

Date: August 4, 2025
To: Peter Hays
From: Christopher Prosper
Project: SWTP 2025
Subject: July Monthly Reporting
Doc. No.: 25US0221-3- 0

INTRODUCTION

This memorandum contains the requirements for monthly report submittal for the month of July pursuant to point 29 of Section IV (Standards and Requirements) of the project contract.

Section 29

A. EMPLOYEE TRAINING AND EQUIPMENT UPDATES FOR SWTP SPILL RESPONSES

No spills occurred onsite.

B. VOLUME OF WATER TREATED

6476782 gallons

C. CHEMICALS/FILTERS CONSUMED

Filters:

- 28 cartridge filters
- 0 RO membranes

Chemicals:

- Caustic (50%): 597 gal
- Antiscalant: 166 gal
- Barium Chloride: 125 lbs

D. VOLUME OF BRINE RETURNED TO THE MINE POOL

4452939 gallons

E. MAINTENANCE PERFORMED

- Cartridge filter changed out in RO #1 Cartridge filters
- Repaired PVC leak in IX Vessel #3 (Item B29)
- Replaced shim rings in vessel 6, RO #2 and added shim rings to vessels 4 and 5.
- Replaced gasket on end cap of RO #2 vessel 5
- Removed old ORC from Net DMR

- TSS auto sampler
- Replaced valves on top of the cartridge filter housing (3 of 4 valves)
- Replaced leaking antiscalant valve
- Fixed leak on pressure transmitter between RO and IX
- Replaced gasket on discharge side of RO #2 antiscalant pump
- Sent cartridge filter samples to the lab for analysis
- Permeate flushed RO#1 with RO#2 permeate
- Installed POE extender to finish installation of Hardwired electrical and data connections to Mine Pool Transducer PLC (Item B34)
- Replaced antiscalant dosing line for RO#2

F. SAMPLING RESULTS AND QA/QC SUMMARY

Attached as Attachment 1. Some analytes have a turnaround time of 20 days. To avoid piece meal reporting and maintain consistency over the life of the project, results will be reported as the summary of the previous month.

G. PROBLEMS ENCOUNTERED AND RESOLUTION

Table 1 Problems and Resolutions

Problems Encountered	Resolution
Leaking Oil from RO#1 High Pressure Pump	Approached multiple pump contractors to come onsite to perform the pump maintenance and replacement of the seal in the pump. Once the issue is resolved, RO#1 will require a CIP.

H. Recommendations

There are no additional recommendations at this time.

Enclosures:

Attachment 1 June DMR and SW submittal

Attachment 2 Daily Reports

END



ATTACHMENT 1

JUNE DMR AND SW SUBMITTAL



Permits and Enforcement Section
Water Quality Control Division
CPDHE
4300 Cherry Creek Dr. South
Denver, CO 80246-1530

07/27/2025
25US0221

**Re: Discharge Monitoring Report for June 2024
Schwartzwalder Mine CO0001244**

TO WHOM IT MAY CONCERN:

On February 10th, 2025 the operations contract for the Schwartzwalder Mine was awarded and the contract started on April 1st, 2025.

During the month of June 2025, there was an exceedance for Total Recoverable arsenic at Outfall 001A. Section 7 of *Amendment Number One to Compliance Order on Consent, Number: IC-150123-1*, amended the Total Recoverable arsenic value to "Report" for the 30-day average. As a new permit has not been issued and discussions with the State indicated no deviation from the "Report" only at this time.

A WET test was taken in June. This resulted in a pass.

Best regards,
Linkan

Patrick M. Delaney
Operator Responsible in Charge (ORC)
Black Fox Mining, LLC

A handwritten signature in black ink, appearing to read "Patrick Delaney", is written in a cursive style.



Enclosures:

June 2025 DMR Submittal
2nd Quarter 2025 TDS Submittal
2nd Quarter 2025 WET Test Submittal

CC List:

Electronic Copy sent to the following:

Peter Hays, CDNR, peter.hays@state.co.us
Quinn Westmoreland, Linkan, quinn.westmoreland@linkan.com
Adam Billin, Linkan, adam.billin@linkan.com
Chris Prosper, Linkan, chris.prosper@linkan.com
Sam Billin, Linkan, sam.billin@linkan.com
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EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. Pursuant to 40 CFR 2.203(a), EPA is providing you with notice that all CBI claims must be asserted at the time of submission. EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact the [NPDES eReporting Help Desk](#) for further guidance. Please note that EPA may contact you after you submit this report for more information.

