0.0504	mg/L	0.0010	101	90	110			
Manganese		0.0502	mg/L	0.0050	100	90	110			
Molybdenum		0.0524	mg/L	0.0050	105	90	110			
Lab ID: CCV	5	Continuing Calibration Verification Standard							05/02/25 05:35	
Cadmium		0.0521	mg/L	0.0010	104	90	110			
Copper		0.0497	mg/L	0.010	99	90	110			
Lead		0.0501	mg/L	0.0010	100	90	110			
Manganese		0.0503	mg/L	0.0050	101	90	110			
Molybdenum		0.0532	mg/L	0.0050	106	90	110			
Method: E200.8								Batch: 199348		
Lab ID: MB-199348	5	Method Blank							Run: ICPMS207-B_250430A	
Cadmium		ND	ug/filter	0.006					05/01/25 08:13	
Copper		ND	ug/filter	0.2						
Lead		ND	ug/filter	0.04						
Manganese		ND	ug/filter	0.2						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25041935

Report Date: 05/08/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 199348
Lab ID: MB-199348	5	Method Blank						Run: ICPMS207-B_250430A		05/01/25 08:13
Molybdenum		0.006	ug/filter	0.005						
Lab ID: LCS-199348	7	Laboratory Control Sample						Run: ICPMS207-B_250430A		05/01/25 08:19
Arsenic		104	ug/filter	1.0	104	85	115			
Cadmium		52.8	ug/filter	1.0	106	85	115			
Copper		102	ug/filter	5.0	102	85	115			
Lead		105	ug/filter	1.0	105	85	115			
Manganese		531	ug/filter	5.0	106	85	115			
Molybdenum		105	ug/filter	1.0	105	85	115			
Zinc		104	ug/filter	5.0	104	85	115			
Lab ID: LCSD-199348	7	Laboratory Control Sample Duplicate						Run: ICPMS207-B_250430A		05/01/25 08:25
Arsenic		104	ug/filter	1.0	104	85	115	0.6	20	
Cadmium		52.4	ug/filter	1.0	105	85	115	0.7	20	
Copper		100	ug/filter	5.0	100	85	115	1.6	20	
Lead		102	ug/filter	1.0	102	85	115	2.4	20	
Manganese		524	ug/filter	5.0	105	85	115	1.3	20	
Molybdenum		104	ug/filter	1.0	104	85	115	0.3	20	
Zinc		103	ug/filter	5.0	103	85	115	1.0	20	
Lab ID: MB-199348	5	Method Blank						Run: ICPMS207-B_250430A		05/02/25 03:39
Cadmium		ND	ug/filter	0.006						
Copper		ND	ug/filter	0.2						
Lead		ND	ug/filter	0.04						
Manganese		ND	ug/filter	0.2						
Molybdenum		0.006	ug/filter	0.005						
Method: E200.8										Analytical Run: ICPMS207-B_250507A
Lab ID: QCS	2	Initial Calibration Verification Standard								05/07/25 21:43
Arsenic		0.0386	mg/L	0.0050	96	90	110			
Zinc		0.0389	mg/L	0.0050	97	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								05/07/25 21:49
Arsenic		0.0461	mg/L	0.0050	92	90	110			
Zinc		0.0454	mg/L	0.0050	91	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								05/07/25 22:59
Arsenic		0.0462	mg/L	0.0050	92	90	110			
Zinc		0.0452	mg/L	0.0050	90	90	110			
Method: E200.8										Batch: 199348
Lab ID: MB-199348	2	Method Blank						Run: ICPMS207-B_250507A		05/07/25 22:12
Arsenic		ND	ug/filter	0.06						
Zinc		ND	ug/filter	0.3						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Bison Engineering

B25041935

Login completed by: Crystal M. Jones

Date Received: 4/24/2025

Reviewed by: gmccartney

Received by: CMJ

Reviewed Date: 4/30/2025

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	2.6°C Blue Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 1

Account Information (Billing Information)

Company/Name Bison Engineering, Inc.	
Contact	Melissa Young
Phone	(406) 442-5768
Mailing Address 3143 E Lyndale Avenue	
City, State, Zip	Helena MT, 59601
Email	myyoung@bison-eng.com
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote
MTR225018	Bottle Order

Report Information (if different than Account Information)

Company/Name Bison Engineering, Inc.	
Contact	Don Milmine
Phone	(406) 208-4833
Mailing Address 2751 Enterprise Avenue Suite 2	
City, State, Zip	Billings, MT 59102
Email	dmilmine@bison-eng.com
Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Special Report/Formats:	
<input type="checkbox"/> LEVEL IV	<input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other

Comments

Analyze per history

Project Information

Project Name, PWSID, Permit, etc. Montana Resources/Greely School PW	
Sampler Name	Sampler Phone
Sample Origin State	Montana
EPA/State Compliance	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
URANIUM MINING CLIENTS MUST indicate sample type.	
<input type="checkbox"/> NOT Source or Byproduct Material	
<input type="checkbox"/> Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING	
<input type="checkbox"/> 11e.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)	

Matrix Codes

A - Air	W - Water
S - Solids	V - Vegetation
B - Bioassay	O - Other
DW - Drinking Water	

Analysis Requested

Asenic	Cadmium	Copper	Lead	Manganese	Molybdenum	Zinc
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

All turnaround times are standard unless marked as RUSH.

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Time	Number of Containers	Matrix (See Codes)	Analysis Requested						RUSH TAT	ELI LAB ID Laboratory Use Only
					Asenic	Cadmium	Copper	Lead	Manganese	Molybdenum		
1 Particulate filter C1104701 Pine ST TSP	3/26/25	24 hr Composite	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		B2504135
2 Particulate filter C1104702 Lab Blank	3/21/25	1620	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
3 Particulate filter C1104703 Walnut ST TSP	3/26/25	24 hr Composite	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
4 Particulate filter C1104704 Pine ST TSP	4/2/25	24 hr Composite	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
5 Particulate filter C1104705 Walnut ST TSP	4/2/25	24 hr Composite	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
6 Particulate filter C1104746 Pine ST TSP	4/7/25	24 hr Composite	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
7 Particulate filter C1104747 Walnut ST TSP	4/7/25	24 hr Composite	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
8 Particulate filter C1104748 Pine ST TSP	4/13/25	24 hr Composite	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
9 Particulate filter C1104749 Walnut ST TSP	4/13/25	24 hr Composite	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
10 Particulate filter C1104750 Field Blank	4/8/25	0826	1	on Teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Custody Record MUST be signed	Relinquished by (print) Don Milmine	Relinquished by (signature) Don Milmine	Date/Time 4/24/25 1130	Signature
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C
LABORATORY USE ONLY				
Received by (print) Don Milmine	Received by (signature) Don Milmine	Date/Time 4/24/25 1130	Signature	
Amount \$	Payment Type CC Cash Check	Receipt Number (cash/check only)		

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

ELI-COC-10/18 v.3



ANALYTICAL SUMMARY REPORT

June 11, 2025

Bison Engineering
3143 E Lyndale Ave
Helena, MT 59601-6401

Work Order: B25052033 Quote ID: B4795

Project Name: Montana Resources/Greely School PW

Energy Laboratories Inc Billings MT received the following 10 samples for Bison Engineering on 5/23/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25052033-001	Particulate filter C1104726 Pine ST TSP	04/19/25 00:00	05/23/25	Air	Metals on air filter by ICP/ICPMS Nitric acid-extraction by 40CFR50G
B25052033-002	Particulate filter C1104727 Walnut ST TSP	04/19/25 00:00	05/23/25	Air	Same As Above
B25052033-003	Particulate filter C1104728 Lab Blank	04/04/25 16:50	05/23/25	Air	Same As Above
B25052033-004	Particulate filter C1104729 Pine ST TSP	04/25/25 00:00	05/23/25	Air	Same As Above
B25052033-005	Particulate filter C1104730 Walnut ST TSP	04/25/25 00:00	05/23/25	Air	Same As Above
B25052033-006	Particulate filter C1104731 Walnut ST TSP	05/01/25 00:00	05/23/25	Air	Same As Above
B25052033-007	Particulate filter C1104732 Pine ST TSP	05/01/25 00:00	05/23/25	Air	Same As Above
B25052033-008	Particulate filter C1104733 Pine ST TSP	05/07/25 00:00	05/23/25	Air	Same As Above
B25052033-009	Particulate filter C1104734 Walnut ST TSP	05/07/25 00:00	05/23/25	Air	Same As Above
B25052033-010	Particulate filter C1104735 Field Blank	05/08/25 10:17	05/23/25	Air	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 So. 27th Street, Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104726 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-001
Collection Date: 04/19/25
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/07/25 03:26 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250606A : 146		200107
Cadmium	0.0070	ug/filter	J	1.0	0.0063	E200.8	06/01/25 01:03 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 575		200107
Copper	4.8	ug/filter		1.0	0.16	E200.8	06/01/25 01:03 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 575		200107
Lead	0.20	ug/filter	J	1.0	0.042	E200.8	06/04/25 06:06 / ae	05/28/25 10:50	40CFR50	ICPMS207-B_250602A : 318		200107
Manganese	0.85	ug/filter	J	1.0	0.18	E200.8	06/01/25 01:03 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 575		200107
Molybdenum	0.42	ug/filter	J	1.0	0.0050	E200.8	06/01/25 01:03 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 575		200107
Zinc	1.4	ug/filter		1.0	0.30	E200.8	06/01/25 01:03 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 575		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104727 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-002
Collection Date: 04/19/25
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 01:10 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 576		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 01:10 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 576		200107
Copper	0.94	ug/filter	J	1.0	0.16	E200.8	06/01/25 01:10 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 576		200107
Lead	0.093	ug/filter	J	1.0	0.042	E200.8	06/04/25 06:11 / ae	05/28/25 10:50	40CFR50	ICPMS207-B_250602A : 319		200107
Manganese	0.51	ug/filter	J	1.0	0.18	E200.8	06/01/25 01:10 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 576		200107
Molybdenum	0.034	ug/filter	J	1.0	0.0050	E200.8	06/01/25 01:10 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 576		200107
Zinc	0.65	ug/filter	J	1.0	0.30	E200.8	06/01/25 01:10 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 576		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104728 Lab Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-003
Collection Date: 04/04/25 16:50
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 01:16 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 577		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 01:16 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 577		200107
Copper	ND	ug/filter		1.0	0.16	E200.8	06/01/25 01:16 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 577		200107
Lead	ND	ug/filter		1.0	0.042	E200.8	06/01/25 01:16 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 577		200107
Manganese	0.19	ug/filter	J	1.0	0.18	E200.8	06/01/25 01:16 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 577		200107
Molybdenum	ND	ug/filter		1.0	0.0050	E200.8	06/01/25 01:16 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 577		200107
Zinc	ND	ug/filter		1.0	0.30	E200.8	06/01/25 01:16 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 577		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104729 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-004
Collection Date: 04/25/25
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 01:22 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 578		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 01:22 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 578		200107
Copper	1.1	ug/filter		1.0	0.16	E200.8	06/01/25 01:22 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 578		200107
Lead	0.079	ug/filter	J	1.0	0.042	E200.8	06/04/25 06:23 / ae	05/28/25 10:50	40CFR50	ICPMS207-B_250602A : 321		200107
Manganese	0.38	ug/filter	J	1.0	0.18	E200.8	06/01/25 01:22 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 578		200107
Molybdenum	0.060	ug/filter	J	1.0	0.0050	E200.8	06/01/25 01:22 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 578		200107
Zinc	0.51	ug/filter	J	1.0	0.30	E200.8	06/01/25 01:22 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 578		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104730 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-005
Collection Date: 04/25/25
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 01:29 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 579		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 01:29 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 579		200107
Copper	0.28	ug/filter	J	1.0	0.16	E200.8	06/01/25 01:29 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 579		200107
Lead	0.064	ug/filter	J	1.0	0.042	E200.8	06/04/25 06:29 / ae	05/28/25 10:50	40CFR50	ICPMS207-B_250602A : 322		200107
Manganese	0.24	ug/filter	J	1.0	0.18	E200.8	06/01/25 01:29 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 579		200107
Molybdenum	0.012	ug/filter	J	1.0	0.0050	E200.8	06/01/25 01:29 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 579		200107
Zinc	0.39	ug/filter	J	1.0	0.30	E200.8	06/01/25 01:29 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 579		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104731 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-006
Collection Date: 05/01/25
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 01:48 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 582		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 01:48 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 582		200107
Copper	0.47	ug/filter	J	1.0	0.16	E200.8	06/01/25 01:48 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 582		200107
Lead	0.051	ug/filter	J	1.0	0.042	E200.8	06/04/25 06:35 / ae	05/28/25 10:50	40CFR50	ICPMS207-B_250602A : 323		200107
Manganese	0.33	ug/filter	J	1.0	0.18	E200.8	06/01/25 01:48 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 582		200107
Molybdenum	0.048	ug/filter	J	1.0	0.0050	E200.8	06/01/25 01:48 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 582		200107
Zinc	0.36	ug/filter	J	1.0	0.30	E200.8	06/01/25 01:48 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 582		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104732 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-007
Collection Date: 05/01/25
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 01:54 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 583		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 01:54 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 583		200107
Copper	1.1	ug/filter		1.0	0.16	E200.8	06/01/25 01:54 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 583		200107
Lead	0.054	ug/filter	J	1.0	0.042	E200.8	06/04/25 06:40 / ae	05/28/25 10:50	40CFR50	ICPMS207-B_250602A : 324		200107
Manganese	0.84	ug/filter	J	1.0	0.18	E200.8	06/01/25 01:54 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 583		200107
Molybdenum	0.091	ug/filter	J	1.0	0.0050	E200.8	06/01/25 01:54 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 583		200107
Zinc	0.47	ug/filter	J	1.0	0.30	E200.8	06/01/25 01:54 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 583		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104733 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-008
Collection Date: 05/07/25
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 02:00 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 584		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 02:00 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 584		200107
Copper	0.74	ug/filter	J	1.0	0.16	E200.8	06/01/25 02:00 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 584		200107
Lead	0.045	ug/filter	J	1.0	0.042	E200.8	06/04/25 06:46 / ae	05/28/25 10:50	40CFR50	ICPMS207-B_250602A : 325		200107
Manganese	0.45	ug/filter	J	1.0	0.18	E200.8	06/01/25 02:00 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 584		200107
Molybdenum	0.056	ug/filter	J	1.0	0.0050	E200.8	06/01/25 02:00 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 584		200107
Zinc	0.44	ug/filter	J	1.0	0.30	E200.8	06/01/25 02:00 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 584		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104734 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-009
Collection Date: 05/07/25
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 02:07 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 585		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 02:07 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 585		200107
Copper	0.62	ug/filter	J	1.0	0.16	E200.8	06/01/25 02:07 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 585		200107
Lead	0.069	ug/filter	J	1.0	0.042	E200.8	06/04/25 06:52 / ae	05/28/25 10:50	40CFR50	ICPMS207-B_250602A : 326		200107
Manganese	0.33	ug/filter	J	1.0	0.18	E200.8	06/01/25 02:07 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 585		200107
Molybdenum	0.042	ug/filter	J	1.0	0.0050	E200.8	06/01/25 02:07 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 585		200107
Zinc	0.45	ug/filter	J	1.0	0.30	E200.8	06/01/25 02:07 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 585		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1104735 Field Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25052033-010
Collection Date: 05/08/25 10:17
Date Received: 05/23/25
Report Date: 06/11/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/01/25 02:13 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 586		200107
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/01/25 02:13 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 586		200107
Copper	ND	ug/filter		1.0	0.16	E200.8	06/01/25 02:13 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 586		200107
Lead	ND	ug/filter		1.0	0.042	E200.8	06/01/25 02:13 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 586		200107
Manganese	0.23	ug/filter	J	1.0	0.18	E200.8	06/01/25 02:13 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 586		200107
Molybdenum	0.0086	ug/filter	J	1.0	0.0050	E200.8	06/07/25 03:31 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250606A : 147		200107
Zinc	ND	ug/filter		1.0	0.30	E200.8	06/01/25 02:13 / jks	05/28/25 10:50	40CFR50	ICPMS207-B_250529A : 586		200107

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25052033

Report Date: 06/09/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS207-B_250529A				
Lab ID: QCS	7	Initial Calibration Verification Standard							06/01/25 00:00	
Arsenic		0.0378	mg/L	0.0050	95	90	110			
Cadmium		0.0196	mg/L	0.0010	98	90	110			
Copper		0.0374	mg/L	0.010	94	90	110			
Lead		0.0359	mg/L	0.0010	90	90	110			
Manganese		0.189	mg/L	0.0050	95	90	110			
Molybdenum		0.0396	mg/L	0.0050	99	90	110			
Zinc		0.0368	mg/L	0.0050	92	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							06/01/25 00:06	
Arsenic		0.0490	mg/L	0.0050	98	90	110			
Cadmium		0.0487	mg/L	0.0010	97	90	110			
Copper		0.0480	mg/L	0.010	96	90	110			
Lead		0.0479	mg/L	0.0010	96	90	110			
Manganese		0.0488	mg/L	0.0050	98	90	110			
Molybdenum		0.0506	mg/L	0.0050	101	90	110			
Zinc		0.0471	mg/L	0.0050	94	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							06/01/25 01:35	
Arsenic		0.0486	mg/L	0.0050	97	90	110			
Cadmium		0.0491	mg/L	0.0010	98	90	110			
Copper		0.0470	mg/L	0.010	94	90	110			
Lead		0.0466	mg/L	0.0010	93	90	110			
Manganese		0.0466	mg/L	0.0050	93	90	110			
Molybdenum		0.0504	mg/L	0.0050	101	90	110			
Zinc		0.0467	mg/L	0.0050	93	90	110			
Method: E200.8						Batch: 200107				
Lab ID: MB-200107	7	Method Blank				Run: ICPMS207-B_250529A		06/01/25 00:38		
Arsenic		ND	ug/filter	0.06						
Cadmium		ND	ug/filter	0.006						
Copper		ND	ug/filter	0.2						
Lead		ND	ug/filter	0.04						
Manganese		0.2	ug/filter	0.2						
Molybdenum		ND	ug/filter	0.005						
Zinc		ND	ug/filter	0.3						
Lab ID: LCS-200107	7	Laboratory Control Sample				Run: ICPMS207-B_250529A		06/01/25 00:44		
Arsenic		104	ug/filter	1.0	104	85	115			
Cadmium		53.3	ug/filter	1.0	107	85	115			
Copper		101	ug/filter	5.0	101	85	115			
Lead		101	ug/filter	1.0	101	85	115			
Manganese		505	ug/filter	5.0	101	85	115			
Molybdenum		108	ug/filter	1.0	107	85	115			
Zinc		100	ug/filter	5.0	101	85	115			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25052033

Report Date: 06/09/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 200107
Lab ID: LCSD-200107	7	Laboratory Control Sample Duplicate				Run: ICPMS207-B_250529A			06/01/25 00:51	
Arsenic		106	ug/filter	1.0	106	85	115	2.2	20	
Cadmium		53.7	ug/filter	1.0	107	85	115	0.6	20	
Copper		104	ug/filter	5.0	104	85	115	2.3	20	
Lead		104	ug/filter	1.0	104	85	115	3.3	20	
Manganese		521	ug/filter	5.0	104	85	115	3.1	20	
Molybdenum		109	ug/filter	1.0	109	85	115	1.3	20	
Zinc		104	ug/filter	5.0	104	85	115	3.0	20	
Method: E200.8										Analytical Run: ICPMS207-B_250602A
Lab ID: QCS		Initial Calibration Verification Standard								06/04/25 04:55
Lead		0.0385	mg/L	0.0010	96	90	110			
Lab ID: CCV										06/04/25 05:54
Lead		0.0473	mg/L	0.0010	95	90	110			
Method: E200.8										Batch: 200107
Lab ID: MB-200107		Method Blank				Run: ICPMS207-B_250602A			06/04/25 05:25	
Lead		ND	ug/filter	0.04						
Method: E200.8										Analytical Run: ICPMS207-B_250606A
Lab ID: QCS	2	Initial Calibration Verification Standard							06/07/25 01:33	
Arsenic		0.0403	mg/L	0.0050	101	90	110			
Molybdenum		0.0432	mg/L	0.0050	108	90	110			
Lab ID: CCV										06/07/25 03:02
Arsenic		0.0486	mg/L	0.0050	97	90	110			
Molybdenum		0.0511	mg/L	0.0050	102	90	110			
Method: E200.8										Batch: 200107
Lab ID: MB-200107	2	Method Blank				Run: ICPMS207-B_250606A			06/07/25 03:20	
Arsenic		ND	ug/filter	0.06						
Molybdenum		ND	ug/filter	0.005						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Bison Engineering

B25052033

Login completed by: Crystal M. Jones

Date Received: 5/23/2025

Reviewed by: gmccartney

Received by: CMJ

Reviewed Date: 5/31/2025

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	1.5°C Blue Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.


Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Chain of Custody & Analytical Request Record

Trust our People. Trust our Data.

www.energylab.com

Account Information (Billing information)

Company/Name Bison Engineering, Inc.			
Contact	Melissa Young		
Phone	(406) 442-5768		
Mailing Address 3143 E Lyndale Avenue			
City, State, Zip	Helena MT, 59601		
Email	myoung@bison-eng.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report
Purchase Order	MTR225018		Quote
		Bottle Order	

Report Information (if different than Account Information)

Company/Name Bison Engineering, Inc.	
Contact	Don Milmine
Phone	(406) 208-4833
Mailing Address 2751 Enterprise Avenue Suite 2	
City, State, Zip	Billings, MT 59102
Email	dmilmine@bison-eng.com
Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Special Report/Forms: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

Analyze per history

Project Information

Project Name, PWSID, Permit, etc. Montana Resources/Greely School PW	
Sampler Name	Sampler Phone
Sample Origin State	Montana
EPA/State Compliance <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
URANIUM MINING CLIENTS MUST indicate sample type.	
<input type="checkbox"/> NOT Source or Byproduct Material	
<input type="checkbox"/> Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING	
<input type="checkbox"/> 11e.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)	

Matrix Codes

A - Air	W - Water	S - Solids	V - Vegetation	B - Bioassay	O - Other	DW - Drinking Water
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Analysis Requested

Lead	Copper	Cadmium	Arsenic	Manganese	Molybdenum	Zinc
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Time	Number of Containers	Matrix (See Codes Above)	Analysis Requested							See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
					Arsenic	Cadmium	Copper	Lead	Manganese	Molybdenum	Zinc			
1 Particulate filter C1104726 Pine ST TSP	4/19/25	24 hr composite	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			1325052033
2 Particulate filter C1104727 Walnut ST TSP	4/19/25	24 hr composite	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
3 Particulate filter C1104728 Lab Blank	4/4/25	1650	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
4 Particulate filter C1104729 Pine ST TSP	4/25/25	24 hr composite	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
5 Particulate filter C1104730 Walnut ST TSP	4/25/25	24 hr composite	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
6 Particulate filter C1104731 Walnut ST TSP	5/1/25	24 hr composite	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
7 Particulate filter C1104732 Pine ST TSP	5/1/25	24 hr composite	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
8 Particulate filter C1104733 Pine ST TSP	5/7/25	24 hr composite	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
9 Particulate filter C1104734 Walnut ST TSP	5/7/25	24 hr composite	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
10 Particulate filter C1104735 Field Blank	5/8/25	1017	1	on teflon filter	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

Custody Record MUST be signed	Relinquished by (print)	Signature	Date/Time	Received by (print)	Signature	Date/Time			
	Don Milmine	5/23/25 1503	5/23/25 1503	Don Milmine	5/23/25 1503	5/23/25 1503			
Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount	Receipt Number
		Y N C B	Y N	°C	Y N	Y N	Cash Check	\$	(cash/check only)

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



ANALYTICAL SUMMARY REPORT

June 27, 2025

Bison Engineering
3143 E Lyndale Ave
Helena, MT 59601-6401

Work Order: B25061347 Quote ID: B4795

Project Name: Montana Resources/Greely School PW

Energy Laboratories Inc Billings MT received the following 10 samples for Bison Engineering on 6/13/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25061347-001	Particulate Filter C1108766 Pine ST TSP	05/13/25 0:00	06/13/25	Air	Metals on air filter by ICP/ICPMS Nitric acid-extraction by 40CFR50G
B25061347-002	Particulate Filter C1108767 TSP Filed Blank	06/01/25 9:26	06/13/25	Air	Same As Above
B25061347-003	Particulate Filter C1108768 Walnut ST TSP	05/13/25 0:00	06/13/25	Air	Same As Above
B25061347-004	Particulate Filter C1108769 Walnut ST TSP	05/19/25 0:00	06/13/25	Air	Same As Above
B25061347-005	Particulate Filter C1108770 Pine ST TSP	05/19/25 0:00	06/13/25	Air	Same As Above
B25061347-006	Particulate Filter C1108771 Walnut ST TSP	05/25/25 0:00	06/13/25	Air	Same As Above
B25061347-007	Particulate Filter C1108772 Pine ST TSP	05/25/25 0:00	06/13/25	Air	Same As Above
B25061347-008	Particulate Filter C1108773 Walnut ST TSP	05/31/25 0:00	06/13/25	Air	Same As Above
B25061347-009	Particulate Filter C1108774 Pine ST TSP	05/31/25 0:00	06/13/25	Air	Same As Above
B25061347-010	Particulate Filter C1108775 Lab Blank	05/02/25 11:48	06/13/25	Air	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 So. 27th Street, Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108766 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-001
Collection Date: 05/13/25
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 05:20 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 435		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 05:20 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 435		200689
Copper	0.58	ug/filter	J	1.0	0.16	E200.8	06/21/25 20:02 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 330		200689
Lead	ND	ug/filter		1.0	0.042	E200.8	06/20/25 05:20 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 435		200689
Manganese	ND	ug/filter		1.0	0.18	E200.8	06/20/25 05:20 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 435		200689
Molybdenum	0.048	ug/filter	J	1.0	0.0059	E200.8	06/21/25 20:02 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 330		200689
Zinc	ND	ug/filter		1.0	0.30	E200.8	06/20/25 05:20 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 435		200689

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108767 TSP Filed Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-002
Collection Date: 06/01/25 09:26
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 05:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 436		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 05:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 436		200689
Copper	0.38	ug/filter	J	1.0	0.16	E200.8	06/21/25 20:08 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 331		200689
Lead	ND	ug/filter		1.0	0.042	E200.8	06/20/25 05:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 436		200689
Manganese	ND	ug/filter		1.0	0.18	E200.8	06/20/25 05:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 436		200689
Molybdenum	0.0091	ug/filter	J	1.0	0.0059	E200.8	06/21/25 20:08 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 331		200689
Zinc	ND	ug/filter		1.0	0.30	E200.8	06/20/25 05:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 436		200689

Report Definitions: RL - Analyte Reporting Limit
J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108768 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-003
Collection Date: 05/13/25
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 05:32 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 437		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 05:32 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 437		200689
Copper	ND	ug/filter		1.0	0.16	E200.8	06/20/25 05:32 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 437		200689
Lead	ND	ug/filter		1.0	0.042	E200.8	06/20/25 05:32 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 437		200689
Manganese	ND	ug/filter		1.0	0.18	E200.8	06/20/25 05:32 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 437		200689
Molybdenum	0.0088	ug/filter	J	1.0	0.0050	E200.8	06/25/25 01:01 / ae	06/17/25 11:21	40CFR50	ICPMS207-B_250623A : 403		200689
Zinc	ND	ug/filter		1.0	0.30	E200.8	06/20/25 05:32 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 437		200689

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108769 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-004
Collection Date: 05/19/25
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 05:38 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 438		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 05:38 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 438		200689
Copper	0.37	ug/filter	J	1.0	0.16	E200.8	06/21/25 20:20 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 333		200689
Lead	ND	ug/filter		1.0	0.042	E200.8	06/20/25 05:38 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 438		200689
Manganese	ND	ug/filter		1.0	0.18	E200.8	06/20/25 05:38 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 438		200689
Molybdenum	0.015	ug/filter	J	1.0	0.0059	E200.8	06/21/25 20:20 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 333		200689
Zinc	ND	ug/filter		1.0	0.30	E200.8	06/25/25 01:07 / ae	06/17/25 11:21	40CFR50	ICPMS207-B_250623A : 404		200689

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108770 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-005
Collection Date: 05/19/25
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 05:56 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 441		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 05:56 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 441		200689
Copper	1.7	ug/filter		1.0	0.16	E200.8	06/21/25 20:26 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 334		200689
Lead	0.071	ug/filter	J	1.0	0.042	E200.8	06/20/25 05:56 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 441		200689
Manganese	0.22	ug/filter	J	1.0	0.18	E200.8	06/25/25 01:25 / ae	06/17/25 11:21	40CFR50	ICPMS207-B_250623A : 407		200689
Molybdenum	0.069	ug/filter	J	1.0	0.0059	E200.8	06/21/25 20:26 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 334		200689
Zinc	0.40	ug/filter	J	1.0	0.30	E200.8	06/21/25 20:26 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 334		200689

Report RL - Analyte Reporting Limit
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ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108771 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-006
Collection Date: 05/25/25
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 06:02 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 442		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 06:02 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 442		200689
Copper	0.68	ug/filter	J	1.0	0.16	E200.8	06/21/25 20:32 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 335		200689
Lead	0.058	ug/filter	J	1.0	0.042	E200.8	06/21/25 20:32 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 335		200689
Manganese	0.27	ug/filter	J	1.0	0.18	E200.8	06/21/25 20:32 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 335		200689
Molybdenum	0.032	ug/filter	J	1.0	0.0059	E200.8	06/21/25 20:32 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 335		200689
Zinc	0.40	ug/filter	J	1.0	0.30	E200.8	06/21/25 20:32 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 335		200689

Report RL - Analyte Reporting Limit
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ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108772 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-007
Collection Date: 05/25/25
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 06:08 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 443		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 06:08 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 443		200689
Copper	1.0	ug/filter		1.0	0.16	E200.8	06/20/25 06:08 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 443		200689
Lead	0.067	ug/filter	J	1.0	0.042	E200.8	06/21/25 20:38 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 336		200689
Manganese	0.30	ug/filter	J	1.0	0.18	E200.8	06/21/25 20:38 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 336		200689
Molybdenum	0.063	ug/filter	J	1.0	0.0059	E200.8	06/21/25 20:38 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 336		200689
Zinc	0.48	ug/filter	J	1.0	0.30	E200.8	06/21/25 20:38 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 336		200689

Report Definitions: RL - Analyte Reporting Limit
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MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108773 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-008
Collection Date: 05/31/25
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 06:14 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 444		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 06:14 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 444		200689
Copper	0.54	ug/filter	J	1.0	0.16	E200.8	06/21/25 20:55 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 339		200689
Lead	0.045	ug/filter	J	1.0	0.042	E200.8	06/25/25 01:30 / ae	06/17/25 11:21	40CFR50	ICPMS207-B_250623A : 408		200689
Manganese	ND	ug/filter		1.0	0.18	E200.8	06/20/25 06:14 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 444		200689
Molybdenum	0.021	ug/filter	J	1.0	0.0059	E200.8	06/21/25 20:55 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 339		200689
Zinc	ND	ug/filter		1.0	0.30	E200.8	06/20/25 06:14 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 444		200689

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108774 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-009
Collection Date: 05/31/25
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 06:20 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 445		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 06:20 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 445		200689
Copper	2.3	ug/filter		1.0	0.16	E200.8	06/20/25 06:20 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 445		200689
Lead	0.12	ug/filter	J	1.0	0.042	E200.8	06/21/25 21:01 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 340		200689
Manganese	0.38	ug/filter	J	1.0	0.18	E200.8	06/21/25 21:01 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 340		200689
Molybdenum	0.066	ug/filter	J	1.0	0.0059	E200.8	06/21/25 21:01 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 340		200689
Zinc	0.71	ug/filter	J	1.0	0.30	E200.8	06/21/25 21:01 / ae	06/17/25 11:21	40CFR50	ICPMS208-B_250620A : 340		200689

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1108775 Lab Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25061347-010
Collection Date: 05/02/25 11:48
Date Received: 06/13/25
Report Date: 06/27/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	06/20/25 06:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 446		200689
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	06/20/25 06:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 446		200689
Copper	ND	ug/filter		1.0	0.16	E200.8	06/20/25 06:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 446		200689
Lead	ND	ug/filter		1.0	0.042	E200.8	06/20/25 06:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 446		200689
Manganese	ND	ug/filter		1.0	0.18	E200.8	06/20/25 06:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 446		200689
Molybdenum	ND	ug/filter		1.0	0.0050	E200.8	06/20/25 06:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 446		200689
Zinc	ND	ug/filter		1.0	0.30	E200.8	06/20/25 06:26 / jks	06/17/25 11:21	40CFR50	ICPMS207-B_250618A : 446		200689

Report Definitions: RL - Analyte Reporting Limit

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061347

Report Date: 06/27/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS207-B_250618A		
Lab ID: QCS	7	Initial Calibration Verification Standard							06/20/25 02:56	
Arsenic		0.0392	mg/L	0.0050	98	90	110			
Cadmium		0.0200	mg/L	0.0010	100	90	110			
Copper		0.0389	mg/L	0.010	97	90	110			
Lead		0.0385	mg/L	0.0010	96	90	110			
Manganese		0.196	mg/L	0.0050	98	90	110			
Molybdenum		0.0409	mg/L	0.0050	102	90	110			
Zinc		0.0394	mg/L	0.0050	98	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							06/20/25 04:20	
Arsenic		0.0475	mg/L	0.0050	95	90	110			
Cadmium		0.0481	mg/L	0.0010	96	90	110			
Copper		0.0476	mg/L	0.010	95	90	110			
Lead		0.0484	mg/L	0.0010	97	90	110			
Manganese		0.0500	mg/L	0.0050	100	90	110			
Molybdenum		0.0517	mg/L	0.0050	103	90	110			
Zinc		0.0477	mg/L	0.0050	95	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							06/20/25 05:44	
Arsenic		0.0475	mg/L	0.0050	95	90	110			
Cadmium		0.0490	mg/L	0.0010	98	90	110			
Copper		0.0471	mg/L	0.010	94	90	110			
Lead		0.0483	mg/L	0.0010	97	90	110			
Manganese		0.0487	mg/L	0.0050	97	90	110			
Molybdenum		0.0518	mg/L	0.0050	104	90	110			
Zinc		0.0472	mg/L	0.0050	94	90	110			
Method: E200.8								Batch: 200689		
Lab ID: MB-200689	7	Method Blank							Run: ICPMS207-B_250618A	
Arsenic		ND	ug/filter	0.06					06/20/25 04:56	
Cadmium		ND	ug/filter	0.006						
Copper		ND	ug/filter	0.2						
Lead		ND	ug/filter	0.04						
Manganese		ND	ug/filter	0.2						
Molybdenum		0.01	ug/filter	0.005						
Zinc		ND	ug/filter	0.3						
Lab ID: LCS-200689	7	Laboratory Control Sample							Run: ICPMS207-B_250618A	
Arsenic		96.2	ug/filter	1.0	96	85	115		06/20/25 05:02	
Cadmium		50.2	ug/filter	1.0	100	85	115			
Copper		95.3	ug/filter	5.0	95	85	115			
Lead		102	ug/filter	1.0	102	85	115			
Manganese		492	ug/filter	5.0	98	85	115			
Molybdenum		106	ug/filter	1.0	106	85	115			
Zinc		97.8	ug/filter	5.0	98	85	115			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061347

Report Date: 06/27/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 200689
Lab ID: LCSD-200689	7	Laboratory Control Sample Duplicate				Run: ICPMS207-B_250618A			06/20/25 05:08	
Arsenic		95.7	ug/filter	1.0	96	85	115	0.5	20	
Cadmium		50.4	ug/filter	1.0	101	85	115	0.5	20	
Copper		94.9	ug/filter	5.0	95	85	115	0.4	20	
Lead		101	ug/filter	1.0	101	85	115	0.8	20	
Manganese		488	ug/filter	5.0	98	85	115	0.7	20	
Molybdenum		105	ug/filter	1.0	105	85	115	1.4	20	
Zinc		97.3	ug/filter	5.0	97	85	115	0.4	20	
Method: E200.8										Analytical Run: ICPMS207-B_250623A
Lab ID: QCS	4	Initial Calibration Verification Standard				06/24/25 19:29				
Lead		0.0409	mg/L	0.0010	102	90	110			
Manganese		0.199	mg/L	0.0050	99	90	110			
Molybdenum		0.0416	mg/L	0.0050	104	90	110			
Zinc		0.0394	mg/L	0.0050	99	90	110			
Lab ID: CCV	4	Continuing Calibration Verification Standard				06/24/25 23:51				
Lead		0.0491	mg/L	0.0010	98	90	110			
Manganese		0.0487	mg/L	0.0050	97	90	110			
Molybdenum		0.0504	mg/L	0.0050	101	90	110			
Zinc		0.0478	mg/L	0.0050	96	90	110			
Lab ID: CCV	4	Continuing Calibration Verification Standard				06/25/25 01:13				
Lead		0.0496	mg/L	0.0010	99	90	110			
Manganese		0.0481	mg/L	0.0050	96	90	110			
Molybdenum		0.0505	mg/L	0.0050	101	90	110			
Zinc		0.0469	mg/L	0.0050	94	90	110			
Method: E200.8										Batch: 200689
Lab ID: MB-200689	4	Method Blank				Run: ICPMS207-B_250623A			06/25/25 00:32	
Lead		ND	ug/filter	0.04						
Manganese		ND	ug/filter	0.2						
Molybdenum		ND	ug/filter	0.005						
Zinc		ND	ug/filter	0.3						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061347

Report Date: 06/27/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS208-B_250620A		
Lab ID: QCS	5	Initial Calibration Verification Standard							06/21/25 19:20	
Copper		0.0376	mg/L	0.010	94	90	110			
Lead		0.0390	mg/L	0.0010	98	90	110			
Manganese		0.192	mg/L	0.0050	96	90	110			
Molybdenum		0.0406	mg/L	0.0050	102	90	110			
Zinc		0.0385	mg/L	0.0050	96	90	110			
Lab ID: CCV	5	Continuing Calibration Verification Standard							06/21/25 19:26	
Copper		0.0461	mg/L	0.010	92	90	110			
Lead		0.0497	mg/L	0.0010	99	90	110			
Manganese		0.0478	mg/L	0.0050	96	90	110			
Molybdenum		0.0497	mg/L	0.0050	99	90	110			
Zinc		0.0469	mg/L	0.0050	94	90	110			
Lab ID: CCV	5	Continuing Calibration Verification Standard							06/21/25 20:43	
Copper		0.0458	mg/L	0.010	92	90	110			
Lead		0.0488	mg/L	0.0010	98	90	110			
Manganese		0.0471	mg/L	0.0050	94	90	110			
Molybdenum		0.0505	mg/L	0.0050	101	90	110			
Zinc		0.0476	mg/L	0.0050	95	90	110			
Method: E200.8								Batch: 200689		
Lab ID: MB-200689	5	Method Blank							Run: ICPMS208-B_250620A	
Copper		ND	ug/filter	0.2						06/21/25 19:56
Lead		ND	ug/filter	0.04						
Manganese		ND	ug/filter	0.2						
Molybdenum		ND	ug/filter	0.006						
Zinc		ND	ug/filter	0.3						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Bison Engineering

B25061347

Login completed by: Natasha L. Anthony

Date Received: 6/13/2025

Reviewed by: cjones

Received by: CRP

Reviewed Date: 6/23/2025

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	1.9°C On Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

The collection date/time is not indicated on the particulate filter C110876 TSP field blank container is 5/2/25 and on the chain of custody it is 6/1/25 and 24 hour composites. Proceeded with the collection date/time as indicated on the chain



Work Order Receipt Checklist - Continued


Bison Engineering

B25061347

of custody. TLA 06/13/25

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing Information)

Company/Name Bison Engineering, Inc.	
Contact Melissa Young	
Phone (406) 442-5768	
Mailing Address 3143 E Lyndale Avenue	
City, State, Zip Helena MT, 59601	
Email myoung@bison-eng.com	
Receive Invoice <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order MTR225018	Quote

Report Information (if different than Account Information)

Company/Name Bison Engineering, Inc.	
Contact Don Milimine	
Phone (406) 208-4833	
Mailing Address 2751 Enterprise Avenue Suite 2	
City, State, Zip Billings, MT 59102	
Email dmilimine@bison-eng.com	
Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Forms: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

Analyze per history

Project Information

Project Name, PWSID, Permit, etc. Montana Resources/Greely School PW	
Sampler Name	Sampler Phone
Sample Origin State Montana	EPA/State Compliance <input type="checkbox"/> Yes <input type="checkbox"/> No
URANIUM MINING CLIENTS MUST indicate sample type. <input type="checkbox"/> NOT Source or Byproduct Material <input type="checkbox"/> Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING <input type="checkbox"/> 11e.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)	

Matrix Codes

A - Air	W - Water	S - Solids	V - Vegetation	B - Bioassay	O - Other	DW - Drinking Water
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Analysis Requested

Analysis Requested	As	Cd	Cu	Fe	Mn	Pb	Zn
<input checked="" type="checkbox"/> Arsenic	<input checked="" type="checkbox"/> Cadmium	<input checked="" type="checkbox"/> Copper	<input checked="" type="checkbox"/> Lead	<input checked="" type="checkbox"/> Manganese	<input checked="" type="checkbox"/> Molybdenum	<input checked="" type="checkbox"/> Zinc	<input checked="" type="checkbox"/>

All turnaround times are standard unless marked as RUSH. Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page
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Sample Identification (Name, Location, Interval, etc.)	Collection Date	Time	Number of Containers	Matrix (See Codes Above)	Analysis Requested	As	Cd	Cu	Fe	Mn	Pb	Zn	See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1 Particulate filter C1108766 Pine ST TSP	5/13/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			205061347
2 Particulate filter C110876 TSP Field Blank	6/1/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
3 Particulate filter C1108768 Walnut ST TSP	5/13/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
4 Particulate filter C1108769 Walnut ST TSP	5/19/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
5 Particulate filter C1108770 Pine ST TSP	5/19/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
6 Particulate filter C1108771 Walnut ST TSP	5/25/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
7 Particulate filter C1108772 Pine ST TSP	5/25/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
8 Particulate filter C1108773 Walnut ST TSP	5/31/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
9 Particulate filter C1108774 Pine ST TSP	5/31/25	0926	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
10 Particulate filter C1108775 Lab Blank	5/2/25	1148	1	on 100m Filter		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			

Custody Record MUST be signed Don Milimine	Relinquished by (print) Don Milimine	Signature Don Milimine	Date/Time 6/13/25 1551
Shipped By	Cooler ID(s) Y N C B	Custody Seals Y N C B	Intact Y N
Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type Cash Check
Amount \$	Receipt Number (cash/check only)	Date/Time 6/13/25 15:51	
Signature Don Milimine		Signature Don Milimine	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly noted on your analytical report.