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-0004). Responses to this collection of information are mandatory in accordance with this permit and EPA NPDES regulations 40 CFR 122.41(l)(4)(i). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information are estimated to average 2 hours per outfall. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Permit

Permit #:

CO0001244

Major:

No

Permitted Feature:

001
External Outfall

Permittee:

Colo Div of Reclamation, Mining and Safety

Permittee Address:

1001 E 62 Ave Room 215
Denver, CO 80216

Discharge:

001-A
WWTF Discharge to Ralston Creek

Facility:

SCHWARTZWALDER MINE

Facility Location:

8300 GLENCOE VALLEY RD
GOLDEN, CO 80402

Report Dates & Status

Monitoring Period:

From 06/01/25 to 06/30/25

DMR Due Date:

07/28/25

Status:

NetDMR Validated

Considerations for Form Completion

Oil and grease - see I.A.2, page 3. Antidegradation limits - see C.2, page 7.

Principal Executive Officer

First Name:

Last Name:

Title:

Telephone:

No Data Indicator (NODI)

Form NODI: --

Code	Parameter	Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration								# of Ex.	Frequency of Analysis	Sample Type
	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units				
00340	Oxygen demand, chem. [high level] [COD]	1 - Effluent Gross	0	--	Sample								<	5.0	<	5.0	19 - mg/L	0	01/07 - Weekly	CP - Composite	
					Permit Req.								<=	100.0 30DA AVG	<=	200.0 DAILY MX	19 - mg/L				
					Value NODI																
00400	pH	1 - Effluent Gross	0	--	Sample						=	7.1			=	7.98	12 - SU	0	05/WK - Five Per Week	GR - Grab	
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU				
					Value NODI																
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample								<	10.0	<	10.0	19 - mg/L	0	03/07 - Three Per Week	CP - Composite	
					Permit Req.								<=	20.0 30DA AVG	<=	30.0 DAILY MX	19 - mg/L				
					Value NODI																
00718	Cyanide, weak acid, dissociable	1 - Effluent Gross	0	--	Sample										<	1.0	28 - ug/L		02/30 - Twice Per Month	CP - Composite	
					Permit Req.										<=	5.0 DAILY MX	28 - ug/L				
					Value NODI																
00718	Cyanide, weak acid, dissociable	P - See Comments	0	--	Sample														02/30 - Twice Per Month	CP - Composite	
					Permit Req.								<=	0.75 ROLL AVG			28 - ug/L				
					Value NODI									B - Below Detection Limit/No Detection							
00940	Chloride [as Cl]	1 - Effluent Gross	0	--	Sample								<	1.0			19 - mg/L	0	02/30 - Twice Per Month	CP - Composite	
					Permit Req.								<=	250.0 30DA AVG			19 - mg/L				
					Value NODI																
		P - See			Sample								=	0.74			19 - mg/L		02/30 - Twice Per Month	CP - Composite	
					Permit												19 -				