ANALYTICAL SUMMARY REPORT

August 14, 2025

Bison Engineering
3143 E Lyndale Ave
Helena, MT 59601-6401

Work Order: B25080182 Quote ID: B4795

Project Name: Montana Resources/Greely School PW

Energy Laboratories Inc Billings MT received the following 10 samples for Bison Engineering on 8/4/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25080182-001	Particulate filter C1108756 Pine ST TSP	06/06/25 0:00	08/04/25	Air	Metals on air filter by ICP/ICPMS Nitric acid-extraction by 40CFR50G
B25080182-002	Particulate filter C1108757 Walnut ST TSP	06/06/25 0:00	08/04/25	Air	Same As Above
B25080182-003	Particulate filter C1108758 Pine ST TSP	06/12/25 0:00	08/04/25	Air	Same As Above
B25080182-004	Particulate filter C1108759 Walnut ST TSP	06/12/25 0:00	08/04/25	Air	Same As Above
B25080182-005	Particulate filter C1108760 Pine ST TSP	06/18/25 0:00	08/04/25	Air	Same As Above
B25080182-006	Particulate filter C1108761 Walnut ST TSP	06/18/25 0:00	08/04/25	Air	Same As Above
B25080182-007	Particulate filter C1108762 Pine ST TSP	06/24/25 0:00	08/04/25	Air	Same As Above
B25080182-008	Particulate filter C1108763 Walnut ST TSP	06/24/25 0:00	08/04/25	Air	Same As Above
B25080182-009	Particulate filter C1108764 TSP Field Blank	06/26/25 0:00	08/04/25	Air	Same As Above
B25080182-010	Particulate filter C1108765 Lab Blank	05/30/25 0:00	08/04/25	Air	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 So. 27th Street, Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108756 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-001
Collection Date: 06/06/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 17:43 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 73		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 07:06 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 175		202201
Copper	2.3	ug/filter		1.0	0.16	E200.8	08/09/25 07:06 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 175		202201
Lead	0.086	ug/filter	J	1.0	0.086	E200.8	08/12/25 22:20 / jks	08/06/25 14:53	40CFR50	ICPMS209-B_250811A : 397		202201
Manganese	0.26	ug/filter	J	1.0	0.18	E200.8	08/11/25 17:43 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 73		202201
Molybdenum	0.078	ug/filter	J	1.0	0.0059	E200.8	08/11/25 17:43 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 73		202201
Zinc	0.59	ug/filter	J	1.0	0.30	E200.8	08/11/25 17:43 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 73		202201

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108757 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-002
Collection Date: 06/06/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 17:49 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 74		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 07:12 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 176		202201
Copper	0.68	ug/filter	J	1.0	0.16	E200.8	08/11/25 17:49 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 74		202201
Lead	0.11	ug/filter	J	1.0	0.086	E200.8	08/12/25 22:26 / jks	08/06/25 14:53	40CFR50	ICPMS209-B_250811A : 398		202201
Manganese	0.26	ug/filter	J	1.0	0.18	E200.8	08/11/25 17:49 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 74		202201
Molybdenum	0.020	ug/filter	J	1.0	0.0059	E200.8	08/11/25 17:49 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 74		202201
Zinc	0.43	ug/filter	J	1.0	0.30	E200.8	08/11/25 17:49 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 74		202201

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108758 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-003
Collection Date: 06/12/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	0.069	ug/filter	J	1.0	0.058	E200.8	08/11/25 17:55 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 75		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 07:17 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 177		202201
Copper	1.6	ug/filter		1.0	0.16	E200.8	08/09/25 07:17 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 177		202201
Lead	0.10	ug/filter	J	1.0	0.086	E200.8	08/12/25 22:31 / jks	08/06/25 14:53	40CFR50	ICPMS209-B_250811A : 399		202201
Manganese	0.32	ug/filter	J	1.0	0.18	E200.8	08/11/25 17:55 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 75		202201
Molybdenum	0.077	ug/filter	J	1.0	0.0059	E200.8	08/11/25 17:55 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 75		202201
Zinc	0.91	ug/filter	J	1.0	0.30	E200.8	08/11/25 17:55 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 75		202201

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108759 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-004
Collection Date: 06/12/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 18:01 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 76		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 07:23 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 178		202201
Copper	0.59	ug/filter	J	1.0	0.16	E200.8	08/11/25 18:01 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 76		202201
Lead	0.050	ug/filter	J	1.0	0.042	E200.8	08/11/25 18:01 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 76		202201
Manganese	0.23	ug/filter	J	1.0	0.18	E200.8	08/11/25 18:01 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 76		202201
Molybdenum	0.030	ug/filter	J	1.0	0.0059	E200.8	08/11/25 18:01 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 76		202201
Zinc	0.42	ug/filter	J	1.0	0.30	E200.8	08/11/25 18:01 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 76		202201

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108760 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-005
Collection Date: 06/18/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 18:07 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 77		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 07:29 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 179		202201
Copper	0.74	ug/filter	J	1.0	0.16	E200.8	08/11/25 18:07 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 77		202201
Lead	0.083	ug/filter	J	1.0	0.042	E200.8	08/11/25 18:07 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 77		202201
Manganese	0.32	ug/filter	J	1.0	0.18	E200.8	08/11/25 18:07 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 77		202201
Molybdenum	0.027	ug/filter	J	1.0	0.0059	E200.8	08/11/25 18:07 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 77		202201
Zinc	0.60	ug/filter	J	1.0	0.30	E200.8	08/11/25 18:07 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 77		202201

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108761 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-006
Collection Date: 06/18/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 18:13 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 78		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 07:35 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 180		202201
Copper	0.70	ug/filter	J	1.0	0.16	E200.8	08/11/25 18:13 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 78		202201
Lead	ND	ug/filter		1.0	0.086	E200.8	08/12/25 22:37 / jks	08/06/25 14:53	40CFR50	ICPMS209-B_250811A : 400		202201
Manganese	0.32	ug/filter	J	1.0	0.18	E200.8	08/11/25 18:13 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 78		202201
Molybdenum	0.046	ug/filter	J	1.0	0.0059	E200.8	08/11/25 18:13 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 78		202201
Zinc	0.91	ug/filter	J	1.0	0.30	E200.8	08/11/25 18:13 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 78		202201

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108762 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-007
Collection Date: 06/24/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 18:19 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 79		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 07:41 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 181		202201
Copper	1.3	ug/filter		1.0	0.16	E200.8	08/09/25 07:41 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 181		202201
Lead	ND	ug/filter		1.0	0.086	E200.8	08/12/25 22:42 / jks	08/06/25 14:53	40CFR50	ICPMS209-B_250811A : 401		202201
Manganese	0.25	ug/filter	J	1.0	0.18	E200.8	08/11/25 18:19 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 79		202201
Molybdenum	0.034	ug/filter	J	1.0	0.0059	E200.8	08/11/25 18:19 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 79		202201
Zinc	0.60	ug/filter	J	1.0	0.30	E200.8	08/11/25 18:19 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 79		202201

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108763 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-008
Collection Date: 06/24/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 18:25 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 80		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 07:58 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 184		202201
Copper	0.52	ug/filter	J	1.0	0.16	E200.8	08/11/25 18:25 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 80		202201
Lead	0.050	ug/filter	J	1.0	0.042	E200.8	08/11/25 18:25 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 80		202201
Manganese	0.19	ug/filter	J	1.0	0.18	E200.8	08/11/25 18:25 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 80		202201
Molybdenum	0.019	ug/filter	J	1.0	0.0059	E200.8	08/11/25 18:25 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 80		202201
Zinc	0.42	ug/filter	J	1.0	0.30	E200.8	08/11/25 18:25 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 80		202201

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108764 TSP Field Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-009
Collection Date: 06/26/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 18:43 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 83		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 08:04 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 185		202201
Copper	ND	ug/filter		1.0	0.16	E200.8	08/09/25 08:04 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 185		202201
Lead	ND	ug/filter		1.0	0.042	E200.8	08/09/25 08:04 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 185		202201
Manganese	ND	ug/filter		1.0	0.18	E200.8	08/09/25 08:04 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 185		202201
Molybdenum	ND	ug/filter		1.0	0.0050	E200.8	08/09/25 08:04 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 185		202201
Zinc	ND	ug/filter		1.0	0.30	E200.8	08/09/25 08:04 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 185		202201

Report Definitions: RL - Analyte Reporting Limit

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate filter C1108765 Lab Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25080182-010
Collection Date: 05/30/25
Date Received: 08/04/25
Report Date: 08/14/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/11/25 18:49 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 84		202201
Cadmium	ND	ug/filter		1.0	0.0063	E200.8	08/09/25 08:10 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 186		202201
Copper	ND	ug/filter		1.0	0.16	E200.8	08/09/25 08:10 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 186		202201
Lead	ND	ug/filter		1.0	0.042	E200.8	08/09/25 08:10 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 186		202201
Manganese	ND	ug/filter		1.0	0.18	E200.8	08/09/25 08:10 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 186		202201
Molybdenum	ND	ug/filter		1.0	0.0059	E200.8	08/11/25 18:49 / jks	08/06/25 14:53	40CFR50	ICPMS208-B_250811A : 84		202201
Zinc	ND	ug/filter		1.0	0.30	E200.8	08/09/25 08:10 / jks	08/06/25 14:53	40CFR50	ICPMS207-B_250808A : 186		202201

Report Definitions: RL - Analyte Reporting Limit

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25080182

Report Date: 08/14/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS207-B_250808A				
Lab ID: QCS	6	Initial Calibration Verification Standard							08/09/25 06:14	
Cadmium		0.0198	mg/L	0.0010	99	90	110			
Copper		0.0383	mg/L	0.010	96	90	110			
Lead		0.0390	mg/L	0.0010	97	90	110			
Manganese		0.194	mg/L	0.0050	97	90	110			
Molybdenum		0.0389	mg/L	0.0050	97	90	110			
Zinc		0.0386	mg/L	0.0050	96	90	110			
Lab ID: CCV	6	Continuing Calibration Verification Standard							08/09/25 06:19	
Cadmium		0.0503	mg/L	0.0010	101	90	110			
Copper		0.0470	mg/L	0.010	94	90	110			
Lead		0.0483	mg/L	0.0010	97	90	110			
Manganese		0.0493	mg/L	0.0050	99	90	110			
Molybdenum		0.0504	mg/L	0.0050	101	90	110			
Zinc		0.0482	mg/L	0.0050	96	90	110			
Lab ID: CCV	6	Continuing Calibration Verification Standard							08/09/25 07:46	
Cadmium		0.0510	mg/L	0.0010	102	90	110			
Copper		0.0494	mg/L	0.010	99	90	110			
Lead		0.0492	mg/L	0.0010	98	90	110			
Manganese		0.0504	mg/L	0.0050	101	90	110			
Molybdenum		0.0518	mg/L	0.0050	103	90	110			
Zinc		0.0491	mg/L	0.0050	98	90	110			
Method: E200.8						Batch: 202201				
Lab ID: MB-202201	6	Method Blank							Run: ICPMS207-B_250808A 08/09/25 06:43	
Cadmium		ND	ug/filter	0.006						
Copper		ND	ug/filter	0.2						
Lead		ND	ug/filter	0.04						
Manganese		ND	ug/filter	0.2						
Molybdenum		ND	ug/filter	0.005						
Zinc		ND	ug/filter	0.3						
Lab ID: LCS-202201	7	Laboratory Control Sample							Run: ICPMS207-B_250808A 08/09/25 06:48	
Arsenic		102	ug/filter	1.0	102	85	115			
Cadmium		52.4	ug/filter	1.0	105	85	115			
Copper		100	ug/filter	5.0	101	85	115			
Lead		102	ug/filter	1.0	103	85	115			
Manganese		510	ug/filter	5.0	102	85	115			
Molybdenum		105	ug/filter	1.0	105	85	115			
Zinc		105	ug/filter	5.0	105	85	115			
Lab ID: LCSD-202201	7	Laboratory Control Sample Duplicate							Run: ICPMS207-B_250808A 08/09/25 06:54	
Arsenic		99.9	ug/filter	1.0	100	85	115	2.3	20	
Cadmium		52.1	ug/filter	1.0	104	85	115	0.7	20	
Copper		98.5	ug/filter	5.0	99	85	115	2.0	20	
Lead		102	ug/filter	1.0	102	85	115	0.9	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25080182

Report Date: 08/14/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 202201
Lab ID: LCSD-202201	7	Laboratory Control Sample Duplicate				Run: ICPMS207-B_250808A			08/09/25 06:54	
Manganese		494	ug/filter	5.0	99	85	115	3.2	20	
Molybdenum		103	ug/filter	1.0	103	85	115	2.3	20	
Zinc		101	ug/filter	5.0	101	85	115	4.2	20	
Method: E200.8										Analytical Run: ICPMS208-B_250811A
Lab ID: QCS	6	Initial Calibration Verification Standard				08/11/25 11:41				
Arsenic		0.0390	mg/L	0.0050	98	90	110			
Copper		0.0377	mg/L	0.010	94	90	110			
Lead		0.0392	mg/L	0.0010	98	90	110			
Manganese		0.192	mg/L	0.0050	96	90	110			
Molybdenum		0.0404	mg/L	0.0050	101	90	110			
Zinc		0.0374	mg/L	0.0050	94	90	110			
Lab ID: CCV	6	Continuing Calibration Verification Standard				08/11/25 17:13				
Arsenic		0.0482	mg/L	0.0050	96	90	110			
Copper		0.0495	mg/L	0.010	99	90	110			
Lead		0.0499	mg/L	0.0010	100	90	110			
Manganese		0.0477	mg/L	0.0050	95	90	110			
Molybdenum		0.0494	mg/L	0.0050	99	90	110			
Zinc		0.0494	mg/L	0.0050	99	90	110			
Lab ID: CCV	6	Continuing Calibration Verification Standard				08/11/25 18:31				
Arsenic		0.0494	mg/L	0.0050	99	90	110			
Copper		0.0514	mg/L	0.010	103	90	110			
Lead		0.0500	mg/L	0.0010	100	90	110			
Manganese		0.0488	mg/L	0.0050	98	90	110			
Molybdenum		0.0498	mg/L	0.0050	100	90	110			
Zinc		0.0496	mg/L	0.0050	99	90	110			
Method: E200.8										Batch: 202201
Lab ID: MB-202201	6	Method Blank				Run: ICPMS208-B_250811A			08/11/25 17:37	
Arsenic		ND	ug/filter	0.06						
Copper		ND	ug/filter	0.2						
Lead		ND	ug/filter	0.04						
Manganese		ND	ug/filter	0.2						
Molybdenum		ND	ug/filter	0.006						
Zinc		ND	ug/filter	0.3						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25080182

Report Date: 08/14/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual	
Method:	E200.8								Analytical Run: ICPMS209-B_250811A		
Lab ID:	QCS	Initial Calibration Verification Standard							08/12/25 17:04		
Lead		0.0388	mg/L	0.0010	97	90	110				
Lab ID:	CCV	Continuing Calibration Verification Standard							08/12/25 22:09		
Lead		0.0486	mg/L	0.0010	97	90	110				
Method:	E200.8								Batch: 202201		
Lab ID:	MB-202201	Method Blank				Run: ICPMS209-B_250811A				08/12/25 22:04	
Lead		ND	ug/filter	0.09							

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Bison Engineering

B25080182

Login completed by: Danielle N. Harris

Date Received: 8/4/2025

Reviewed by: gmccartney

Received by: CMJ

Reviewed Date: 8/11/2025

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	1.3°C Blue Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Chain of Custody & Analytical Request Record

Trust our People. Trust our Data.

www.energylab.com

Account Information (Billing Information)

Company/Name: **Bison Engineering, Inc.**

Contact: **Melissa Young**

Phone: **(406) 442-5768**

Mailing Address: **3143 E Lyndale Avenue**

City, State, Zip: **Helena MT, 59601**

Email: **myyoung@bison-eng.com**

Receive Invoice ☐ Hard Copy ☒ Email ☐ Email

Purchase Order: **MTR225018**

Quote: _____

Bottle Order: _____

Report Information (if different than Account Information)

Company/Name: **Bison Engineering, Inc.**

Contact: **Don Milimine**

Phone: **(406) 208-4833**

Mailing Address: **2751 Enterprise Avenue Suite 2**

City, State, Zip: **Billings, MT 59102**

Email: **dmilimine@bison-eng.com**

Receive Report ☐ Hard Copy ☒ Email

Special Report Formats: ☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other _____

Comments

Analyze per history

Project Information

Project Name, PWSID, Permit, etc.: **Montana Resources/Greely School PW**

Sampler Name: _____

Sample Origin State: **Montana**

EPA/State Compliance: ☒ Yes ☐ No

URANIUM MINING CLIENTS MUST indicate sample type.

☐ NOT Source or Byproduct Material

☐ Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING

☐ 11e.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)

Matrix Codes:

A - Air

W - Water

S - Solids

V - Vegetation

B - Bioassay

O - Other

DW - Drinking Water

Analysis Requested

See Attached

All turnaround times are standard unless marked as RUSH.

Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Time	Number of Containers	Matrix (See Codes)	Arsenic	Cadmium	Copper	Lead	Manganese	Molybdenum	Zinc	ELI LAB ID RUSH TAT
1 Particulate filter C1108756 Pine ST TSP	6/6/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	22508582
2 Particulate filter C1108757 Walnut ST TSP	6/6/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	
3 Particulate filter C1108758 Pine ST TSP	6/12/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	
4 Particulate filter C1108759 Walnut ST TSP	6/12/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	
5 Particulate filter C1108760 Pine ST TSP	6/18/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	
6 Particulate filter C1108761 Walnut ST TSP	6/18/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	
7 Particulate filter C1108762 Pine ST TSP	6/24/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	
8 Particulate filter C1108763 Walnut ST TSP	6/24/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	
9 Particulate filter C1108764 TSP Field Blank	6/26/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	
10 Particulate filter C1108765 Lab Blank	5/30/25	24 hr Composite	1	on nylon filter	X	X	X	X	X	X	X	

Custody Record MUST be signed	Relinquished by (print): Don Milimine	Signature: _____	Date/Time: 8/4/25 1633	Received by (print): Don Milimine	Signature: _____	Date/Time: 8/20/25								
	Relinquished by (print): _____	Signature: _____	Date/Time: _____	Received by Laboratory (print): Don Milimine	Signature: _____	Date/Time: 8/20/25								
Shipped By	Cooler ID(s)	Custody Seals	Y N C B	Intact	Y N	Temp Blank	Y N	On Ice	Y N	CC	Cash	Check	Amount \$	Receipt Number (check only)

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



ANALYTICAL SUMMARY REPORT

August 28, 2025

Bison Engineering
3143 E Lyndale Ave
Helena, MT 59601-6401

Work Order: B25081469 Quote ID: B4795

Project Name: Montana Resources/Greely School PW

Energy Laboratories Inc Billings MT received the following 10 samples for Bison Engineering on 8/14/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25081469-001	Particulate Filter C1062666 Walnut ST TSP	06/30/25 0:00	08/14/25	Air	Metals on air filter by ICP/ICPMS Nitric acid-extraction by 40CFR50G
B25081469-002	Particulate Filter C1062667 Pine ST TSP	06/30/25 0:00	08/14/25	Air	Same As Above
B25081469-003	Particulate Filter C1062668 Lab Blank	06/24/25 16:20	08/14/25	Air	Same As Above
B25081469-004	Particulate Filter C1062669 Pine ST TSP	07/06/25 0:00	08/14/25	Air	Same As Above
B25081469-005	Particulate Filter C1062670 Walnut ST TSP	07/06/25 0:00	08/14/25	Air	Same As Above
B25081469-006	Particulate Filter C1062671 Pine ST TSP	07/12/25 0:00	08/14/25	Air	Same As Above
B25081469-007	Particulate Filter C1062672 Walnut ST TSP	07/12/25 0:00	08/14/25	Air	Same As Above
B25081469-008	Particulate Filter C1062673 Pine ST TSP	07/18/25 0:00	08/14/25	Air	Same As Above
B25081469-009	Particulate Filter C1062674 Walnut ST TSP	07/18/25 0:00	08/14/25	Air	Same As Above
B25081469-010	Particulate Filter C1062675 Field Blank	07/19/25 10:17	08/14/25	Air	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 So. 27th Street, Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062666 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-001
Collection Date: 06/30/25
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/25/25 22:28 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 117		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/25/25 22:28 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 117		202652
Copper	0.72	ug/filter	J	1.0	0.16	E200.8	08/26/25 14:48 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 277		202652
Lead	0.054	ug/filter	J	1.0	0.042	E200.8	08/26/25 14:48 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 277		202652
Manganese	0.46	ug/filter	J	1.0	0.18	E200.8	08/25/25 22:28 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 117		202652
Molybdenum	0.059	ug/filter	J	1.0	0.0059	E200.8	08/26/25 14:48 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 277		202652
Zinc	0.38	ug/filter	J	1.0	0.30	E200.8	08/26/25 14:48 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 277		202652