00940	Chloride [as Cl]	Comments	0	--	Req. Value NODI								<=	54.0 ROLL AVG				mg/L	0	Month	CP - Composite
00945	Sulfate, total [as SO4]	1 - Effluent Gross	0	--	Sample								=	3.0				19 - mg/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	250.0 30DA AVG				19 - mg/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
00945	Sulfate, total [as SO4]	P - See Comments	0	--	Sample								=	5.72				19 - mg/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	131.0 ROLL AVG				19 - mg/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
00949	Fluoride	1 - Effluent Gross	0	--	Sample										<	0.1		19 - mg/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.								<=	2.0 DAILY MX				19 - mg/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																
X 00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample								=	108.0				28 - ug/L	1	02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	0.02 30DA AVG				28 - ug/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
00980	Iron, total recoverable	1 - Effluent Gross	0	--	Sample								=	20.0				28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.								Req Mon 30DA AVG				28 - ug/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
00980	Iron, total recoverable	P - See Comments	0	--	Sample								=	5.0				28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.								Req Mon ROLL AVG				28 - ug/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
01022	Boron, total [as B]	1 - Effluent Gross	0	--	Sample								=	0.175				19 - mg/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	0.46 30DA AVG				19 - mg/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
01046	Iron, dissolved [as Fe]	1 - Effluent Gross	0	--	Sample								<	20.0				28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	300.0 30DA AVG				28 - ug/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
01046	Iron, dissolved [as Fe]	P - See Comments	0	--	Sample													28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	45.0 ROLL AVG								
					Value NODI							B - Below Detection Limit/No Detection									
01056	Manganese, dissolved [as Mn]	1 - Effluent Gross	0	--	Sample								<	1.0				28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	50.0 30DA AVG				28 - ug/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
01056	Manganese, dissolved [as Mn]	P - See Comments	0	--	Sample								=	0.3				28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	7.5 ROLL AVG				28 - ug/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
01059	Thallium, total [as Tl]	1 - Effluent Gross	0	--	Sample													28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	0.24 30DA AVG								
					Value NODI							B - Below Detection Limit/No Detection									
01097	Antimony, total [as Sb]	1 - Effluent Gross	0	--	Sample								<	1.0				28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.							<=	5.6 30DA AVG				28 - ug/L	02/30 - Twice Per Month		CP - Composite	
					Value NODI																
																	28 -		02/30 - Twice Per		

01220	Chromium, hexavalent dissolved [as Cr]	1 - Effluent Gross	0	--	Sample											<	10.0	<	10.0	ug/L	0	Month	CP - Composite
					Permit Req.												Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01303	Zinc, potentially dissolved	1 - Effluent Gross	0	--	Sample											<	10.0	<	10.0	28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.												Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01303	Zinc, potentially dissolved	P - See Comments	0	--	Sample											=	15.4			28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.												Req Mon ROLL AVG			28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01304	Silver, potentially dissolved	1 - Effluent Gross	0	--	Sample											<	0.04	<	0.04	28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.											<=	0.13 30DA AVG	<=	3.5 DAILY MX	28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01304	Silver, potentially dissolved	P - See Comments	0	--	Sample															28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.											<=	0.02 ROLL AVG						
					Value NODI												B - Below Detection Limit/No Detection						
01306	Copper, potentially dissolved	1 - Effluent Gross	0	--	Sample											<	0.5	<	0.5	28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.											<=	12.0 30DA AVG	<=	18.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01306	Copper, potentially dissolved	P - See Comments	0	--	Sample											=	0.09			28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.											<=	1.8 ROLL AVG			28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01313	Cadmium, potentially dissolvd	1 - Effluent Gross	0	--	Sample											<	1.0	<	1.0	28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.												Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01322	Nickel, potentially dissolvd	1 - Effluent Gross	0	--	Sample											<	5.0	<	5.0	28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.												Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01322	Nickel, potentially dissolvd	P - See Comments	0	--	Sample											<	8.0			28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.												Req Mon ROLL AVG			28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01323	Selenium, potentially dissolvd	1 - Effluent Gross	0	--	Sample											<	1.0	<	1.0	28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.												Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
01323	Selenium, potentially dissolvd	P - See Comments	0	--	Sample											<	1.0			28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.												Req Mon ROLL AVG			28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value NODI																		
03582	Oil and grease	1 - Effluent Gross	0	--	Sample															19 - mg/L	0	77/77 - Contingent	GR - Grab
					Permit Req.													<=	10.0 INST MAX				
					Value NODI														9 - Conditional Monitoring - Not Required This Period				
04262	Chromium, trivalent total recoverable	1 - Effluent Gross	0	--	Sample													<	10.0	28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Permit Req.													<=	50.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month	CP - Composite
					Value																		