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062667 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-002
Collection Date: 06/30/25
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/25/25 22:34 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 118		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/25/25 22:34 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 118		202652
Copper	1.7	ug/filter		1.0	0.16	E200.8	08/25/25 22:34 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 118		202652
Lead	0.082	ug/filter	J	1.0	0.042	E200.8	08/26/25 14:54 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 278		202652
Manganese	0.41	ug/filter	J	1.0	0.18	E200.8	08/25/25 22:34 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 118		202652
Molybdenum	0.14	ug/filter	J	1.0	0.0059	E200.8	08/26/25 14:54 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 278		202652
Zinc	0.49	ug/filter	J	1.0	0.30	E200.8	08/26/25 14:54 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 278		202652

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062668 Lab Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-003
Collection Date: 06/24/25 16:20
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/25/25 22:41 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 119		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/25/25 22:41 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 119		202652
Copper	ND	ug/filter		1.0	0.16	E200.8	08/25/25 22:41 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 119		202652
Lead	ND	ug/filter		1.0	0.042	E200.8	08/25/25 22:41 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 119		202652
Manganese	ND	ug/filter		1.0	0.18	E200.8	08/25/25 22:41 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 119		202652
Molybdenum	ND	ug/filter		1.0	0.0059	E200.8	08/26/25 15:00 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 279		202652
Zinc	ND	ug/filter		1.0	0.30	E200.8	08/25/25 22:41 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 119		202652

Report Definitions: RL - Analyte Reporting Limit

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062669 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-004
Collection Date: 07/06/25
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/25/25 22:47 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 120		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/25/25 22:47 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 120		202652
Copper	1.2	ug/filter		1.0	0.16	E200.8	08/25/25 22:47 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 120		202652
Lead	0.056	ug/filter	J	1.0	0.042	E200.8	08/26/25 15:06 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 280		202652
Manganese	0.28	ug/filter	J	1.0	0.18	E200.8	08/25/25 22:47 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 120		202652
Molybdenum	0.12	ug/filter	J	1.0	0.0059	E200.8	08/26/25 15:06 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 280		202652
Zinc	0.40	ug/filter	J	1.0	0.30	E200.8	08/26/25 15:06 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 280		202652

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062670 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-005
Collection Date: 07/06/25
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/25/25 22:53 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 121		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/25/25 22:53 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 121		202652
Copper	0.90	ug/filter	J	1.0	0.16	E200.8	08/26/25 15:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 281		202652
Lead	0.053	ug/filter	J	1.0	0.042	E200.8	08/26/25 15:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 281		202652
Manganese	0.31	ug/filter	J	1.0	0.18	E200.8	08/25/25 22:53 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 121		202652
Molybdenum	0.082	ug/filter	J	1.0	0.0059	E200.8	08/26/25 15:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 281		202652
Zinc	0.33	ug/filter	J	1.0	0.30	E200.8	08/26/25 15:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 281		202652

Report RL - Analyte Reporting Limit
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ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062671 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-006
Collection Date: 07/12/25
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/25/25 23:11 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 124		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/25/25 23:11 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 124		202652
Copper	2.6	ug/filter		1.0	0.16	E200.8	08/25/25 23:11 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 124		202652
Lead	0.21	ug/filter	J	1.0	0.042	E200.8	08/26/25 15:30 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 284		202652
Manganese	0.48	ug/filter	J	1.0	0.18	E200.8	08/25/25 23:11 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 124		202652
Molybdenum	0.14	ug/filter	J	1.0	0.0059	E200.8	08/26/25 15:30 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 284		202652
Zinc	0.73	ug/filter	J	1.0	0.30	E200.8	08/26/25 15:30 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 284		202652

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062672 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-007
Collection Date: 07/12/25
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/25/25 23:54 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 131		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/25/25 23:54 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 131		202652
Copper	0.65	ug/filter	J	1.0	0.16	E200.8	08/26/25 15:37 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 285		202652
Lead	0.082	ug/filter	J	1.0	0.042	E200.8	08/26/25 15:37 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 285		202652
Manganese	0.25	ug/filter	J	1.0	0.18	E200.8	08/25/25 23:54 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 131		202652
Molybdenum	0.075	ug/filter	J	1.0	0.0059	E200.8	08/26/25 15:37 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 285		202652
Zinc	0.33	ug/filter	J	1.0	0.30	E200.8	08/26/25 15:37 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 285		202652

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062673 Pine ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-008
Collection Date: 07/18/25
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/26/25 00:00 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 132		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/26/25 15:43 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 286		202652
Copper	2.4	ug/filter		1.0	0.16	E200.8	08/26/25 00:00 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 132		202652
Lead	0.15	ug/filter	J	1.0	0.042	E200.8	08/26/25 15:43 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 286		202652
Manganese	0.46	ug/filter	J	1.0	0.18	E200.8	08/26/25 00:00 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 132		202652
Molybdenum	0.19	ug/filter	J	1.0	0.0059	E200.8	08/26/25 15:43 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 286		202652
Zinc	0.68	ug/filter	J	1.0	0.30	E200.8	08/26/25 15:43 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 286		202652

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062674 Walnut ST TSP
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-009
Collection Date: 07/18/25
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/26/25 00:06 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 133		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/26/25 00:06 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 133		202652
Copper	0.65	ug/filter	J	1.0	0.16	E200.8	08/26/25 15:49 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 287		202652
Lead	0.11	ug/filter	J	1.0	0.042	E200.8	08/26/25 15:49 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 287		202652
Manganese	0.41	ug/filter	J	1.0	0.18	E200.8	08/26/25 00:06 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 133		202652
Molybdenum	0.027	ug/filter	J	1.0	0.0059	E200.8	08/26/25 15:49 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 287		202652
Zinc	0.48	ug/filter	J	1.0	0.30	E200.8	08/26/25 15:49 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 287		202652

Report RL - Analyte Reporting Limit
Definitions: J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Bison Engineering
Client Sample ID: Particulate Filter C1062675 Field Blank
Project: Montana Resources/Greely School PW
Matrix: Air

Lab ID: B25081469-010
Collection Date: 07/19/25 10:17
Date Received: 08/14/25
Report Date: 08/28/25

Analyses	Result	Units	QUAL	RL	MDL	Method	Analysis Date / By	Prep Date	Prep Method	RunID	Run Order	BatchID
METALS IN AIR												
Arsenic	ND	ug/filter		1.0	0.058	E200.8	08/26/25 00:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 134		202652
Cadmium	ND	ug/filter		1.0	0.0044	E200.8	08/26/25 00:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 134		202652
Copper	0.28	ug/filter	J	1.0	0.16	E200.8	08/26/25 15:55 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 288		202652
Lead	ND	ug/filter		1.0	0.042	E200.8	08/26/25 00:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 134		202652
Manganese	ND	ug/filter		1.0	0.18	E200.8	08/26/25 00:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 134		202652
Molybdenum	ND	ug/filter		1.0	0.0059	E200.8	08/26/25 00:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 134		202652
Zinc	ND	ug/filter		1.0	0.30	E200.8	08/26/25 00:12 / jks	08/22/25 10:29	40CFR50	ICPMS208-B_250825A : 134		202652

Report Definitions: RL - Analyte Reporting Limit
J - Estimated value - analyte was present but less than the Reporting Limit (RL)

MCL - Maximum Contaminant Level

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25081469

Report Date: 08/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS208-B_250825A		
Lab ID: QCS	7	Initial Calibration Verification Standard							08/25/25 18:43	
Arsenic		0.0375	mg/L	0.0050	94	90	110			
Cadmium		0.0194	mg/L	0.0010	97	90	110			
Copper		0.0368	mg/L	0.010	92	90	110			
Lead		0.0391	mg/L	0.0010	98	90	110			
Manganese		0.187	mg/L	0.0050	93	90	110			
Molybdenum		0.0381	mg/L	0.0050	95	90	110			
Zinc		0.0368	mg/L	0.0050	92	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							08/25/25 21:33	
Arsenic		0.0479	mg/L	0.0050	96	90	110			
Cadmium		0.0485	mg/L	0.0010	97	90	110			
Copper		0.0469	mg/L	0.010	94	90	110			
Lead		0.0509	mg/L	0.0010	102	90	110			
Manganese		0.0470	mg/L	0.0050	94	90	110			
Molybdenum		0.0475	mg/L	0.0050	95	90	110			
Zinc		0.0474	mg/L	0.0050	95	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							08/25/25 22:59	
Arsenic		0.0484	mg/L	0.0050	97	90	110			
Cadmium		0.0482	mg/L	0.0010	96	90	110			
Copper		0.0473	mg/L	0.010	95	90	110			
Lead		0.0503	mg/L	0.0010	101	90	110			
Manganese		0.0475	mg/L	0.0050	95	90	110			
Molybdenum		0.0464	mg/L	0.0050	93	90	110			
Zinc		0.0481	mg/L	0.0050	96	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							08/25/25 23:42	
Arsenic		0.0488	mg/L	0.0050	98	90	110			
Cadmium		0.0483	mg/L	0.0010	97	90	110			
Copper		0.0476	mg/L	0.010	95	90	110			
Lead		0.0508	mg/L	0.0010	102	90	110			
Manganese		0.0480	mg/L	0.0050	96	90	110			
Molybdenum		0.0462	mg/L	0.0050	92	90	110			
Zinc		0.0493	mg/L	0.0050	99	90	110			
Lab ID: QCS	7	Initial Calibration Verification Standard							08/26/25 10:19	
Arsenic		0.0384	mg/L	0.0050	96	90	110			
Cadmium		0.0194	mg/L	0.0010	97	90	110			
Copper		0.0379	mg/L	0.010	95	90	110			
Lead		0.0387	mg/L	0.0010	97	90	110			
Manganese		0.194	mg/L	0.0050	97	90	110			
Molybdenum		0.0400	mg/L	0.0050	100	90	110			
Zinc		0.0381	mg/L	0.0050	95	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							08/26/25 14:05	
Arsenic		0.0487	mg/L	0.0050	97	90	110			
Cadmium		0.0486	mg/L	0.0010	97	90	110			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25081469

Report Date: 08/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8		Analytical Run: ICPMS208-B_250825A								
Lab ID: CCV	7	Continuing Calibration Verification Standard								08/26/25 14:05
Copper		0.0478	mg/L	0.010	96	90	110			
Lead		0.0498	mg/L	0.0010	100	90	110			
Manganese		0.0484	mg/L	0.0050	97	90	110			
Molybdenum		0.0490	mg/L	0.0050	98	90	110			
Zinc		0.0479	mg/L	0.0050	96	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard								08/26/25 15:18
Arsenic		0.0486	mg/L	0.0050	97	90	110			
Cadmium		0.0485	mg/L	0.0010	97	90	110			
Copper		0.0479	mg/L	0.010	96	90	110			
Lead		0.0491	mg/L	0.0010	98	90	110			
Manganese		0.0489	mg/L	0.0050	98	90	110			
Molybdenum		0.0507	mg/L	0.0050	101	90	110			
Zinc		0.0471	mg/L	0.0050	94	90	110			
Method: E200.8		Batch: 202652								
Lab ID: MB-202652	7	Method Blank								Run: ICPMS208-B_250825A 08/25/25 22:04
Arsenic		ND	ug/filter	0.06						
Cadmium		ND	ug/filter	0.004						
Copper		ND	ug/filter	0.2						
Lead		ND	ug/filter	0.04						
Manganese		ND	ug/filter	0.2						
Molybdenum		ND	ug/filter	0.006						
Zinc		ND	ug/filter	0.3						
Lab ID: LCS-202652	7	Laboratory Control Sample								Run: ICPMS208-B_250825A 08/25/25 22:10
Arsenic		94.1	ug/filter	1.0	94	85	115			
Cadmium		46.9	ug/filter	1.0	94	85	115			
Copper		92.7	ug/filter	5.0	93	85	115			
Lead		98.4	ug/filter	1.0	98	85	115			
Manganese		463	ug/filter	5.0	93	85	115			
Molybdenum		94.6	ug/filter	1.0	95	85	115			
Zinc		94.6	ug/filter	5.0	95	85	115			
Lab ID: LCSD-202652	7	Laboratory Control Sample Duplicate								Run: ICPMS208-B_250825A 08/25/25 22:16
Arsenic		95.7	ug/filter	1.0	96	85	115	1.7	20	
Cadmium		49.2	ug/filter	1.0	98	85	115	4.7	20	
Copper		94.2	ug/filter	5.0	94	85	115	1.6	20	
Lead		100	ug/filter	1.0	100	85	115	2.0	20	
Manganese		468	ug/filter	5.0	94	85	115	1.1	20	
Molybdenum		96.3	ug/filter	1.0	96	85	115	1.8	20	
Zinc		98.1	ug/filter	5.0	98	85	115	3.6	20	
Lab ID: MB-202652	7	Method Blank								Run: ICPMS208-B_250825A 08/26/25 14:42
Arsenic		ND	ug/filter	0.06						
Cadmium		ND	ug/filter	0.004						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25081469

Report Date: 08/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 202652
Lab ID: MB-202652	7	Method Blank				Run: ICPMS208-B_250825A				08/26/25 14:42
Copper		ND	ug/filter	0.2						
Lead		ND	ug/filter	0.04						
Manganese		0.2	ug/filter	0.2						
Molybdenum		ND	ug/filter	0.006						
Zinc		ND	ug/filter	0.3						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Bison Engineering

B25081469

Login completed by: Danielle N. Harris

Date Received: 8/14/2025

Reviewed by: gmccartney

Received by: EAH

Reviewed Date: 8/23/2025

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	2.6°C Blue Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

None

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Chain of Custody & Analytical Request Record

Trust our People. Trust our Data.

www.energylab.com

Account Information (Billing information)

Company/Name		Bison Engineering, Inc.	
Contact	Melissa Young		
Phone	(406) 442-5768		
Mailing Address		3143 E Lyndale Avenue	
City, State, Zip	Helena MT, 59601		
Email	myoung@bison-eng.com		
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	MTR225018	Quote	Bottle Order

Report Information (If different than Account Information)

Company/Name		Bison Engineering, Inc.	
Contact	Don Milimine		
Phone	(406) 208-4833		
Mailing Address		2751 Enterprise Avenue Suite 2	
City, State, Zip	Billings, MT 59102		
Email	dmilimine@bison-eng.com		
Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email		
Special Report/Formats:			
<input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other			

Comments

Analyze per history

Project Information

Project Name, PWSID, Permit, etc.		Montana Resources/Greely School PW	
Sampler Name		Sampler Phone	
Sample Origin State	Montana	EPA/State Compliance	<input type="checkbox"/> Yes <input type="checkbox"/> No
URANIUM MINING CLIENTS MUST indicate sample type.			
<input type="checkbox"/> NOT Source or Byproduct Material			
<input type="checkbox"/> Source/Processed Ore (Ground or Refined) **CALL BEFORE SENDING			
<input type="checkbox"/> 11a.(2) Byproduct Material (Can ONLY be Submitted to ELI Casper Location)			

Matrix Codes

- A - Air
- W - Water
- S - Solids
- V - Vegetation
- B - Bioassay
- O - Other
- DW - Drinking Water

Analysis Requested

Lead	<input checked="" type="checkbox"/>	Copper	<input checked="" type="checkbox"/>	Cadmium	<input checked="" type="checkbox"/>	Arsenic	<input checked="" type="checkbox"/>	Manganese	<input checked="" type="checkbox"/>	Molybdenum	<input checked="" type="checkbox"/>	Zinc	<input checked="" type="checkbox"/>
------	-------------------------------------	--------	-------------------------------------	---------	-------------------------------------	---------	-------------------------------------	-----------	-------------------------------------	------------	-------------------------------------	------	-------------------------------------

Number of Containers	1	Matrix (See Codes)	on 1st collection
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Sample Identification (Name, Location, Interval, etc.)	Date	Time	Collection
1 Particulate filter C1062666 Walnut ST TSP	6/30/25	24 hr composite	on 1st collection
2 Particulate filter C1062667 Pine ST TSP	6/30/25	24 hr composite	on 1st collection
3 Particulate filter C1062668 Lab Blank	6/24/25	1620	on 1st collection
4 Particulate filter C1062669 Pine ST TSP	7/6/25	24 hr composite	on 1st collection
5 Particulate filter C1062670 Walnut ST TSP	7/6/25	24 hr composite	on 1st collection
6 Particulate filter C1062671 Pine ST TSP	7/12/25	24 hr composite	on 1st collection
7 Particulate filter C1062672 Walnut ST TSP	7/12/25	24 hr composite	on 1st collection
8 Particulate filter C1062673 Pine ST TSP	7/18/25	24 hr composite	on 1st collection
9 Particulate filter C1062674 Walnut ST TSP	7/18/25	24 hr composite	on 1st collection
10 Particulate filter C1062675 Field Blank	7/19/25	1017	on 1st collection

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

See Attached

Sample Identification (Name, Location, Interval, etc.)	Date	Time	Collection	Number of Containers	Matrix (See Codes)	Received by Laboratory (print)	Signature	Date/Time	Amount \$	Payment Type	Check	Receipt Number (cash/check only)
1 Particulate filter C1062666 Walnut ST TSP	6/30/25	24 hr composite	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
2 Particulate filter C1062667 Pine ST TSP	6/30/25	24 hr composite	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
3 Particulate filter C1062668 Lab Blank	6/24/25	1620	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
4 Particulate filter C1062669 Pine ST TSP	7/6/25	24 hr composite	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
5 Particulate filter C1062670 Walnut ST TSP	7/6/25	24 hr composite	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
6 Particulate filter C1062671 Pine ST TSP	7/12/25	24 hr composite	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
7 Particulate filter C1062672 Walnut ST TSP	7/12/25	24 hr composite	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
8 Particulate filter C1062673 Pine ST TSP	7/18/25	24 hr composite	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
9 Particulate filter C1062674 Walnut ST TSP	7/18/25	24 hr composite	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	
10 Particulate filter C1062675 Field Blank	7/19/25	1017	on 1st collection	1	on 1st collection	Don V. Milimine	Signature	8/14/25 1632		CC	Cash	

Custody Record MUST be signed	Relinquished by (print)	Signature	Don V. Milimine	Signature	Don V. Milimine	Signature	Don V. Milimine
Shipped By	Cooler ID(s)	Custody Seals	Y N C B	Intact	Y N	Receipt Temp	°C

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

APPENDIX C: LABORATORY ANALYSIS REPORTS - DUSTFALL



ANALYTICAL SUMMARY REPORT

June 09, 2025

Bison Engineering
3143 E Lyndale Ave
Helena, MT 59601-6401

Work Order: H25050113 Quote ID: H16951

Project Name: Montana Resources Dustfall

Energy Laboratories Inc Helena MT received the following 4 samples for Bison Engineering on 5/6/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H25050113-001	DF-GREELEY-021	04/29/25 10:35	05/06/25	Solid	Metals by ICP/ICPMS, Total Total Metals Digestion by SW3050B Soil Parameters
H25050113-002	DF-PINE-021	04/29/25 11:25	05/06/25	Solid	Same As Above
H25050113-003	DF-WALNUT-021	04/29/25 12:11	05/06/25	Solid	Same As Above
H25050113-004	DF-FB-021	04/29/25 12:15	05/06/25	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25050113-001
Client Sample ID: DF-GREELEY-021

Report Date: 06/09/25
Collection Date: 04/29/25 10:35
Date Received: 05/06/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.1033	g		0.00010		USDA1	05/14/25 15:38 / kjb
Wet Wt, g	404.57	g		0.00010		USDA1	05/14/25 15:38 / kjb
METALS, TOTAL - EPA SW846							
Arsenic	24	mg/kg		4		SW6020B	05/20/25 15:13 / dck
Cadmium	2	mg/kg		1		SW6020B	05/20/25 15:13 / dck
Copper	2890	mg/kg		10		SW6020B	05/20/25 15:13 / dck
Lead	102	mg/kg		10		SW6020B	05/20/25 15:13 / dck
Manganese	549	mg/kg		10		SW6020B	05/20/25 15:13 / dck
Molybdenum	918	mg/kg		10		SW6020B	05/20/25 15:13 / dck
Zinc	562	mg/kg		200		SW6020B	05/21/25 19:58 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25050113-002
Client Sample ID: DF-PINE-021

Report Date: 06/09/25
Collection Date: 04/29/25 11:25
Date Received: 05/06/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.1380	g		0.00010		USDA1	05/14/25 15:38 / kjb
Wet Wt, g	578.63	g		0.00010		USDA1	05/14/25 15:38 / kjb
METALS, TOTAL - EPA SW846							
Arsenic	32	mg/kg		3		SW6020B	05/20/25 15:29 / dck
Cadmium	2	mg/kg		1		SW6020B	05/20/25 15:29 / dck
Copper	2900	mg/kg		7		SW6020B	05/20/25 15:29 / dck
Lead	114	mg/kg		7		SW6020B	05/20/25 15:29 / dck
Manganese	622	mg/kg		7		SW6020B	05/20/25 15:29 / dck
Molybdenum	807	mg/kg		7		SW6020B	05/20/25 15:29 / dck
Zinc	577	mg/kg		100		SW6020B	05/21/25 20:04 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25050113-003
Client Sample ID: DF-WALNUT-021

Report Date: 06/09/25
Collection Date: 04/29/25 12:11
DateReceived: 05/06/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.1122	g		0.00010		USDA1	05/14/25 15:38 / kjb
Wet Wt, g	417.36	g		0.00010		USDA1	05/14/25 15:38 / kjb
METALS, TOTAL - EPA SW846							
Arsenic	23	mg/kg		4		SW6020B	05/20/25 15:33 / dck
Cadmium	2	mg/kg		1		SW6020B	05/20/25 15:33 / dck
Copper	2470	mg/kg		9		SW6020B	05/20/25 15:33 / dck
Lead	85	mg/kg		9		SW6020B	05/20/25 15:33 / dck
Manganese	497	mg/kg		9		SW6020B	05/20/25 15:33 / dck
Molybdenum	604	mg/kg		9		SW6020B	05/20/25 15:33 / dck
Zinc	518	mg/kg		200		SW6020B	05/21/25 20:09 / dck

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25050113-004
Client Sample ID: DF-FB-021

Report Date: 06/09/25
Collection Date: 04/29/25 12:15
Date Received: 05/06/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	-0.0010	g		0.00010		USDA1	05/14/25 15:38 / kjb
Wet Wt, g	336.55	g		0.00010		USDA1	05/14/25 15:38 / kjb
METALS, TOTAL - EPA SW846							
Arsenic	ND	mg/kg		1		SW6020B	05/20/25 15:37 / dck
Cadmium	ND	mg/kg		1		SW6020B	05/20/25 15:37 / dck
Copper	0.4	mg/kg	J	1		SW6020B	05/20/25 15:37 / dck
Lead	ND	mg/kg		1		SW6020B	05/20/25 15:37 / dck
Manganese	ND	mg/kg		1		SW6020B	05/20/25 15:37 / dck
Molybdenum	ND	mg/kg		1		SW6020B	05/20/25 15:37 / dck
Zinc	0.6	mg/kg	DJ	4		SW6020B	05/21/25 20:15 / dck

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
J - Estimated value - analyte was present but less than the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: H25050113

Report Date: 06/09/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B				Analytical Run: ICPMS206-H_250520A						
Lab ID: ICV	6	Initial Calibration Verification Standard								05/20/25 10:06
Arsenic		0.0599	mg/L	0.0010	100	90	110			
Cadmium		0.0292	mg/L	0.0010	97	90	110			
Copper		0.0614	mg/L	0.0050	102	90	110			
Lead		0.0600	mg/L	0.0010	100	90	110			
Manganese		0.303	mg/L	0.0010	101	90	110			
Molybdenum		0.0576	mg/L	0.0010	96	90	110			
Lab ID: ICSA	6	Interference Check Sample A								05/20/25 10:29
Arsenic		0.0000164	mg/L	0.0010						
Cadmium		0.000177	mg/L	0.0010						
Copper		0.0000477	mg/L	0.0050						
Lead		-4.40E-06	mg/L	0.0010						
Manganese		0.000126	mg/L	0.0010						
Molybdenum		0.820	mg/L	0.0010	103	80	120			
Lab ID: ICSAB	6	Interference Check Sample AB								05/20/25 10:38
Arsenic		0.00983	mg/L	0.0010	98	80	120			
Cadmium		0.00976	mg/L	0.0010	98	80	120			
Copper		0.0188	mg/L	0.0050	94	80	120			
Lead		-4.84E-06	mg/L	0.0010						
Manganese		0.0192	mg/L	0.0010	96	80	120			
Molybdenum		0.783	mg/L	0.0010	98	80	120			
Lab ID: CCV	6	Continuing Calibration Verification Standard								05/20/25 14:52
Arsenic		0.0500	mg/L	0.0010	100	90	110			
Cadmium		0.0501	mg/L	0.0010	100	90	110			
Copper		0.0511	mg/L	0.0050	102	90	110			
Lead		0.0490	mg/L	0.0010	98	90	110			
Manganese		0.0502	mg/L	0.0010	100	90	110			
Molybdenum		0.0509	mg/L	0.0010	102	90	110			
Lab ID: ICSA	7	Interference Check Sample A								05/21/25 19:18
Arsenic		0.0000228	mg/L	0.0010						
Cadmium		0.000165	mg/L	0.0010						
Copper		8.15E-06	mg/L	0.0010						
Lead		0.0000493	mg/L	0.0010						
Manganese		0.000426	mg/L	0.0010						
Molybdenum		0.884	mg/L	0.0010	110	80	120			
Zinc		0.000612	mg/L	0.0020						
Lab ID: ICSAB	7	Interference Check Sample AB								05/21/25 19:30
Arsenic		0.00882	mg/L	0.0010	88	80	120			
Cadmium		0.00878	mg/L	0.0010	88	80	120			
Copper		0.0167	mg/L	0.0010	83	80	120			
Lead		0.0000451	mg/L	0.0010						
Manganese		0.0171	mg/L	0.0010	85	80	120			
Molybdenum		0.798	mg/L	0.0010	100	80	120			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: H25050113

Report Date: 06/09/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B							Analytical Run: ICPMS206-H_250520A			
Lab ID: ICSAB	7	Interference Check Sample AB								05/21/25 19:30
Zinc		0.0106	mg/L	0.0020	106	80	120			
Lab ID: CCV	7	Continuing Calibration Verification Standard								05/21/25 19:47
Arsenic		0.0509	mg/L	0.0010	102	90	110			
Cadmium		0.0504	mg/L	0.0010	101	90	110			
Copper		0.0501	mg/L	0.0010	100	90	110			
Lead		0.0483	mg/L	0.0010	97	90	110			
Manganese		0.0496	mg/L	0.0010	99	90	110			
Molybdenum		0.0515	mg/L	0.0010	103	90	110			
Zinc		0.0493	mg/L	0.0020	99	90	110			
Lab ID: ICV	7	Initial Calibration Verification Standard								05/22/25 14:09
Arsenic		0.0601	mg/L	0.0010	100	90	110			
Cadmium		0.0301	mg/L	0.0010	100	90	110			
Copper		0.0613	mg/L	0.0050	102	90	110			
Lead		0.0601	mg/L	0.0010	100	90	110			
Manganese		0.301	mg/L	0.0010	100	90	110			
Molybdenum		0.0585	mg/L	0.0010	98	90	110			
Zinc		0.0605	mg/L	0.010	101	90	110			
Lab ID: ICSA	7	Interference Check Sample A								05/23/25 08:26
Arsenic		0.0000568	mg/L	0.0010						
Cadmium		0.000193	mg/L	0.0010						
Copper		0.0000481	mg/L	0.0050						
Lead		0.0000591	mg/L	0.0010						
Manganese		0.000470	mg/L	0.0010						
Molybdenum		0.786	mg/L	0.0010	98	80	120			
Zinc		0.000679	mg/L	0.010						
Lab ID: ICSAB	7	Interference Check Sample AB								05/23/25 08:53
Arsenic		0.00898	mg/L	0.0010	90	80	120			
Cadmium		0.00854	mg/L	0.0010	85	80	120			
Copper		0.0172	mg/L	0.0050	86	80	120			
Lead		0.0000513	mg/L	0.0010						
Manganese		0.0182	mg/L	0.0010	91	80	120			
Molybdenum		0.689	mg/L	0.0010	86	80	120			
Zinc		0.0114	mg/L	0.010	114	80	120			
Lab ID: CCV	7	Continuing Calibration Verification Standard								05/23/25 19:48
Arsenic		0.0500	mg/L	0.0010	100	90	110			
Cadmium		0.0489	mg/L	0.0010	98	90	110			
Copper		0.0506	mg/L	0.0050	101	90	110			
Lead		0.0452	mg/L	0.0010	90	90	110			
Manganese		0.0523	mg/L	0.0010	105	90	110			
Molybdenum		0.0492	mg/L	0.0010	98	90	110			
Zinc		0.0489	mg/L	0.010	98	90	110			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: H25050113

Report Date: 06/09/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B						Analytical Run: ICPMS206-H_250520A				
Lab ID: CCV	7	Continuing Calibration Verification Standard							05/23/25 22:12	
Arsenic		0.0507	mg/L	0.0010	101	90	110			
Cadmium		0.0486	mg/L	0.0010	97	90	110			
Copper		0.0507	mg/L	0.0050	101	90	110			
Lead		0.0453	mg/L	0.0010	91	90	110			
Manganese		0.0514	mg/L	0.0010	103	90	110			
Molybdenum		0.0489	mg/L	0.0010	98	90	110			
Zinc		0.0499	mg/L	0.010	100	90	110			
Method: SW6020B						Batch: 77761				
Lab ID: MB-77761	7	Method Blank							Run: ICPMS206-H_250520A 05/20/25 15:00	
Arsenic		ND	mg/kg	0.3						
Cadmium		ND	mg/kg	0.01						
Copper		ND	mg/kg	0.3						
Lead		ND	mg/kg	0.2						
Manganese		ND	mg/kg	0.2						
Molybdenum		ND	mg/kg	0.1						
Zinc		ND	mg/kg	0.9						
Lab ID: H25050113-001ADIL	7	Serial Dilution							Run: ICPMS206-H_250520A 05/20/25 15:17	
Arsenic		25.6	mg/kg	19		0	0	20		N
Cadmium		2.17	mg/kg	4.8		0	0	20		N
Copper		2770	mg/kg	48		0	0	4.4	20	
Lead		102	mg/kg	48		0	0	0.2	20	
Manganese		566	mg/kg	48		0	0	3.0	20	
Molybdenum		956	mg/kg	48		0	0	4.1	20	
Zinc		631	mg/kg	48		0	0	7.4	20	
Lab ID: H25050113-001AMS	7	Sample Matrix Spike							Run: ICPMS206-H_250520A 05/20/25 15:21	
Arsenic		120	mg/kg	3.9	99	75	125			
Cadmium		100	mg/kg	1.0	101	75	125			
Copper		2940	mg/kg	9.7		75	125			A
Lead		189	mg/kg	9.7	90	75	125			
Manganese		624	mg/kg	9.7		75	125			A
Molybdenum		1020	mg/kg	9.7		75	125			A
Zinc		671	mg/kg	9.7		75	125			A
Lab ID: H25050113-001AMSD	7	Sample Matrix Spike Duplicate							Run: ICPMS206-H_250520A 05/20/25 15:25	
Arsenic		120	mg/kg	3.9	99	75	125	0.2	20	
Cadmium		101	mg/kg	1.0	102	75	125	1.1	20	
Copper		3060	mg/kg	9.7		75	125	3.9	20	A
Lead		197	mg/kg	9.7	98	75	125	4.1	20	
Manganese		631	mg/kg	9.7		75	125	1.1	20	A
Molybdenum		1020	mg/kg	9.7		75	125	0.1	20	A
Zinc		676	mg/kg	9.7		75	125	0.6	20	A

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

A - Analyte level was greater than four times the spike level - in accordance with the method, percent recovery is not calculated
N - Analyte concentration was not sufficiently high to calculate a Relative Percent Difference (RPD) for the serial dilution test



Work Order Receipt Checklist

Bison Engineering

H25050113

Login completed by: Rebecca A. Tooke

Date Received: 5/6/2025

Reviewed by: tjones

Received by: RAT

Reviewed Date: 5/12/2025

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	19.4°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

The collection date/times are not indicated on the containers. Proceeded with the collection date/time as indicated on the chain of custody. RAT 5/6/25

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Chain of Custody & Analytical Request Record

Trust our People. Trust our Data.

www.energylab.com

Page 1 of 1

Account Information (Billing information)

Company/Name		Bison Engineering Inc.	
Contact	Steve Heck		
Phone	406-498-4199		
Mailing Address	3143 E Lyndale Ave		
City, State, Zip	Helena, MT 59601		
Email	sheck@bison-eng.com		
Receive Invoice	<input type="checkbox"/> Hard Copy	<input checked="" type="checkbox"/> Email	Receive Report
Purchase Order	Quote		<input type="checkbox"/> Hard Copy
MTR224018	H16951		<input checked="" type="checkbox"/> Email
Bottle Order			

Report Information (if different than Account Information)

Company/Name			
Contact			
Phone			
Mailing Address			
City, State, Zip			
Email			
Receive Report	<input type="checkbox"/> Hard Copy	<input type="checkbox"/> Email	
Special Report/Formats:			
<input type="checkbox"/> LEVEL IV	<input type="checkbox"/> NELAC	<input type="checkbox"/> EDD/EDT (contact laboratory)	<input type="checkbox"/> Other

Comments

These are dustfall samples.
Collected from 03.31.2025 to 04.29.2025

Project Information

Project Name, PWSID, Permit, etc.		Montana Resources Dustfall	
Sampler Name	Steve Heck	Sampler Phone	406-498-4199
Sample Origin State	Montana	EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
URANIUM MINING CLIENTS MUST indicate sample type			
<input type="checkbox"/> Unprocessed Ore			
<input type="checkbox"/> Processed Ore (Ground or Refined) **CALL BEFORE SENDING			
<input type="checkbox"/> 11(e)2 Byproduct Material (Can ONLY be Submitted to ELI Casper Location)			

Matrix Codes

A - Air	W - Water
S - Solids	V - Vegetation
B - Bioassay	O - Oil
DW - Drinking Water	

Analysis Requested

Gravimetric - total mass	As, Cd, Cu, Pb, Mn, Mo, Zn	See Attached
+		
Matrix	Number of Containers	Matrix (See Codes Above)
1	A	1
2	A	1
3	A	1
4	A	1
5		
6		
7		
8		
9		

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

ELI LAB ID	1725050113
RUSH TAT	

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were NOT used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print) Steve Heck	Signature	5-6-1515	Date/Time	5-6-1515	Signature	
Shipped By	Relinquished by (print)	Signature		Date/Time		Signature	
Cooler ID(s)	Custody Seals	Intact	Receipt Temp	Temp Blank	On Ice	Payment Type	Amount
Boo	Y N C B	Y N	19.4 °C	Y N	Y N	Cash Check	\$
LABORATORY USE ONLY						Receipt Number (cash/check only)	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



ANALYTICAL SUMMARY REPORT

August 12, 2025

Bison Engineering
3143 E Lyndale Ave
Helena, MT 59601-6401

Work Order: H25060074 Quote ID: H16951

Project Name: Montana Resources Dustfall

Energy Laboratories Inc Helena MT received the following 4 samples for Bison Engineering on 6/3/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H25060074-001	DF-GREELEY-022	05/30/25 14:00	06/03/25	Solid	Metals by ICP/ICPMS, Total Total Metals Digestion by SW3050B Soil Preparation USDA1 Soil Parameters
H25060074-002	DF-PINE-022	05/30/25 13:45	06/03/25	Solid	Metals by ICP/ICPMS, Total Total Metals Digestion by SW3050B Soil Parameters
H25060074-003	DF-WALNUT-022	05/30/25 14:08	06/03/25	Solid	Same As Above
H25060074-004	DF-FB-022	05/30/25 14:10	06/03/25	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25060074-001
Client Sample ID: DF-GREELEY-022

Report Date: 08/12/25
Collection Date: 05/30/25 14:00
Date Received: 06/03/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.0976	g		0.00010		USDA1	06/19/25 08:55 / kjb
Wet Wt, g	852.33	g		0.00010		USDA1	06/19/25 08:55 / kjb
METALS, TOTAL - EPA SW846							
Arsenic	20	mg/kg		2		SW6020B	06/25/25 06:00 / dck
Cadmium	2	mg/kg		1		SW6020B	06/25/25 06:00 / dck
Copper	2040	mg/kg		10		SW6020B	06/25/25 06:00 / dck
Lead	69	mg/kg		5		SW6020B	06/25/25 06:00 / dck
Manganese	405	mg/kg		10		SW6020B	07/03/25 03:18 / dck
Molybdenum	876	mg/kg		10		SW6020B	07/03/25 03:18 / dck
Zinc	448	mg/kg		100		SW6020B	06/25/25 06:00 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25060074-002
Client Sample ID: DF-PINE-022

Report Date: 08/12/25
Collection Date: 05/30/25 13:45
Date Received: 06/03/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.1147	g		0.00010		USDA1	06/19/25 08:55 / kjb
Wet Wt, g	900.05	g		0.00010		USDA1	06/19/25 08:55 / kjb
METALS, TOTAL - EPA SW846							
Arsenic	24	mg/kg		2		SW6020B	06/25/25 06:17 / dck
Cadmium	2	mg/kg		1		SW6020B	06/25/25 06:17 / dck
Copper	3000	mg/kg		9		SW6020B	06/25/25 06:17 / dck
Lead	102	mg/kg		4		SW6020B	06/25/25 06:17 / dck
Manganese	477	mg/kg		9		SW6020B	07/03/25 03:23 / dck
Molybdenum	976	mg/kg		9		SW6020B	07/03/25 03:23 / dck
Zinc	558	mg/kg		90		SW6020B	06/25/25 06:17 / dck

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25060074-003
Client Sample ID: DF-WALNUT-022

Report Date: 08/12/25
Collection Date: 05/30/25 14:08
Date Received: 06/03/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.1230	g		0.00010		USDA1	06/19/25 08:55 / kjb
Wet Wt, g	818.01	g		0.00010		USDA1	06/19/25 08:55 / kjb
METALS, TOTAL - EPA SW846							
Arsenic	19	mg/kg		2		SW6020B	06/25/25 06:22 / dck
Cadmium	2	mg/kg		1		SW6020B	06/25/25 06:22 / dck
Copper	1980	mg/kg		8		SW6020B	06/25/25 06:22 / dck
Lead	79	mg/kg		4		SW6020B	06/25/25 06:22 / dck
Manganese	549	mg/kg		8		SW6020B	07/03/25 03:28 / dck
Molybdenum	611	mg/kg		4		SW6020B	06/25/25 06:22 / dck
Zinc	488	mg/kg		80		SW6020B	06/25/25 06:22 / dck

Report
Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25060074-004
Client Sample ID: DF-FB-022

Report Date: 08/12/25
Collection Date: 05/30/25 14:10
Date Received: 06/03/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.0000	g		0.00010		USDA1	06/19/25 08:55 / kjb
Wet Wt, g	437.82	g		0.00010		USDA1	06/19/25 08:55 / kjb
METALS, TOTAL - EPA SW846							
Arsenic	ND	mg/kg		1		SW6020B	06/25/25 06:28 / dck
Cadmium	ND	mg/kg		1		SW6020B	06/25/25 06:28 / dck
Copper	ND	mg/kg		1		SW6020B	06/25/25 06:28 / dck
Lead	ND	mg/kg		1		SW6020B	06/25/25 06:28 / dck
Manganese	0.1	mg/kg	J	1		SW6020B	07/25/25 20:27 / slj
Molybdenum	ND	mg/kg		1		SW6020B	06/25/25 06:28 / dck
Zinc	ND	mg/kg	D	4		SW6020B	08/12/25 12:30 / slj

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
J - Estimated value - analyte was present but less than the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: H25060074

Report Date: 08/12/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B		Analytical Run: ICPMS205-H_250624B								
Lab ID: ICV	6	Initial Calibration Verification Standard								06/24/25 11:44
Arsenic		0.0597	mg/L	0.0010	100	90	110			
Cadmium		0.0306	mg/L	0.0010	102	90	110			
Copper		0.0606	mg/L	0.0050	101	90	110			
Lead		0.0594	mg/L	0.0010	99	90	110			
Molybdenum		0.0584	mg/L	0.0010	97	90	110			
Zinc		0.0605	mg/L	0.010	101	90	110			
Lab ID: ICSA	6	Interference Check Sample A								06/24/25 22:43
Arsenic		0.0000366	mg/L	0.0010						
Cadmium		0.000135	mg/L	0.0010						
Copper		0.000410	mg/L	0.0050						
Lead		0.0000887	mg/L	0.0010						
Molybdenum		0.799	mg/L	0.0010	100	80	120			
Zinc		0.00538	mg/L	0.010						
Lab ID: ICSAB	5	Interference Check Sample AB								06/24/25 22:53
Arsenic		0.00892	mg/L	0.0010	89	80	120			
Cadmium		0.00896	mg/L	0.0010	90	80	120			
Copper		0.0176	mg/L	0.0050	88	80	120			
Lead		0.0000614	mg/L	0.0010						
Molybdenum		0.791	mg/L	0.0010	99	80	120			
Lab ID: CCV	6	Continuing Calibration Verification Standard								06/24/25 23:10
Arsenic		0.0478	mg/L	0.0010	96	90	110			
Cadmium		0.0499	mg/L	0.0010	100	90	110			
Copper		0.0497	mg/L	0.0050	99	90	110			
Lead		0.0481	mg/L	0.0010	96	90	110			
Molybdenum		0.0498	mg/L	0.0010	100	90	110			
Zinc		0.0492	mg/L	0.010	98	90	110			
Lab ID: CCV	6	Continuing Calibration Verification Standard								06/25/25 05:33
Arsenic		0.0463	mg/L	0.0010	93	90	110			
Cadmium		0.0509	mg/L	0.0010	102	90	110			
Copper		0.0476	mg/L	0.0050	95	90	110			
Lead		0.0487	mg/L	0.0010	97	90	110			
Molybdenum		0.0509	mg/L	0.0010	102	90	110			
Zinc		0.0496	mg/L	0.010	99	90	110			
Lab ID: CCV	6	Continuing Calibration Verification Standard								06/25/25 06:33
Arsenic		0.0468	mg/L	0.0010	93	90	110			
Cadmium		0.0513	mg/L	0.0010	103	90	110			
Copper		0.0483	mg/L	0.0050	97	90	110			
Lead		0.0484	mg/L	0.0010	97	90	110			
Molybdenum		0.0520	mg/L	0.0010	104	90	110			
Zinc		0.0546	mg/L	0.010	109	90	110			
Method: SW6020B		Batch: 78399								