					NODI																		
04262	Chromium, trivalent total recoverable	P - See Comments	0	--	Sample																		
					Permit Req.									<=	7.5 ROLL AVG				28 - ug/L	02/30 - Twice Per Month	CP - Composite		
					Value NODI										B - Below Detection Limit/No Detection								
09501	Radium 226, total	1 - Effluent Gross	0	--	Sample																		
					Permit Req.									<=	0.055	=	0.1	17 - pCi/L	0	02/30 - Twice Per Month	CP - Composite		
					Value NODI										10.0 30DA AVG	<=	30.0 DAILY MX	17 - pCi/L		02/30 - Twice Per Month	CP - Composite		
09503	Radium 226, dissolved	1 - Effluent Gross	0	--	Sample																		
					Permit Req.										=	0.04	=	0.05	17 - pCi/L	0	02/30 - Twice Per Month	CP - Composite	
					Value NODI										<=	3.0 30DA AVG	<=	10.0 DAILY MX	17 - pCi/L		02/30 - Twice Per Month	CP - Composite	
11503	Radium 226 + radium 228, total	1 - Effluent Gross	0	--	Sample																		
					Permit Req.										=	0.7			17 - pCi/L	0	02/30 - Twice Per Month	CP - Composite	
					Value NODI										<=	5.0 30DA AVG			17 - pCi/L		02/30 - Twice Per Month	CP - Composite	
22708	Uranium, total	1 - Effluent Gross	0	--	Sample																		
					Permit Req.										=	6.85			28 - ug/L	0	02/30 - Twice Per Month	CP - Composite	
					Value NODI										<=	30.0 30DA AVG			28 - ug/L		02/30 - Twice Per Month	CP - Composite	
22708	Uranium, total	P - See Comments	0	--	Sample																		
					Permit Req.										=	10.23			28 - ug/L	0	02/30 - Twice Per Month	CP - Composite	
					Value NODI										<=	22.0 ROLL AVG			28 - ug/L		02/30 - Twice Per Month	CP - Composite	
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample	=	0.124272	=	0.153792	03 - MGD									0		99/99 - Continuous	RC - Recorder (auto)	
					Permit Req.	<=	0.288 30DA AVG		Req Mon DAILY MX	03 - MGD											99/99 - Continuous	RC - Recorder (auto)	
					Value NODI																		
51202	Sulfide-hydrogen sulfide [undissociated]	1 - Effluent Gross	0	--	Sample																		
					Permit Req.										<	0.04			19 - mg/L	0	02/30 - Twice Per Month	CP - Composite	
					Value NODI											Req Mon 30DA AVG			19 - mg/L		02/30 - Twice Per Month	CP - Composite	
51202	Sulfide-hydrogen sulfide [undissociated]	P - See Comments	0	--	Sample																		
					Permit Req.											<	0.04			19 - mg/L	0	02/30 - Twice Per Month	CP - Composite
					Value NODI												Req Mon ROLL AVG			19 - mg/L		02/30 - Twice Per Month	CP - Composite
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample																		
					Permit Req.											<	0.1			28 - ug/L	0	02/30 - Twice Per Month	CP - Composite
					Value NODI												Req Mon 30DA AVG			28 - ug/L		02/30 - Twice Per Month	CP - Composite
84066	Oil and grease visual	1 - Effluent Gross	0	--	Sample			=	0.0	9P - N=0;Y=1									0	05/WK - Five Per Week		VI - Visual	
					Permit Req.				Req Mon INST MAX	9P - N=0;Y=1											05/WK - Five Per Week	VI - Visual	
					Value NODI																		

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

Parameter		Monitoring Location	Field	Type	Description	Acknowledge
Code	Name					
00978	Arsenic, total recoverable	1 - Effluent Gross	Quality or Concentration Sample Value 2	Soft	The provided sample value is outside the permit limit. Please verify that the value you have provided is correct.	Yes

Comments

Attachments

Name		Type	Size
2025_06_Schwartzwalder_Outfall_001A_Cover_Letter.pdf		pdf	242956.0
2025_06_Schwartzwalder_Outfall_001A_Results_5.pdf		pdf	1472451.0
2025_06_Schwartzwalder_Outfall_001A_Results_3.pdf		pdf	1301687.0
2025_06_Schwartzwalder_Outfall_001A_Results_2.pdf		pdf	2254684.0
2025_06_Schwartzwalder_Outfall_001A_Results_1.pdf		pdf	1879474.0
2025_06_Schwartzwalder_Outfall_001A_Results_4.pdf		pdf	2003147.0
2025_06_Schwartzwalder_Outfall_001A_Results_7.pdf		pdf	1777458.0
2025_06_Schwartzwalder_Outfall_001A_Results_6.pdf		pdf	1741625.0
Report Last Saved By			
Colo Div of Reclamation, Mining and Safety			
User:	pdelaney@alexcoresource.com		
Name:	Patrick Delaney		
E-Mail:	pdelaney@blackfoxmining.com		
Date/Time:	2025-07-28 18:08 (Time Zone: -06:00)		
Report Last Signed By			
User:	pdelaney@alexcoresource.com		
Name:	Patrick Delaney		
E-Mail:	pdelaney@blackfoxmining.com		
Date/Time:	2025-07-28 18:14 (Time Zone: -06:00)		