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: H25060074

Report Date: 08/12/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B										Batch: 78399
Lab ID: MB-78399	7	Method Blank				Run: ICPMS205-H_250624B				06/25/25 05:44
Arsenic		ND	mg/kg	0.2						
Cadmium		ND	mg/kg	0.03						
Copper		ND	mg/kg	0.7						
Lead		ND	mg/kg	0.4						
Manganese		ND	mg/kg	1						
Molybdenum		ND	mg/kg	0.2						
Zinc		ND	mg/kg	3						
Lab ID: LCS-78399	7	Laboratory Control Sample				Run: ICPMS205-H_250624B				06/25/25 05:50
Arsenic		21.5	mg/kg	1.0	86	80	120			
Cadmium		13.0	mg/kg	1.0	104	80	120			
Copper		23.2	mg/kg	1.0	93	80	120			
Lead		25.2	mg/kg	1.0	101	80	120			
Manganese		106	mg/kg	1.1	85	80	120			
Molybdenum		26.3	mg/kg	1.0	105	80	120			
Zinc		21.9	mg/kg	10	88	80	120			
Lab ID: LCSD-78399	7	Laboratory Control Sample Duplicate				Run: ICPMS205-H_250624B				06/25/25 05:55
Arsenic		21.4	mg/kg	1.0	85	80	120	0.9	20	
Cadmium		12.9	mg/kg	1.0	103	80	120	0.4	20	
Copper		22.8	mg/kg	1.0	91	80	120	1.8	20	
Lead		25.3	mg/kg	1.0	101	80	120	0.6	20	
Manganese		104	mg/kg	1.1	83	80	120	2.0	20	
Molybdenum		26.4	mg/kg	1.0	105	80	120	0.1	20	
Zinc		21.5	mg/kg	10	86	80	120	1.7	20	
Lab ID: H25060074-001ADIL	7	Serial Dilution				Run: ICPMS205-H_250624B				06/25/25 06:06
Arsenic		22.6	mg/kg	10		0	0		20	N
Cadmium		1.93	mg/kg	2.6		0	0		20	N
Copper		2130	mg/kg	51		0	0	4.0	20	
Lead		70.1	mg/kg	26		0	0		20	N
Manganese		395	mg/kg	54		0	0		20	N
Molybdenum		965	mg/kg	26		0	0	1.9	20	
Zinc		548	mg/kg	510		0	0		20	N
Lab ID: H25060074-001AMS	7	Sample Matrix Spike				Run: ICPMS205-H_250624B				06/25/25 06:11
Arsenic		65.7	mg/kg	2.0	88	75	125			
Cadmium		53.9	mg/kg	1.0	102	75	125			
Copper		2110	mg/kg	10		75	125			A
Lead		116	mg/kg	5.1	91	75	125			
Manganese		422	mg/kg	11		75	125			A
Molybdenum		1040	mg/kg	5.1		75	125			AE
Zinc		502	mg/kg	100		75	125			A

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

A - Analyte level was greater than four times the spike level - in accordance with the method, percent recovery is not calculated
E - Estimated value - result exceeds the instrument upper quantitation limit



QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: H25060074

Report Date: 08/12/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B								Analytical Run: ICPMS205-H_250702A		
Lab ID: ICV	2	Initial Calibration Verification Standard								07/02/25 15:44
Manganese		0.303	mg/L	0.0010	101	90	110			
Molybdenum		0.0589	mg/L	0.0010	98	90	110			
Lab ID: ICSA	2	Interference Check Sample A								07/02/25 16:23
Manganese		0.000338	mg/L	0.0010						
Molybdenum		0.766	mg/L	0.0010	96	80	120			
Lab ID: ICSAB	2	Interference Check Sample AB								07/02/25 16:34
Manganese		0.0187	mg/L	0.0010	94	80	120			
Molybdenum		0.768	mg/L	0.0010	96	80	120			
Lab ID: CCV	2	Continuing Calibration Verification Standard								07/02/25 22:07
Manganese		0.0498	mg/L	0.0010	99	90	110			
Molybdenum		0.0492	mg/L	0.0010	98	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								07/03/25 03:01
Manganese		0.0482	mg/L	0.0010	96	90	110			
Molybdenum		0.0475	mg/L	0.0010	95	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								07/03/25 03:39
Manganese		0.0482	mg/L	0.0010	96	90	110			
Molybdenum		0.0476	mg/L	0.0010	95	90	110			
Method: SW6020B								Batch: 78399		
Lab ID: MB-78399	7	Method Blank								Run: ICPMS205-H_250702A 07/03/25 03:12
Arsenic		ND	mg/kg	0.2						
Cadmium		ND	mg/kg	0.04						
Copper		ND	mg/kg	1						
Lead		ND	mg/kg	0.5						
Manganese		ND	mg/kg	0.7						
Molybdenum		ND	mg/kg	0.4						
Zinc		ND	mg/kg	8						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: H25060074

Report Date: 08/12/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B								Analytical Run: ICPMS205-H_250724A		
Lab ID: ICV		Initial Calibration Verification Standard						07/24/25 14:54		
Manganese		0.298	mg/L	0.0010	99	90	110			
Lab ID: ICSA		Interference Check Sample A						07/25/25 12:08		
Manganese		0.000228	mg/L	0.0010						
Lab ID: ICSAB		Interference Check Sample AB						07/25/25 12:19		
Manganese		0.0177	mg/L	0.0010	88	80	120			
Lab ID: CCV		Continuing Calibration Verification Standard						07/25/25 12:35		
Manganese		0.0494	mg/L	0.0010	99	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard						07/25/25 20:11		
Manganese		0.0483	mg/L	0.0010	97	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard						07/25/25 20:38		
Manganese		0.0481	mg/L	0.0010	96	90	110			
Method: SW6020B								Batch: 78399		
Lab ID: MB-78399	7	Method Blank				Run: ICPMS205-H_250724A			07/25/25 20:22	
Arsenic		ND	mg/kg	0.1						
Cadmium		ND	mg/kg	0.02						
Copper		ND	mg/kg	0.5						
Lead		ND	mg/kg	0.3						
Manganese		ND	mg/kg	0.4						
Molybdenum		ND	mg/kg	0.2						
Zinc		ND	mg/kg	4						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Helena, MT Branch

Work Order: H25060074

Report Date: 08/12/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	SW6020B							Analytical Run: ICPMS206-H_250811B		
Lab ID:	ICV	Initial Calibration Verification Standard							08/11/25 15:10	
Zinc		0.0609	mg/L	0.010	101	90	110			
Lab ID:	ICSA	Interference Check Sample A							08/12/25 09:47	
Zinc		0.000479	mg/L	0.010						
Lab ID:	ICSAB	Interference Check Sample AB							08/12/25 09:55	
Zinc		0.0111	mg/L	0.010	111	80	120			
Lab ID:	CCV	Continuing Calibration Verification Standard							08/12/25 10:08	
Zinc		0.0474	mg/L	0.010	95	90	110			
Lab ID:	CCV	Continuing Calibration Verification Standard							08/12/25 12:01	
Zinc		0.0465	mg/L	0.010	93	90	110			
Lab ID:	CCV	Continuing Calibration Verification Standard							08/12/25 12:34	
Zinc		0.0461	mg/L	0.010	92	90	110			
Method:	SW6020B							Batch: 78399		
Lab ID:	MB-78399	7	Method Blank			Run: ICPMS206-H_250811B			08/12/25 12:13	
Arsenic			ND	mg/kg	0.2					
Cadmium			ND	mg/kg	0.02					
Copper			ND	mg/kg	0.2					
Lead			ND	mg/kg	0.08					
Manganese			ND	mg/kg	0.2					
Molybdenum			ND	mg/kg	0.05					
Zinc			ND	mg/kg	2					
Lab ID:	LCS-78399	7	Laboratory Control Sample			Run: ICPMS206-H_250811B			08/12/25 12:18	
Arsenic			22.6	mg/kg	1.0	90	80	120		
Cadmium			11.8	mg/kg	1.0	94	80	120		
Copper			21.1	mg/kg	1.2	84	80	120		
Lead			23.5	mg/kg	1.0	94	80	120		
Manganese			106	mg/kg	1.2	85	80	120		
Molybdenum			22.0	mg/kg	1.0	88	80	120		
Zinc			21.8	mg/kg	20	87	80	120		
Lab ID:	LCSD-78399	7	Laboratory Control Sample Duplicate			Run: ICPMS206-H_250811B			08/12/25 12:22	
Arsenic			23.3	mg/kg	1.0	93	80	120	3.1	20
Cadmium			12.1	mg/kg	1.0	97	80	120	2.6	20
Copper			21.9	mg/kg	1.2	88	80	120	3.8	20
Lead			23.9	mg/kg	1.0	96	80	120	1.9	20
Manganese			109	mg/kg	1.2	88	80	120	3.1	20
Molybdenum			22.8	mg/kg	1.0	91	80	120	3.8	20
Zinc			22.4	mg/kg	20	89	80	120	2.6	20

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Bison Engineering

H25060074

Login completed by: Rebecca A. Tooke

Date Received: 6/3/2025

Reviewed by: tjones

Received by: WJJ

Reviewed Date: 6/6/2025

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	19.6°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

The collection dates/times are not indicated on the containers. Proceeded with the collection date/time as indicated on the chain of custody. RAT 06/03/25

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 1

Account Information (Billing Information)

Company/Name	Bison Engineering Inc.
Contact	Steve Heck
Phone	406-498-4199
Mailing Address	3143 E Lyndale Ave
City, State, Zip	Helena, MT 59601
Email	heck@bison-eng.com
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote
MTR224018	H16951

Report Information (if different than Account Information)

Company/Name	
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	
Receive Report	<input type="checkbox"/> Hard Copy <input type="checkbox"/> Email
Special Report/Formats:	
<input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

These are dustfall samples.
Collected from 04.29.2025 to 05.30.2025

Project Information

Project Name, PWSID, Permit, etc.	Montana Resources Dustfall
Sampler Name	Steve Heck
Sampler Phone	406-498-4199
Sample Origin State	Montana
EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
URANIUM MINING CLIENTS MUST indicate sample type	
<input type="checkbox"/> Unprocessed Ore	
<input type="checkbox"/> Processed Ore (Ground or Refined) **CALL BEFORE SENDING	
<input type="checkbox"/> 11(e)2 Byproduct Material (Can ONLY be Submitted to ELI Casper Location)	

Matrix Codes

A - Air	
W - Water	
S - Solids	
V - Vegetation	
B - Bioassay	
O - Oil	
DW - Drinking Water	

Analysis Requested

Gravimetric - total mass	<input checked="" type="checkbox"/>
As, Cd, Cu, Pb, Mn, Mo, Zn	<input checked="" type="checkbox"/>
See Attached	
ELI LAB ID	1125060074
RUSH TAT	
Signature	
Date/Time	

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were NOT used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print) Steve Heck	Signature	Received by (print) Steve Heck	Signature	Date/Time	05/30/25
Shipped By: [Signature]	Cooler ID(s)	Y (N) C B	Intact	Y (N)	Receipt Temp	19.6 °C
					Temp Blank	Y (N)
					On Ice	Y (N)
					Payment Type	Cash Check
					Amount	\$
					Receipt Number (cash/check only)	

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.



ANALYTICAL SUMMARY REPORT

August 25, 2025

Bison Engineering
3143 E Lyndale Ave
Helena, MT 59601-6401

Work Order: H25070364 Quote ID: H16951

Project Name: Montana Resources Dustfall

Energy Laboratories Inc Helena MT received the following 4 samples for Bison Engineering on 7/10/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
H25070364-001	DF-GREELEY-023	06/29/25 13:27	07/10/25	Solid	Metals by ICP/ICPMS, Total Total Metals Digestion by SW3050B Soil Preparation USDA1 Soil Parameters
H25070364-002	DF-PINE-023	06/29/25 13:15	07/10/25	Solid	Metals by ICP/ICPMS, Total Total Metals Digestion by SW3050B Soil Parameters
H25070364-003	DF-WALNUT-023	06/29/25 13:02	07/10/25	Solid	Same As Above
H25070364-004	DF-FB-023	06/29/25 13:30	07/10/25	Solid	Same As Above

The analyses presented in this report were performed by Energy Laboratories, Inc., 3161 E. Lyndale Ave., Helena, MT 59604, unless otherwise noted. Any exceptions or problems with the analyses are noted in the report package. Any issues encountered during sample receipt are documented in the Work Order Receipt Checklist.

The results as reported relate only to the item(s) submitted for testing. This report shall be used or copied only in its entirety. Energy Laboratories, Inc. is not responsible for the consequences arising from the use of a partial report.

Energy Laboratories, Inc. verifies the reported results for the analysis has been technically reviewed and approved for release.

If you have any questions regarding these test results, please contact your Project Manager.



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25070364-001
Client Sample ID: DF-GREELEY-023

Revised Date: 08/25/25
Report Date: 08/25/25
Collection Date: 06/29/25 13:27
Date Received: 07/10/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.1329	g		0.00010		USDA1	07/17/25 09:29 / dlm
Wet Wt, g	555.42	g		0.00010		USDA1	07/17/25 09:29 / dlm
METALS, TOTAL - EPA SW846							
Arsenic	15	mg/kg		2		SW6020B	08/22/25 16:53 / slj
Cadmium	1	mg/kg		1		SW6020B	08/22/25 16:53 / slj
Copper	1690	mg/kg		2		SW6020B	08/22/25 16:53 / slj
Lead	57	mg/kg		8		SW6020B	08/22/25 20:32 / slj
Manganese	312	mg/kg		2		SW6020B	08/22/25 16:53 / slj
Molybdenum	562	mg/kg		2		SW6020B	08/22/25 16:53 / slj
Zinc	368	mg/kg		30		SW6020B	08/22/25 16:53 / slj

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25070364-002
Client Sample ID: DF-PINE-023

Revised Date: 08/25/25
Report Date: 08/25/25
Collection Date: 06/29/25 13:15
Date Received: 07/10/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.1311	g		0.00010		USDA1	07/17/25 09:30 / dlm
Wet Wt, g	571.14	g		0.00010		USDA1	07/17/25 09:30 / dlm
METALS, TOTAL - EPA SW846							
Arsenic	16	mg/kg		2		SW6020B	08/22/25 16:57 / slj
Cadmium	2	mg/kg		1		SW6020B	08/22/25 16:57 / slj
Copper	2030	mg/kg		2		SW6020B	08/22/25 16:57 / slj
Lead	55	mg/kg		8		SW6020B	08/22/25 20:36 / slj
Manganese	357	mg/kg		2		SW6020B	08/22/25 16:57 / slj
Molybdenum	631	mg/kg		2		SW6020B	08/22/25 16:57 / slj
Zinc	383	mg/kg		30		SW6020B	08/22/25 16:57 / slj

Report Definitions: RL - Analyte Reporting Limit
QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25070364-003
Client Sample ID: DF-WALNUT-023

Revised Date: 08/25/25
Report Date: 08/25/25
Collection Date: 06/29/25 13:02
DateReceived: 07/10/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	0.1268	g		0.00010		USDA1	07/17/25 09:30 / dlm
Wet Wt, g	541.78	g		0.00010		USDA1	07/17/25 09:30 / dlm
METALS, TOTAL - EPA SW846							
Arsenic	12	mg/kg		2		SW6020B	08/22/25 17:01 / slj
Cadmium	1	mg/kg		1		SW6020B	08/22/25 17:01 / slj
Copper	1270	mg/kg		2		SW6020B	08/22/25 17:01 / slj
Lead	54	mg/kg		8		SW6020B	08/22/25 20:40 / slj
Manganese	330	mg/kg		2		SW6020B	08/22/25 17:01 / slj
Molybdenum	397	mg/kg		2		SW6020B	08/22/25 17:01 / slj
Zinc	339	mg/kg		30		SW6020B	08/22/25 17:01 / slj

Report RL - Analyte Reporting Limit
Definitions: QCL - Quality Control Limit

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)



LABORATORY ANALYTICAL REPORT

Prepared by Helena, MT Branch

Client: Bison Engineering
Project: Montana Resources Dustfall
Lab ID: H25070364-004
Client Sample ID: DF-FB-023

Revised Date: 08/25/25
Report Date: 08/25/25
Collection Date: 06/29/25 13:30
Date Received: 07/10/25
Matrix: Solid

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL CHARACTERISTICS							
Dry Wt, g	-0.0004	g		0.00010		USDA1	07/17/25 09:30 / dlm
Wet Wt, g	573.75	g		0.00010		USDA1	07/17/25 09:30 / dlm
METALS, TOTAL - EPA SW846							
Arsenic	ND	mg/kg		1		SW6020B	08/22/25 17:06 / slj
Cadmium	ND	mg/kg		1		SW6020B	08/22/25 17:06 / slj
Copper	1	mg/kg		1		SW6020B	08/22/25 17:06 / slj
Lead	0.3	mg/kg	J	1		SW6020B	08/22/25 20:45 / slj
Manganese	0.4	mg/kg	J	1		SW6020B	08/22/25 17:06 / slj
Molybdenum	ND	mg/kg		1		SW6020B	08/22/25 17:06 / slj
Zinc	2	mg/kg	DJ	2		SW6020B	08/22/25 20:45 / slj

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
D - Reporting Limit (RL) increased due to sample matrix

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
J - Estimated value - analyte was present but less than the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 08/25/25

Work Order: H25070364

Report Date: 08/25/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B							Analytical Run: ICPMS206-H_250821A			
Lab ID: ICV	7	Initial Calibration Verification Standard							08/22/25 10:19	
Arsenic		0.0597	mg/L	0.0010	99	90	110			
Cadmium		0.0300	mg/L	0.0010	100	90	110			
Copper		0.0649	mg/L	0.0050	108	90	110			
Lead		0.0605	mg/L	0.0010	101	90	110			
Manganese		0.287	mg/L	0.0010	96	90	110			
Molybdenum		0.0562	mg/L	0.0010	94	90	110			
Zinc		0.0623	mg/L	0.010	104	90	110			
Lab ID: ICSA	7	Interference Check Sample A							08/22/25 10:48	
Arsenic		0.0000226	mg/L	0.0010						
Cadmium		0.000190	mg/L	0.0010						
Copper		0.0000187	mg/L	0.0050						
Lead		0.0000304	mg/L	0.0010						
Manganese		-8.12E-06	mg/L	0.0010						
Molybdenum		0.720	mg/L	0.0010	90	80	120			
Zinc		0.000413	mg/L	0.010						
Lab ID: ICSAB	7	Interference Check Sample AB							08/22/25 10:56	
Arsenic		0.00968	mg/L	0.0010	97	80	120			
Cadmium		0.00920	mg/L	0.0010	92	80	120			
Copper		0.0190	mg/L	0.0050	95	80	120			
Lead		0.0000292	mg/L	0.0010						
Manganese		0.0196	mg/L	0.0010	98	80	120			
Molybdenum		0.718	mg/L	0.0010	90	80	120			
Zinc		0.0117	mg/L	0.010	117	80	120			
Lab ID: CCV	7	Continuing Calibration Verification Standard							08/22/25 11:34	
Arsenic		0.0495	mg/L	0.0010	99	90	110			
Cadmium		0.0498	mg/L	0.0010	100	90	110			
Copper		0.0526	mg/L	0.0050	105	90	110			
Lead		0.0499	mg/L	0.0010	100	90	110			
Manganese		0.0498	mg/L	0.0010	100	90	110			
Molybdenum		0.0502	mg/L	0.0010	100	90	110			
Zinc		0.0501	mg/L	0.010	100	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							08/22/25 15:47	
Arsenic		0.0491	mg/L	0.0010	98	90	110			
Cadmium		0.0507	mg/L	0.0010	101	90	110			
Copper		0.0506	mg/L	0.0050	101	90	110			
Lead		0.0506	mg/L	0.0010	101	90	110			
Manganese		0.0468	mg/L	0.0010	94	90	110			
Molybdenum		0.0488	mg/L	0.0010	98	90	110			
Zinc		0.0498	mg/L	0.010	100	90	110			
Lab ID: ICV	7	Initial Calibration Verification Standard							08/22/25 18:52	
Arsenic		0.0580	mg/L	0.0010	97	90	110			
Cadmium		0.0294	mg/L	0.0010	98	90	110			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 08/25/25