ANALYTICAL SUMMARY REPORT

June 19, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25060769 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 3 samples for Linkan Engineering on 6/9/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25060769-001	Outfall 001A	06/05/25 13:22	06/09/25	Aqueous	Chemical Oxygen Demand Preparation for COD testing HACH 8000
B25060769-002	Outfall 001A	06/05/25 13:22	06/09/25	Aqueous	Solids, Total Suspended
B25060769-003	Outfall 001A	06/06/25 14:04	06/09/25	Aqueous	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: Linkan Engineering
Project: Schwartzwalder Mine
Work Order: B25060769

Revised Date: 06/19/25

Report Date: 06/17/25

CASE NARRATIVE

"J" qualified analyte concentrations are below the laboratory minimum recommended Reporting Limit (RL) and above the calculated method detection limit (MDL). The laboratory reporting limits are based on the lowest calibration standard for the method and are set at levels which can be reliably quantitated. Metals reporting limits are based on the MDL and through examination of blank performance. MDL's are statistically calculated values determined through analysis of a clean sample matrix.

Inorganic analytes reported with "J" qualifiers should be verified against the corresponding method blank. Inorganic "J" quantitations near the MDL may be suspect due to possible method background levels, sample matrix effects, and/or daily variability in instrument signal-to-noise levels.

Revised Date: 6/19/2025

Revised Sample(s): Outfall 001A (B25060769-001)

On 6/19/25 a request was received from Chris Prosper at Linkan Engineering to revise this workorder by updating the following:

Project ID changed from Not Indicated to Schwartzwalder Mine

B25060769-001 sample ID changed from COD Outfall to Outfall 001A

B25060769-002 sample ID changed from TSS Outfall-1 to Outfall 001A

B25060769-003 sample ID changed from TSS Outfall-2 to Outfall 001A.

The collection time for B25060769-001 and B25060769-002 has been updated from 07:22 to 13:22.

The collection date for B25060769-003 has been updated from 06/05/25 to 06/06/25 (indicated on the COC).

The report has been revised and replaces the previously issued report dated 6/17/2025 in its entirety.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25060769-001
Client Sample ID: Outfall 001A

Revised Date: 06/19/25
Report Date: 06/17/25
Collection Date: 06/05/25 13:22
DateReceived: 06/09/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		5		E410.4	06/11/25 12:54 / jaw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25060769-002
Client Sample ID: Outfall 001A

Revised Date: 06/19/25
Report Date: 06/17/25
Collection Date: 06/05/25 13:22
DateReceived: 06/09/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	0.8	mg/L	J	10		A2540 D	06/09/25 13:35 / pjw

**Report
Definitions:**

RL - Analyte Reporting Limit
QCL - Quality Control 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: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25060769-003
Client Sample ID: Outfall 001A

Revised Date: 06/19/25
Report Date: 06/17/25
Collection Date: 06/06/25 14:04
DateReceived: 06/09/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	0.7	mg/L	J	10		A2540 D	06/09/25 13:35 / pjw

**Report
Definitions:**

RL - Analyte Reporting Limit
QCL - Quality Control 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: B25060769

Report Date: 06/16/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D										Batch: TSS20250609A
Lab ID: MBLK_20250609-2		Method Blank					Run: BAL #30_250609A			06/09/25 09:43
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: LCS_20250609-2										Run: BAL #30_250609A
Solids, Total Suspended TSS @ 105 C		105	mg/L	25	105	80	120			06/09/25 09:43
Lab ID: B25060753-001BDUP										Run: BAL #30_250609A
Solids, Total Suspended TSS @ 105 C		46.4	mg/L	10				7.1	10	06/09/25 13:35