Work Order: H25070364

Report Date: 08/25/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B							Analytical Run: ICPMS206-H_250821A			
Lab ID: ICV	7	Initial Calibration Verification Standard							08/22/25 18:52	
Copper		0.0635	mg/L	0.0050	106	90	110			
Lead		0.0596	mg/L	0.0010	99	90	110			
Manganese		0.275	mg/L	0.0010	92	90	110			
Molybdenum		0.0548	mg/L	0.0010	91	90	110			
Zinc		0.0595	mg/L	0.010	99	90	110			
Lab ID: ICSA	7	Interference Check Sample A							08/22/25 19:07	
Arsenic		0.0000183	mg/L	0.0010						
Cadmium		0.000173	mg/L	0.0010						
Copper		-0.0000882	mg/L	0.0050						
Lead		0.0000153	mg/L	0.0010						
Manganese		0.000129	mg/L	0.0010						
Molybdenum		0.696	mg/L	0.0010	87	80	120			
Zinc		0.000674	mg/L	0.010						
Lab ID: ICSAB	7	Interference Check Sample AB							08/22/25 19:15	
Arsenic		0.00974	mg/L	0.0010	97	80	120			
Cadmium		0.00920	mg/L	0.0010	92	80	120			
Copper		0.0195	mg/L	0.0050	97	80	120			
Lead		0.0000131	mg/L	0.0010						
Manganese		0.0198	mg/L	0.0010	99	80	120			
Molybdenum		0.716	mg/L	0.0010	89	80	120			
Zinc		0.0119	mg/L	0.010	119	80	120			
Lab ID: CCV	7	Continuing Calibration Verification Standard							08/22/25 19:54	
Arsenic		0.0488	mg/L	0.0010	98	90	110			
Cadmium		0.0496	mg/L	0.0010	99	90	110			
Copper		0.0523	mg/L	0.0050	105	90	110			
Lead		0.0495	mg/L	0.0010	99	90	110			
Manganese		0.0489	mg/L	0.0010	98	90	110			
Molybdenum		0.0492	mg/L	0.0010	98	90	110			
Zinc		0.0491	mg/L	0.010	98	90	110			
Lab ID: CCV	7	Continuing Calibration Verification Standard							08/22/25 20:57	
Arsenic		0.0488	mg/L	0.0010	97	90	110			
Cadmium		0.0498	mg/L	0.0010	100	90	110			
Copper		0.0530	mg/L	0.0050	106	90	110			
Lead		0.0498	mg/L	0.0010	100	90	110			
Manganese		0.0488	mg/L	0.0010	98	90	110			
Molybdenum		0.0497	mg/L	0.0010	99	90	110			
Zinc		0.0492	mg/L	0.010	98	90	110			
Method: SW6020B							Batch: 78888			
Lab ID: MB-78888	7	Method Blank							Run: ICPMS206-H_250821A	
Arsenic		ND	mg/kg	0.4						08/22/25 16:36
Cadmium		ND	mg/kg	0.05						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 08/25/25

Work Order: H25070364

Report Date: 08/25/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B										Batch: 78888
Lab ID: MB-78888	7	Method Blank				Run: ICPMS206-H_250821A				08/22/25 16:36
Copper		ND	mg/kg	0.6						
Lead		ND	mg/kg	0.2						
Manganese		ND	mg/kg	0.5						
Molybdenum		ND	mg/kg	0.1						
Zinc		ND	mg/kg	4						
Lab ID: LCS-78888	7	Laboratory Control Sample				Run: ICPMS206-H_250821A				08/22/25 16:40
Arsenic		24.3	mg/kg	1.0	97	80	120			
Cadmium		12.6	mg/kg	1.0	101	80	120			
Copper		23.8	mg/kg	1.2	95	80	120			
Lead		24.0	mg/kg	1.0	96	80	120			
Manganese		108	mg/kg	1.2	86	80	120			
Molybdenum		23.4	mg/kg	1.0	94	80	120			
Zinc		24.5	mg/kg	20	98	80	120			
Lab ID: LCSD-78888	7	Laboratory Control Sample				Run: ICPMS206-H_250821A				08/22/25 16:44
Arsenic		24.0	mg/kg	1.0	96	80	120			
Cadmium		12.3	mg/kg	1.0	99	80	120			
Copper		23.5	mg/kg	1.2	94	80	120			
Lead		23.6	mg/kg	1.0	95	80	120			
Manganese		106	mg/kg	1.2	85	80	120			
Molybdenum		22.9	mg/kg	1.0	92	80	120			
Zinc		24.1	mg/kg	20	97	80	120			
Lab ID: H25070364-004ADIL	7	Serial Dilution				Run: ICPMS206-H_250821A				08/22/25 17:10
Arsenic		ND	mg/kg	1.0		0	0	20		
Cadmium		ND	mg/kg	1.0		0	0	20		
Copper		1.19	mg/kg	1.0		0	0	20		N
Lead		0.322	mg/kg	1.0		0	0	20		N
Manganese		0.361	mg/kg	1.0		0	0	20		N
Molybdenum		ND	mg/kg	1.0		0	0	20		
Zinc		2.29	mg/kg	20		0	0	20		N
Lab ID: H25070364-004APDS1	7	Post Digestion/Distillation Spike				Run: ICPMS206-H_250821A				08/22/25 17:14
Arsenic		1.80	mg/kg	1.0	90	75	125			
Cadmium		1.89	mg/kg	1.0	94	75	125			
Copper		2.97	mg/kg	1.0	90	75	125			
Lead		2.19	mg/kg	1.0	93	75	125			
Manganese		2.14	mg/kg	1.0	85	75	125			
Molybdenum		1.89	mg/kg	1.0	94	75	125			
Zinc		3.85	mg/kg	4.0	85	75	125			
Lab ID: MB-78888	7	Method Blank				Run: ICPMS206-H_250821A				08/22/25 20:28
Arsenic		ND	mg/kg	0.9						
Cadmium		ND	mg/kg	0.09						
Copper		ND	mg/kg	1						
Lead		ND	mg/kg	0.4						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

N - Analyte concentration was not sufficiently high to calculate a Relative Percent Difference (RPD) for the serial dilution test



QA/QC Summary Report

Prepared by Helena, MT Branch

Revised Date: 08/25/25

Work Order: H25070364

Report Date: 08/25/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: SW6020B										Batch: 78888
Lab ID: MB-78888	7	Method Blank				Run: ICPMS206-H_250821A				08/22/25 20:28
Manganese		ND	mg/kg		1					
Molybdenum		ND	mg/kg		0.2					
Zinc		ND	mg/kg		8					

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Bison Engineering

H25070364

Login completed by: Rebecca A. Tooke

Date Received: 7/10/2025

Reviewed by: tjones

Received by: JEK

Reviewed Date: 7/15/2025

Carrier name: Hand Deliver

Shipping container/cooler in good condition?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input type="checkbox"/>
Custody seals intact on all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Custody seals intact on all sample bottles?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Present <input checked="" type="checkbox"/>
Chain of custody present?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody signed when relinquished and received?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Chain of custody agrees with sample labels?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Samples in proper container/bottle?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sample containers intact?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Sufficient sample volume for indicated test?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Not Applicable <input type="checkbox"/>
Container/Temp Blank temperature:	30.0°C No Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes <input type="checkbox"/>	No <input type="checkbox"/>	No VOA vials submitted <input checked="" type="checkbox"/>
Water - pH acceptable upon receipt?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input checked="" type="checkbox"/>

Standard Reporting Procedures:

Lab measurement of analytes considered field parameters that require analysis within 15 minutes of sampling such as pH, Dissolved Oxygen and Residual Chlorine, are qualified as being analyzed outside of recommended holding time.

Solid/soil samples are reported on a wet weight basis (as received) unless specifically indicated. If moisture corrected, data units are typically noted as –dry. For agricultural and mining soil parameters/characteristics, all samples are dried and ground prior to sample analysis.

The reference date for Radon analysis is the sample collection date. The reference date for all other Radiochemical analyses is the analysis date. Radiochemical precision results represent a 2-sigma Total Measurement Uncertainty.

For methods that require zero headspace or require preservation check at the time of analysis due to potential interference, the pH is verified at analysis. Nonconforming sample pH is documented as part of the analysis and included in the sample analysis comments.

Trip Blanks and/or Blind Duplicate samples are assigned the earliest collection time for the associated requested analysis in order to evaluate the holding time unless specifically indicated.

Contact and Corrective Action Comments:

The collection dates/times are not indicated on the containers. Proceeded with the collection date/time as indicated on the chain of custody. RAT 07/10/25

Laboratory Certifications and Accreditations

Current certificates are available at www.energylab.com website:

	Agency	Number
Billings, MT  	Alaska	17-023
	California	3087
	Colorado	MT00005
	Department of Defense (DoD)/ISO17025	ADE-2588
	Florida (Primary NELAP)	E87668
	Idaho	MT00005
	Louisiana	05079
	Montana	CERT0044
	Nebraska	NE-OS-13-04
	Nevada	NV-C24-00250
	North Dakota	R-007
	National Radon Proficiency	109383-RMP
	Oregon	4184
	South Dakota	ARSD 74:04:07
	Texas	TX-C24-00302
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00170
	Washington	C1039
Casper, WY 	Alaska	20-006
	California	3021
	Colorado	WY00002
	Florida (Primary NELAP)	E87641
	Idaho	WY00002
	Louisiana	05083
	Montana	CERT0002
	Nebraska	NE-OS-08-04
	Nevada	NV-C24-00245
	North Dakota	R-125
	Oregon	WY200001
	South Dakota	WY00002
	Texas	T104704181-23-21
	US EPA Region VIII	WY00002
	USNRC License	49-26846-01
	Washington	C1012
Gillette, WY	US EPA Region VIII	WY00006
Helena, MT	Colorado	MT00945
	Montana	CERT0079
	Nevada	NV-C24-00119
	US EPA Region VIII	Reciprocal
	USDA Soil Permit	P330-20-00090



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Account Information (Billing information)

Company/Name	Bison Engineering Inc.
Contact	Steve Heck
Phone	406-498-4199
Mailing Address	3143 E Lyndale Ave
City, State, Zip	Helena, MT 59601
Email	heck@bison-eng.com
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote H16951
MT224018	Bottle Order

Report Information (If different than Account Information)

Company/Name	
Contact	
Phone	
Mailing Address	
City, State, Zip	
Email	
Receive Report	<input type="checkbox"/> Hard Copy <input type="checkbox"/> Email
Special Report/Forms	<input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other

Comments

These are dustfall samples.
Collected from 05.30.2025 to 06.29.2025

Project Information

Project Name, PWSID, Permit, etc.	Montana Resources Dustfall
Sampler Name	Steve Heck
Sampler Phone	406-498-4199
Sample Origin	State Montana
EPA/State Compliance	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
URANIUM MINING CLIENTS MUST indicate sample type	
<input type="checkbox"/> Unprocessed Ore	
<input type="checkbox"/> Processed Ore (Ground or Refined) **CALL BEFORE SENDING	
<input type="checkbox"/> 11(e)2 Byproduct Material (Can ONLY be Submitted to ELI Casper Location)	

Matrix Codes

A - Air	W - Water
S - Solids	V - Vegetation
B - Bioassay	O - Oil
DW - Drinking Water	

Analysis Requested

Gravimetric - total mass	<input checked="" type="checkbox"/>
As, Cd, Cu, Pb, Mn, Mo, Zn	<input checked="" type="checkbox"/>

See Attached

All turnaround times are standard unless marked as RUSH.
Energy Laboratories MUST be contacted prior to RUSH sample submittal for charges and scheduling - See Instructions Page

Sample Identification (Name, Location, Interval, etc.)	Collection		Matrix (See Codes Above)	Number of Containers	Date	Time	Received by Laboratory (print)	Date/Time	Signature
	Date	Time							
1 DF-GREELEY-023	06/29/2025	1:27 pm	A	1					
2 DF-PINE-023	06/29/2025	1:15 pm	A	1					
3 DF-WALNUT-023	06/29/2025	1:02 pm	A	1					
4 DF-FB-023	06/29/2025	1:30 pm	A	1					
5									
6									
7									
8									
9									

ELI is REQUIRED to provide preservative traceability. If the preservatives supplied with the bottle order were NOT used, please attach your preservative information with this COC.

Custody Record MUST be signed	Relinquished by (print) Steve Heck	Date/Time 7/1/24/27	Signature	Received by Laboratory (print) Steve Heck	Date/Time 7/1/25 12:47	Signature				
Shipped By	Cooler ID(s)	Custody Seals Y (N) C B	Intact Y N	Receipt Temp 30.0 °C	Temp Blank Y (N)	On Ice Y (N)	CC	Payment Type Cash Check	Amount \$	Receipt Number (cash/check only)

In certain circumstances, samples submitted to Energy Laboratories, Inc. may be subcontracted to other certified laboratories in order to complete the analysis requested. This serves as notice of this possibility. All subcontracted data will be clearly notated on your analytical report.

APPENDIX D: COMMON GUIDELINES FOR AIRBORNE CONTAMINANTS

Dose and Risk Assessment References

Pollutant	Organization	Standard Type	Description	Value	Units	Time Period	Reference
Arsenic	WHO	Air Quality Guideline		0.0015	Unit Risk	Life-time	https://www.atsdr.cdc.gov/toxprofiles/tp2-c8.pdf
	NIOSH	REL		2	µg/m ³	15 min	https://www.atsdr.cdc.gov/toxprofiles/tp2-c8.pdf
	ACGIH	TLV (TWA)		10	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	OSHA	PEL (TWA)	General - organic As	200	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	OSHA	PEL (TWA)	General - inorganic As	10	µg/m ³	8-hour	https://www.atsdr.cdc.gov/toxprofiles/tp2-c8.pdf
	OSHA	PEL (TWA)	Construction - organic	500	µg/m ³	8-hour	https://www.atsdr.cdc.gov/toxprofiles/tp2-c8.pdf
	OSHA	PEL (TWA)	Shipyard - organic	500	µg/m ³	8-hour	https://www.atsdr.cdc.gov/toxprofiles/tp2-c8.pdf
	EPA	EPA- Ca	Noncancer	0.015	µg/m ³		https://www.epa.gov/sites/production/files/2014-05/documents/table1.pdf
	EPA	IRIS	Risk = 10 ⁻⁶ (lifetime)	0.043	µg/m ³	Life-time	https://www.epa.gov/sites/production/files/2014-05/documents/table1.pdf
	EPA	REL		0.20	µg/m ³	1-Hour	https://www.epa.gov/sites/production/files/2014-05/documents/table2.pdf
	EPA	RFc	Inorganic As	0.015	µg/m ³	Life-time	https://semspub.epa.gov/work/HQ/401635.pdf - (November, 2021)
Cadmium	EPA	RSL	Cancer Risk @ 10 ⁻⁶	0.65	ng/m ³	Life-time	https://semspub.epa.gov/work/HQ/401635.pdf - (November, 2021)
	EPA	RSL	HI = 1	0.016	µg/m ³		https://semspub.epa.gov/work/HQ/401635.pdf - (November, 2021)
	ACGIH	TLV (TWA)	(total)	10	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	ACGIH	TLV (TWA)	(respirable)	2	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	OSHA	PEL (TWA)		5	µg/m ³		https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	EPA	ATSDR	Noncancer - Cd Compounds	0.01	µg/m ³	Chronic	https://www.epa.gov/sites/production/files/2014-05/documents/table1.pdf
	EPA	IRIS	Cancer - Cd Compounds	2	µg/m ³	Chronic	https://www.epa.gov/sites/production/files/2014-05/documents/table1.pdf
	EPA	MRL	Cd Compounds	0.03	µg/m ³	Acute	
	EPA	AEGL-1 (1-hr)	Cd Compounds	100	µg/m ³	1-Hour	https://www.epa.gov/sites/production/files/2014-05/documents/table2.pdf
	EPA	AEGL-1 (8-hr)	Cd Compounds	41	µg/m ³	8-Hour	https://www.epa.gov/sites/production/files/2014-05/documents/table2.pdf
	EPA	RFc	Cd (water)	0.01	µg/m ³	Life-time	https://semspub.epa.gov/work/HQ/401635.pdf - (November, 2021)
Copper	EPA	RSL: TR @ 10 ⁻⁶	Cd (water) (Cancer Risk)	1.60	ng/m ³	Life-time	https://semspub.epa.gov/work/HQ/401635.pdf - (November, 2021)
	EPA	RSL: HI = 1	Cd (water) (Noncancer Risk)	10	ng/m ³	HI=1	https://semspub.epa.gov/work/HQ/401635.pdf - (November, 2021)
	ACGIH	TLV (TWA)	(dust & mist)	1,000	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	NIOSH	REL (TWA)		1,000	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	OSHA	PEL (TWA)		1,000	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	ACGIH	TLV (TWA)	(inorganic)	50	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	NIOSH	REL (TWA)	(inorganic+ organic salts)	50	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	OSHA	PEL (TWA)	(inorganic)	50	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	EPA	NAAQS		0.150	µg/m ³	3-month mean	40 CFR 50.12 (and Appendix R)
	NIOSH	IGHL/10	Lead compounds	10	ng/m ³		https://www.epa.gov/sites/production/files/2014-05/documents/table2.pdf
	EPA	RSL: HI = 1	Pb (Noncancer Risk)	0.15	µg/m ³	HI=1	https://semspub.epa.gov/work/HQ/401635.pdf - (November, 2021)
Manganese	ACGIH	TLV (TWA)	(compounds + fumes)	20	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	NIOSH	REL (TWA)	(compounds + fumes)	1,000	µg/m ³	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html </

Zinc (Zn)

ACGIH	TLV (TWA)	(zinc oxide - respirable)	2,000	$\mu\text{g}/\text{m}^3$	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
	STEL	(zinc oxide - respirable)	10,000	$\mu\text{g}/\text{m}^3$	15 minutes	https://www.osha.gov/dsg/annotated-pels/tablez-1.html
OSHA	PEL (TWA)	(inorganic)	5,000	$\mu\text{g}/\text{m}^3$	8-hour	https://www.osha.gov/dsg/annotated-pels/tablez-1.html

<u>Term</u>	<u>Definition</u>
ACGIH	American Congress of Governmental Industrial Hygienists
AEGL-1	Acute exposure guideline levels for mild effects: 1-hour and 8-hour
ATSDR	Agency for Toxic Substances & Disease Registry
HI (EPA)	Hazardous Index: Aggregate exposures below a HI of 1.0 will likely not result in adverse noncancer health effects over a lifetime of exposure. A respiratory HI greater than 1.0 can be best described as indicating that a potential may exist for adverse irritation to the respiratory system. https://archive.epa.gov/airtoxics/nata/web/html/gloss.html
IDHL/10	One-tenth of levels determined by NIOSH to be imminently dangerous to life and death.
IRIS	Integrated Risk Information System
NAAQS	National Ambient Air Quality Standards: 40 CFR 50.12
NIOSH	National Institute of Occupational Safety and Health (part of CDC)
PEL	Permissible Exposure Limits (expressed as 8-hour time weighted average (TWA)) 29 CFR 1910.1000 Z-1 Table
REL (NIOSH)	Recommended exposure limit: Level at which NIOSH believes protects worker safety and health over a working lifetime.
REL (Ca EPA)	California EPA concentration level at which no adverse health effect are anticipated. Includes most sensitive individuals Levels exceeding REL does not automatically indicate an adverse health impact.
RfC	Reference Concentration (EPA) is an estimate (with uncertainty spanning perhaps an order of magnitude) of a continuous inhalation exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime https://www.epa.gov/sites/default/files/2015-08/documents/technical_appendix_a_toxicity_v2_3_3.pdf
RSL	Residential Regional Screening Level (EPA Region X) @ 10^{-6} Cancer Risk or (Noncancer) Hazardous Index (HI) = 1 (based on Hazard Quotient (HQ) of 1. https://semspub.epa.gov/work/HQ/401635.pdf Last (EPA) Table Update: November 2021
STEL	Short-Term Exposure Limit (15-minutes)
TEEL-1	Temporary emergency exposure limits for mild transient effects for 1-hour exposure
TLV	Threshold Limit Value
TWA	Time Weighted Average
WHO	World Health Organization

APPENDIX E: CALIBRATIONS

BGI PQ200 TSP Sampler – Monthly Calibration Checks			
Date: 04/29/2025	Time: 1130 - 1150 MST	Sampler Serial Number: 90133	
Performed By: Steve Heck		Location (field or lab): Pine St	
Ref Standard & S/N: 1) Delta Cal SN 1288		Certification Date: 1) 12-19-2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	620 mm Hg	620.2 mmHg	-0.2
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	13.3 C	13.5 C	-0.2 C
Filter Temperature	13.7 C	13.4 C	+0.3 C
Leak Check			
Vacuum Readings (cm H ₂ O)	Start 138	End 138	Pass Fail
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Reference Standard (b)	% Difference $100 \cdot (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	17.77	-6.0%
Reading (liters per minute)	Reference Standard (b)	Design Flow Rate Standard (c)	% Difference $100 \cdot (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Design flow rate calculation	17.77	16.7	+6.4%
<p>Performed multipoint flow cal:</p> <p>@15.0 LPM: 14.98 LPM</p> <p>@18.4 LPM: 18.40 LPM</p> <p>@16.7 LPM: 16.72 LPM</p> <p>Operating flow verification: 16.72 LPM</p>			

BGI PQ200 TSP Sampler – Monthly Calibration Checks			
Date: 05/21/2025	Time: 1215 - 1235 MST	Sampler Serial Number: 90133	
Performed By: Steve Heck		Location (field or lab): Pine St	
Ref Standard & S/N: 1) Delta Cal SN 1288		Certification Date: 1) 12-19-2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	625 mm Hg	625.2 mmHg	-0.2
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	10.0 C	10.6 C	-0.6 C
Filter Temperature	12.8 C	12.6 C	+0.2 C
Leak Check			
Vacuum Readings (cm H ₂ O)	Start 139	End 139	Pass Fail
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Reference Standard (b)	% Difference $100 \cdot (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	16.69	+0.1%
Reading (liters per minute)	Reference Standard (b)	Design Flow Rate Standard (c)	% Difference $100 \cdot (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Design flow rate calculation	16.69	16.7	-0.1%
No adjustments			

BGI PQ200 TSP Sampler – Monthly Calibration Checks			
Date: 06/09/2025	Time: 1220 - 1235 MST	Sampler Serial Number: 90133	
Performed By: Steve Heck		Location (field or lab): Pine St	
Ref Standard & S/N: 1) Delta Cal SN 1288		Certification Date: 1) 12-19-2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	624 mm Hg	624.7 mmHg	-0.7
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	26.9 C	27.2 C	-0.3 C
Filter Temperature	29.6 C	29.5 C	+0.1 C
Leak Check			
Vacuum Readings (cm H ₂ O)	Start 143	End 142	Pass Fail
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Reference Standard (b)	% Difference $100 \cdot (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	17.21	-3.0%
Reading (liters per minute)	Reference Standard (b)	Design Flow Rate Standard (c)	% Difference $100 \cdot (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Design flow rate calculation	17.21	16.7	+3.1%
No adjustments			

BGI PQ200 TSP Sampler – Monthly Calibration Checks			
Date: 07/07/2025	Time: 1210 - 1230 MST	Sampler Serial Number: 90133	
Performed By: Steve Heck		Location (field or lab): Pine St	
Ref Standard & S/N: 1) Delta Cal SN 1288		Certification Date: 1) 12-19-2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	625 mm Hg	626.2 mmHg	-1.2
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	25.3 C	26.1 C	-0.8 C
Filter Temperature	27.6 C	27.0 C	+0.6 C
Leak Check			
Vacuum Readings (cm H ₂ O)	Start	End	Pass Fail
	144	143	
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Reference Standard (b)	% Difference $100 \cdot (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	17.28	-3.4%
Reading (liters per minute)	Reference Standard (b)	Design Flow Rate Standard (c)	% Difference $100 \cdot (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Design flow rate calculation	17.28	16.7	+3.5%
<p>No adjustments.</p> <p>Swift 25.0 showed 16.64 LPM Tetra Cal showed 16.92 LPM</p>			

BGI PQ200 TSP Sampler – Monthly Calibration Checks			
Date: 04/29/2025	Time: 1225 – 1245	Sampler Serial Number: 90129	
Performed By: Steve Heck		Location (field or lab): Walnut St	
Ref Std: Delta Cal SN 1288		Certification Date: 12/19/2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	622	620.7	+1.3
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	12.3 C	12.9 C	-0.6
Filter Temperature	13.4 C	13.1 C	+0.3
Leak Check			
Vacuum Readings (cm H ₂ O)	Start 137	End 136	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Reference Standard (b)	% Difference $100 \times (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	16.37	+2.0%
Reading (liters per minute)	Reference Standard (b)	Design Flow Rate Standard (c)	% Difference $100 \times (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Design flow rate calculation	16.37	16.7	-2.0%
<p>Performed multipoint flow cal:</p> <p>@15.0 LPM: 14.97 LPM</p> <p>@18.4 LPM: 18.38 LPM</p> <p>@16.7 LPM: 16.70 LPM</p> <p>Operating flow verification: 16.68 LPM</p>			

BGI PQ200 TSP Sampler – Monthly Calibration Checks			
Date: 05/21/2025	Time: 1242 – 1330	Sampler Serial Number: 90129	
Performed By: Steve Heck		Location (field or lab): Walnut St	
Ref Std: Delta Cal SN 1288		Certification Date: 12/19/2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	626	625.7	+0.3
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	8.5 C	9.0 C	-0.5
Filter Temperature	12.1 C	11.5 C	+0.6
Leak Check			
Vacuum Readings (cm H ₂ O)	Start 137	End 136	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Reference Standard (b)	% Difference $100 \cdot (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	17.23	-3.1%
Reading (liters per minute)	Reference Standard (b)	Design Flow Rate Standard (c)	% Difference $100 \cdot (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Design flow rate calculation	17.23	16.7	+3.2%
<p>Performed multipoint flow cal:</p> <p>@15.0 LPM: 15.01 LPM</p> <p>@18.4 LPM: 18.38 LPM</p> <p>@16.7 LPM: 16.68 LPM</p> <p>Operating flow verification: 16.68 LPM</p> <p>Tightened filter holder although leak test was good.</p>			

BGI PQ200 TSP Sampler – Monthly Calibration Checks			
Date: 06/09/2025	Time: 1345 – 1400	Sampler Serial Number: 90129	
Performed By: Steve Heck		Location (field or lab): Walnut St	
Ref Std: Delta Cal SN 1288		Certification Date: 12/19/2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	625	625.2	-0.2
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	27.0 C	27.3 C	-0.3
Filter Temperature	29.6 C	30.0 C	-0.4
Leak Check			
Vacuum Readings (cm H ₂ O)	Start 142	End 141	Pass <input checked="" type="checkbox"/> Fail <input type="checkbox"/>
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Reference Standard (b)	% Difference $100 \cdot (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	16.90	-1.2%
Reading (liters per minute)	Reference Standard (b)	Design Flow Rate Standard (c)	% Difference $100 \cdot (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Design flow rate calculation	16.90	16.7	+1.2%

BGI PQ200 TSP Sampler – Monthly Calibration Checks			
Date: 07/07/2025	Time: 1303 – 1325	Sampler Serial Number: 90129 (with old Main PC board)	
Performed By: Steve Heck		Location (field or lab): Walnut St	
Ref Std: Delta Cal SN 1288		Certification Date: 12/19/2024	
Barometric Pressure Sensor Verification			
Reading (mm Hg)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 10$)
Ambient Pressure	627	626.7	+0.3
Temperature Sensor Verification			
Reading (degrees Celsius)	Sampler (a)	Reference Standard (b)	Difference (a - b) (must be $\leq \pm 2^{\circ}\text{C}$)
Ambient Temperature	26.4 C	27.5 C	-1.1
Filter Temperature	28.3 C	28.9 C	-0.6
Leak Check			
Vacuum Readings (cm H ₂ O)	Start 143	End 142	Pass Fail
Flow Rate Verification			
Reading (liters per minute)	Sampler (a)	Reference Standard (b)	% Difference $100 \cdot (a - b) / b$ (must be $\leq \pm 4\%$)
Operating flow rate check	16.7	16.92	-1.3%
Reading (liters per minute)	Reference Standard (b)	Design Flow Rate Standard (c)	% Difference $100 \cdot (b - 16.7) / 16.7$ (must be $\leq \pm 5\%$)
Design flow rate calculation	16.92	16.7	+1.3%
<p>Performed with Main PC Board SN 240250053 immediately before replacement</p>			

APPENDIX F: CALIBRATION STANDARD CERTIFICATION SHEETS



Mesa Labs 12100 W. 6th Ave
Lakewood, CO 80228
NIST Traceable Calibration Facility

CERTIFICATE OF CALIBRATION - NIST TRACEABILITY

Calibration Report #: 1288-19122024
DeltaCal Serial Number: 1288
Calibration Technician: Elsy Lasky
Date: 19-Dec-2024
Recommended Recal Date: 19-Dec-2025

Critical Venturi Flow Meter

Max Uncertainty = 0.346%

TE20004	6 - 30.00 LPM	Calibration Due:	22-Oct-2025
TE20006	1.40 - 6.0 LPM	Calibration Due:	17-Oct-2025

Room Temperature: $\pm 0.03^{\circ}\text{C}$ from -5°C - 70°C Room Temperature: 24.00°C

Brand:	Eutechnics	Serial Number:	358921
TE Number:	TE12312	Std Cal Due Date:	26-Aug-25
Std Cal Date:	26-Aug-24		

Ambient Temperature (set): 24.0°C

Aux (filter) Temperature (set): 24.0°C

Barometric and Absolute Pressure

Vaisala Model PTB330 (50-1100) Digital Accuracy: 0.03371%

TE Number:	TE12311	Serial Number:	H0850001
Std Cal Date:	23-Feb-24	Std Cal Due Date:	23-Feb-25

DeltaCal:

Barometric pressure (set): 609.10 mmHg

Results of Venturi Calibration

Flow Rate (Q) vs. Pressure Drop (ΔP).

Where: Q=Lpm, ΔP = Cm of H2O

Venturi

TE20004	Q= 3.96199	ΔP^{\wedge}	0.52283	Overall Uncertainty: 0.35%
TE20006	Q= 3.92006	ΔP^{\wedge}	0.5439	Overall Uncertainty: 0.35%



Mesa Labs 12100 W. 6th Ave Lakewood,
CO 80228

NIST Traceable Calibration Facility

As Shipped Calibration Data for DeltaCal

Unit Type: DC 1
Flow Range: 1.5-19.5 LPM
Serial No. : 1288
Firmware Version: 4.00P

Date	Technician
19Dec2024	Elsy Lasky

Ambient Pressure:	622.3	mmHg
Ambient Temperature:	24	°C

Range 1		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi Type	TE20004 1A	1	133.14	622.7	6.517	6.500	-0.261
Flow range	6 - 30.00 LPM	2	204.61	622.7	10.085	10.016	-0.684
		3	264.61	622.7	13.076	13.012	-0.489
		4	324.54	622.7	16.066	16.019	-0.293
		5	364.67	622.7	18.074	18.012	-0.343
		6	398.36	622.7	19.756	19.805	0.248
Maximum allowable error at any flow rate is 0.75%.						Average Result	-0.304
							PASS

Range 2		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi Type	TE20006 2A	1	143.14	622.2	2.015	2.008	-0.347
Flow range	1.40 - 6.0 LPM	2	213.42	622.2	3.023	3.016	-0.232
		3	261.43	622.2	3.711	3.724	0.350
		4	316.47	622.2	4.500	4.521	0.467
		5	369.32	622.2	5.258	5.269	0.209
		6	417.88	622.2	5.954	5.985	0.521
Maximum allowable error at any flow rate is 0.75%.						Average Result	0.161
							PASS

Performed By: Elsy Lasky

Date: 19-Dec-2024

Approved By:

Troy Thacker
QC Inspector

Date: 23 DEC 2024



Mesa Labs 12100 W. 6th Ave Lakewood,
CO 80228

NIST Traceable Calibration Facility

As-Found data for DeltaCal

Unit Type: DC 1
Flow Range: 1.5-19.5 LPM
Serial No. : 1288
Firmware Version: 4.00P

Date	Technician
19Dec2024	Elsy Lasky

Ambient Pressure:	622.3	mmHg
Ambient Temperature:	24	°C

As Received Temp. Press. Calibration					As Shipped Temp. Press. Calibration				
	DUT	Standard	Diff	+/- 1 mmHg	DUT	Standard	Diff	+/- 1 mmHg	
Pres _{AMB} mmHg	609.6	619.9	-10.3	Fail	622.2	622.3	-0.1	Pass	
	DUT	Standard	Diff	+/- 1 °C	DUT	Standard	Diff	+/- 1 °C	
Temp _{AMB} °C	-51	24	-75	Fail	24	24	0	Pass	
Temp _{Filter} °C	24	24	0	Pass	24	24	0	Pass	
	Offset	New Offset							
Pres _{AMB}	2.9	13.2							
Temp _{AMB}	0.05	75.05							
Temp _{Filter}	0	0							

Range 1		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi	TE20004	1	156.85	609.1	5.878	6.588	12.079
Type	1A	2	234.96	609.1	8.855	10.009	13.032
Flow range	6 - 30.00 LPM	3	305.31	609.1	11.536	13.029	12.942
		4	374.67	609.1	14.179	16.007	12.892
		5	421.14	609.1	15.950	18.057	13.210
		6	459.25	609.1	17.402	19.838	13.998
Maximum allowable error at any flow rate is 0.75%.						Average Result	13.026
							FAIL

Range 2		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi	TE20006	1	167.05	609.6	1.798	2.011	11.846
Type	2A	2	249.30	609.1	2.699	3.037	12.523
Flow range	1.40 - 6.0 LPM	3	307.97	609.1	3.341	3.762	12.601
		4	363.80	609.1	3.952	4.522	14.423
		5	422.33	609.1	4.592	5.223	13.741
		6	478.87	609.1	5.211	5.922	13.644
Maximum allowable error at any flow rate is 0.75%.						Average Result	13.130
							FAIL



Mesa Labs 12100 W. 6th Ave
Lakewood, CO 80228
NIST Traceable Calibration Facility

CERTIFICATE OF CALIBRATION - NIST TRACEABILITY

Calibration Report #: 149645-13012025

TetraCal Serial Number: 149645

Calibration Technician: Elsy Lasky

Date: 13-Jan-2025

Recommended Recal Date: 13-Jan-2026

Critical Venturi Flow Meter

Max Uncertainty = 0.346%

TE20006 1.40 - 6.0 LPM

Calibration Due: 17-Oct-2025

TE20004 6 - 30.00 LPM

Calibration Due: 22-Oct-2025

TE20008 0.40 - 1.20 LPM

Calibration Due: 9-Oct-2025

Room Temperature: $\pm 0.03^{\circ}\text{C}$ from -5°C - 70°C Room Temperature: 23.10°C

Brand: Eutechnics

TE Number: TE12312

Serial Number: 358921

Std Cal Date: 26-Aug-24

Std Cal Due Date: 26-Aug-25

Ambient Temperature (set): 23.0°C

Aux (filter) Temperature (set): 23.0°C

Barometric and Absolute Pressure

Vaisala Model PTB330 (50-1100) Digital Accuracy: 0.03371%

TE Number: TE12311

Serial Number: H0850001

Std Cal Date: 23-Feb-24

Std Cal Due Date: 23-Feb-25

TetraCal:

Barometric pressure (set): 619.00 mmHg

0

Results of Venturi Calibration

Flow Rate (Q) vs. Pressure Drop (ΔP).

Where: Q=Lpm, ΔP = Cm of H₂O

Venturi

TE20006 Q1 = 1.22082 ΔP^{\wedge} 0.515 Overall Uncertainty: 0.35%

TE20004 Q2 = 5.45324 ΔP^{\wedge} 0.51821 Overall Uncertainty: 0.35%

TE20008 Q3 = 0.22238 ΔP^{\wedge} 0.50444 Overall Uncertainty: 0.35%



Mesa Labs 12100 W. 6th Ave Lakewood,
CO 80228

NIST Traceable Calibration Facility

As Shipped Calibration Data for TetraCal

Unit Type: TetraCal TC12 Flow Range: 1.20 -30.00 LPM Serial No. : 149645 Firmware Version: 3.41P	Date	Technician
	13Jan2025	Elsy Lasky
	Ambient Pressure:	619.4 mmHg
	Ambient Temperature:	23.1 °C

Range 1: 1.2 - 6.00 LPM		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi	TE20006	1	112.16	619.0	1.574	1.578	0.254
Type	2A	2	237.62	619.0	3.375	3.383	0.237
Flow range	1.40 - 6.0 LPM	3	421.63	619.0	6.017	6.041	0.399
Maximum allowable error at any flow rate is 0.75%.						Average Result	0.297
							PASS

Range 2: 6.00 - 30.0 LPM		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi	TE20004	1	124.02	619.7	6.066	6.031	-0.577
Type	1A	2	366.67	619.7	18.189	18.058	-0.720
Flow range	6 - 30.00 LPM	3	599.33	619.7	29.812	30.008	0.657
Maximum allowable error at any flow rate is 0.75%.						Average Result	-0.213
							PASS

Range 3: NP		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi	TE20008	1	235.80	618.0	0.533	0.532	-0.188
Type	3A	2	381.71	618.0	0.864	0.858	-0.694
Flow range	0.40 - 1.20 LPM	3	554.71	618.0	1.255	1.250	-0.398
Maximum allowable error at any flow rate is 0.75%.						Average Result	-0.427
							PASS

Performed By: Elsy Lasky

Date: 13-Jan-2025

Approved By: Troy Thacker
QC Inspector

Date: 14 JAN 2025



Mesa Labs 12100 W. 6th Ave Lakewood,
CO 80228

NIST Traceable Calibration Facility

As-Found data for TetraCal

Unit Type: TetraCal TC12 Flow Range: 1.20 -30.00 LPM Serial No. : 149645 Firmware Version: 3.41P	Date	Technician
	13Jan2025	Elsy Lasky
Ambient Pressure: 619.4 mmHg Ambient Temperature: 23.1 °C		

As Received Temp. Press. Calibration					As Shipped Temp. Press. Calibration			
	DUT	Standard	Diff	+/- 1 mmHg	DUT	Standard	Diff	+/- 1 mmHg
Pres_{AMB} mmHg	619.7	619.6	0.1	Pass	619	619.4	-0.4	Pass
	DUT	Standard	Diff	+/- 1 °C	DUT	Standard	Diff	+/- 1 °C
Temp_{AMB} °C	22.9	22.8	0.1	Pass	23	23.1	-0.1	Pass
Temp_{Filter} °C	22.96	22.8	0.16	Pass	23	23.1	-0.1	Pass

	Offset	New Offset
PresAMB	-46.8	-46.9
TempAMB	0.15	0.05
Temp Filter	0.15	-0.01

Range 1: 1.2 - 6.00 LPM		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi	TE20006	1	113.60	619.7	1.592	1.537	-3.455
Type	2A	2	241.39	619.7	3.425	3.310	-3.358
Flow range	1.40 - 6.0 LPM	3	435.90	619.7	6.215	6.037	-2.864
Maximum allowable error at any flow rate is 0.75%.						Average Result	-3.225
							FAIL

Range 2: 6.00 - 30.0 LPM		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi	TE20004	1	124.02	619.7	6.066	6.031	-0.577
Type	1A	2	366.67	619.7	18.189	18.058	-0.720
Flow range	6 - 30.00 LPM	3	599.33	619.7	29.812	30.008	0.657
Maximum allowable error at any flow rate is 0.75%.						Average Result	-0.213
							PASS

Range 3: NP		Test #	Static Pressure mmHg	Barometric Pressure mmHg	Venturi Qa LPM	DUT Qa LPM	% error %
Venturi	TE20008	1	243.39	619.7	0.548	0.546	-0.365
Type	3A	2	375.02	619.7	0.845	0.862	2.012
Flow range	0.40 - 1.20 LPM	3	526.16	619.7	1.185	1.231	3.882
Maximum allowable error at any flow rate is 0.75%.						Average Result	1.843
							FAIL

Certificate of Calibration

Model Swift 25.0

Serial Number : D16202

Calibrated Date: 7/15/2024

Firmware: R0.2.0.5a

Calibrated By: A.Schultz

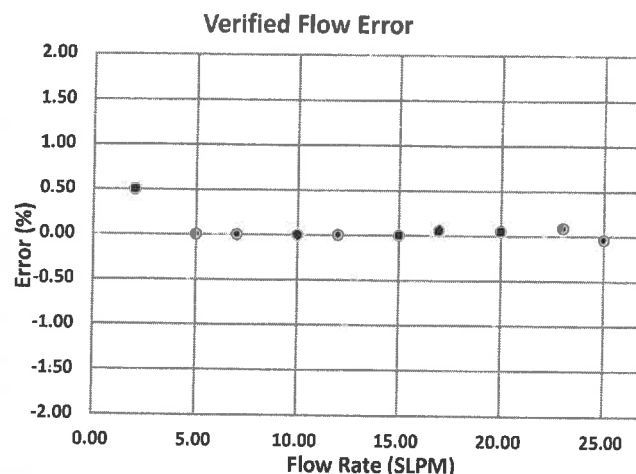
As Left



As Found



Verified Flow Data Points			
Standard (SLPM)	Swift 25.0 (SLPM)	Acceptable Range	In Tolerance
2	2.01	1.98 - 2.02	Pass
5	5.00	4.95 - 5.05	Pass
7	7.00	6.93 - 7.07	Pass
10	10.00	9.90 - 10.10	Pass
12	12.00	11.88 - 12.12	Pass
15	15.00	14.85 - 15.15	Pass
17	17.01	16.83 - 17.17	Pass
20	20.01	19.80 - 20.20	Pass
23	23.02	22.77 - 23.23	Pass
25	24.99	24.75 - 25.75	Pass



Internal Temperature		
Standard (SLPM)	Swift 25.0 (SLPM)	In Tolerance
22.72	22.72	Pass
Temp Accuracy: ± 0.08 °C		

Pressure		
Standard (mbar)	Swift 25.0 (mbar)	In Tolerance
974.2	975.0	Pass
Pressure Accuracy: ± 0.8 mbar		

External Temperature Probe		
Standard (°C)	Swift 25.0 (°C)	In Tolerance
22.84	22.91	Pass
Temp Accuracy: ± 0.19 °C		

RH %		
Standard (RH%)	Swift 25.0 (RH%)	In Tolerance
41	38	Pass
Relative Humidity Accuracy: ± 3 %RH		

Calibration Procedure: Swift 25.0-6100
Recommended Calibration Interval: 12 months from the first day of use

Standards	Model	SN	Cal Due
Air Flow Meter	M-50SLPM-D	432090	2/26/2025
Rotronics	HC2-S3	61082036	9/7/2024
BAROMETRIC PRESSURE	597	Y13061	5/20/2025

This instrument has been tested and calibrated to meet the manufacturer's published specifications at an ISO-9001 certified facility. The standards used for the calibration are on record and traceable to the National Institute of Standards and Technology (NIST) and have accuracies equal to or greater than the instrument being tested. The calibration system complies with MIL-STD-45662A. Complete test records for each unit are maintained by Met One Instruments, Inc. and are available upon request.