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25060769

Report Date: 06/16/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E410.4										Batch: 200493
Lab ID: MB-200493		Method Blank					Run: SPEC3_250611C			06/11/25 12:54
Oxygen Demand, Chemical (COD)		ND	mg/L	3						
Lab ID: LCS-200493										06/11/25 12:54
Oxygen Demand, Chemical (COD)		23.8	mg/L	5.0	97	90	110			
Lab ID: B25060789-001DMS										06/11/25 12:54
Oxygen Demand, Chemical (COD)		139	mg/L	10	98	90	110			
Lab ID: B25060789-001DMSD										06/11/25 12:54
Oxygen Demand, Chemical (COD)		140	mg/L	10	100	90	110	0.7	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Linkan Engineering

B25060769

Login completed by: Natasha L. Anthony

Date Received: 6/9/2025

Reviewed by: cjones

Received by: EAH

Reviewed Date: 6/16/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	13.9°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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



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Chain of Custody & Analytical Request Record

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www.energylab.com

Account Information (Billing Information)

Company Name	Linkan
Contact	Chris Prosper
Phone	775-777-8003
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89807
Email	AP@linkan.com
Receive Invoice	<input type="checkbox"/> Hard Copy <input type="checkbox"/> Email
Purchase Order	17287
Quote	187916

Report Information (if different than Account Information)

Company Name	Linkan
Contact	Alex Schrieber
Phone	775-397-6779
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89807
Email	
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 checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other

Comments

755 EPOD - Weekly samples
Please email report
and EDD results to:
chris.prosper@linkan.com
alex.schrieber@linkan.com
peter.hager@stateco.us

Project Information

Project Name, PWSID, Permit, etc.	
Sampler Name	
Sample Origin State	
EPA/State Compliance	<input type="checkbox"/> Yes <input 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)	

Analysis Requested

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

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.)	Date	Time	Number of Containers	Matrix (See Codes Above)	RUSH TAT	ELI LAB ID Laboratory Use Only
1 2720 - Outfall	06/07/25	01:20 pm	1	W		155600749
2 755 - Outfall - 1	06/07/25	01:22 pm	1	W		
3 755 - Outfall - 2	06/07/25	02:04 pm	1	W		
4						
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) Alexander Schrieber	Date/Time 06/06/2025	Signature <i>Alex Schrieber</i>
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N
Received by (print) Elizabeth Linton	Date/Time 06/09/25	Signature <i>Elizabeth Linton</i>	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.



ANALYTICAL SUMMARY REPORT

June 23, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25061225 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 2 samples for Linkan Engineering on 6/12/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25061225-001	Outfall 001A	06/09/25 14:16	06/12/25	Aqueous	Solids, Total Suspended
B25061225-002	Outfall 001A	06/11/25 14:50	06/12/25	Aqueous	Chemical Oxygen Demand Preparation for COD testing HACH 8000 Solids, Total Dissolved Solids, Total Suspended

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: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061225-001
Client Sample ID: Outfall 001A

Report Date: 06/23/25
Collection Date: 06/09/25 14:16
DateReceived: 06/12/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/13/25 09:44 / pjw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061225-002
Client Sample ID: Outfall 001A

Report Date: 06/23/25
Collection Date: 06/11/25 14:50
DateReceived: 06/12/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/13/25 09:44 / pjw
Solids, Total Dissolved TDS @ 180 C	92	mg/L		20		A2540 C	06/13/25 14:10 / etv
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		5		E410.4	06/13/25 15:12 / fap

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

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



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061225

Report Date: 06/23/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS20250613C
Lab ID: MBLK_20250613-6		Method Blank					Run: Bal #30_250613D			06/13/25 14:09
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	20						
Lab ID: LCS_20250613-4										06/13/25 14:09
Solids, Total Dissolved TDS @ 180 C		929	mg/L	25	93	90	110			
Lab ID: B25061181-001ADUP										06/13/25 14:09
Solids, Total Dissolved TDS @ 180 C		517	mg/L	25				0.6	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061225

Report Date: 06/23/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D										Batch: TSS20250613A
Lab ID: MBLK_20250613-4		Method Blank					Run: BAL #30_250613B			06/13/25 09:42
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: LCS_20250613-2										Run: BAL #30_250613B
Solids, Total Suspended TSS @ 105 C		102	mg/L	25	102	80	120			06/13/25 09:43
Lab ID: B25061153-001BDUP										Run: BAL #30_250613B
Solids, Total Suspended TSS @ 105 C		14.0	mg/L	10				9.3	10	06/13/25 09:44

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061225

Report Date: 06/23/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E410.4										Analytical Run: SPEC3_250613B
Lab ID: CCV-200579										Continuing Calibration Verification Standard
Oxygen Demand, Chemical (COD)										06/13/25 15:12
		51.1	mg/L	5.0	102	90	110			
Method: E410.4										Batch: 200579
Lab ID: MB-200579										Method Blank
Oxygen Demand, Chemical (COD)										Run: SPEC3_250613B
		ND	mg/L	3						06/13/25 15:11
Lab ID: LCS-200579										Laboratory Control Sample
Oxygen Demand, Chemical (COD)										Run: SPEC3_250613B
		23.9	mg/L	5.0	98	90	110			06/13/25 15:11
Lab ID: B25061225-002CMS										Sample Matrix Spike
Oxygen Demand, Chemical (COD)										Run: SPEC3_250613B
		23.6	mg/L	5.0	97	90	110			06/13/25 15:12
Lab ID: B25061225-002CMSD										Sample Matrix Spike Duplicate
Oxygen Demand, Chemical (COD)										Run: SPEC3_250613B
		23.3	mg/L	5.0	95	90	110	1.4	10	06/13/25 15:12

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Linkan Engineering

B25061225

Login completed by: Leslie S. Cadreau

Date Received: 6/12/2025

Reviewed by: cindy

Received by: SRG

Reviewed Date: 6/21/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	5.6°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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



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Chain of Custody & Analytical Request Record

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Page 1 of 1

Account Information (Billing information)

Company/Name Linkan	
Contact Chris Prosper	
Phone 775-777-8003	
Mailing Address 2720 Ruby Vista Dr	
City, State, Zip Elko, NV 89801	
Email AP@linkan.com	
Receive Invoice <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email <input type="checkbox"/> Email	
Purchase Order 25-0152	Quote H17287

Project Information

Project Name, PWSID, Permit, etc. Schwartzwalder Mine	
Sampler Name <i>Byproduct handling</i>	Sampler Phone 7/238/6169
Sample Origin State Colorado	EPA/State Compliance <input type="checkbox"/> Yes <input 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)	

Report Information (if different than Account Information)

Company/Name Linkan	
Contact Alex Schwiebert	
Phone 775-397-6779	
Mailing Address 2720 Ruby Vista Dr	
City, State, Zip Elko, NV 89801	
Email see comments	
Receive Report <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email <input type="checkbox"/> Email	
Special Report/Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDDIET (contact laboratory) <input type="checkbox"/> Other	

Comments

Outfall 001A - Weekly Sample
+ Outfall 001A - Quarterly TDS
Please email Report and EDD results to:
chris.prosper@linkan.com
adam.billin@linkan.com
alex.schwiebert@linkan.com
peter.hays@state.co.us
Times per container 5.
26-06/12/25

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Time	Matrix Number of Containers (See Codes Above)	Analysis Requested						Total Suspended Solids	Chemical Oxygen Demand	Total Dissolved Solids	See Attached	ELI LAB ID RUSH TAT Laboratory Use Only	
				A - Air	W - Water	S - Solids	V - Vegetation	B - Bioassay	O - Oil						DW - Drinking Water
1 Outfall 001A	6/9/25	14:10	1							X					
2 Outfall 001A	6/11/25	14:50	2							X					
3 Outfall 001A	6/11/25	↓	1								X				
		26-06/12/25													
4															
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) <i>Byproduct handling</i>	Date/Time 6/10/25	Signature <i>[Signature]</i>
	Relinquished by (print)	Date/Time	Signature
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N
	Receipt Temp °C	Temp Blank Y N	On Ice Y N
LABORATORY USE ONLY			
Received by (print) <i>See attached</i>		Date/Time 6/12/25 10:35	Signature <i>[Signature]</i>
Payment Type CC 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.



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 406.252.6325 • Casper, WY 307.235.0515 • Gillette, WY 307.686.7175 • Helena, MT 406.442.0711



BOTTLE ORDER 193743

SHIPPED Linkan Engineering

TO:



To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us

Contact: Chris Prosper

400 Corporate Circle, Suite H
Golden CO 80401

Phone: (719) 247-0564

Project: Schwartzwalder Mine - Outfall 001A Quarterly

Order Created by: Yvonna E. Smith

Shipped From: Billings, MT

Ship Date: 4/17/2025

VIA: Ground

Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
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Outfall 001A Quarterly

1 Liter Plastic	1	A2540 C	Solids, Total Dissolved				1
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Comments

☒ HNO3 - Nitric Acid ☒ H2SO4 - Sulfuric Acid ☒ NaOH - Sodium Hydroxide
☒ ZnAc - Zinc Acetate ☒ HCl - Hydrochloric Acid ☒ H3PO4 - Phosphoric Acid

We strongly suggest that the samples are shipped the same day as they are collected.

Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets

Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.

Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BO#: 193743

1 of 1



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BOTTLE ORDER 193742

SHIPPED Linkan Engineering

TO:



To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us

Contact: Chris Prosper

400 Corporate Circle, Suite H

Golden CO 80401

Phone: (719) 247-0564

Project: Schwartzwalder Mine-Outfall 001A Monthly + Weekly

Order Created by: Yvonna E. Smith

Shipped From: Billings, MT

Ship Date: 4/17/2025

VIA: Ground

Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
------------------	------------------	--------	-------	--------------------	--------------	-------	-------------

Outfall 001A Weekly COD (4 Sets)

500 mL Plastic	1	E410.4 HACH 8000	Chemical Oxygen Demand Preparation for COD testing HACH 8000		<input checked="" type="checkbox"/> H2SO4		1
----------------	---	---------------------	---	--	---	--	---

Outfall 001A Three Times Weekly TSS (12 Sets)

1 Liter Plastic Wide Mouth	1	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
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Outfall 001A Bi-Weekly (2 Sets)

250 mL Plastic	1	A3500-Cr B E300.0	Chromium, Hexavalent Anions by Ion Chromatography	24.00 hrs			1
250 mL Plastic	1	E200.7_8	Metals by ICP/ICPMS, Dissolved		<input checked="" type="checkbox"/> HNO3	Filter before preservation	1
250 mL Plastic	1	E200.7_8	Metals by ICP/ICPMS, Total Recoverable		<input checked="" type="checkbox"/> HNO3		1
		Calculation E245.1	Chromium, Total Recoverable Trivalent Mercury, Total				
		E200.2	Metals Digestion by E200.2				
		E245.1	Mercury Digestion by E245.1				

BO#: 193742

1 of 2

250 mL Plastic	1	E200.7_8 MCAWW	Metals by ICP/ICPMS, Potentially Dissolved Preparation, Potentially Dissolved Filtration	<input checked="" type="checkbox"/> HNO3	1
500 mL Amber Plastic	1	Kelada-01	Cyanide, Weak Acid Dissociable	<input checked="" type="checkbox"/> NaOH	1
250 mL Plastic	1	A4500-S D	Sulfide, Methylene Blue Colorimetric	<input checked="" type="checkbox"/> ZnAc <input checked="" type="checkbox"/> NaOH	1
1 Gallon Plastic	1	E903.0	Radium-226, Dissolved	<input checked="" type="checkbox"/> HNO3	1
1 Gallon Plastic	1	A7500-RA E903.0 RA-05	Radium 226 + Radium 228 Radium 226, Total Radium 228, Total	<input checked="" type="checkbox"/> HNO3	1

Extra Weekly Supplies

1 Liter Plastic Wide Mouth	2	A2540-D	Solids, Total Suspended		1
500 mL Plastic	1	E410.4	Chemical Oxygen Demand	<input type="checkbox"/> H2SO4	1

Comments

We strongly suggest that the samples are shipped the same day as they are collected.

☒ HNO3 - Nitric Acid ☐ H2SO4 - Sulfuric Acid ☒ NaOH - Sodium Hydroxide
☒ ZnAc - Zinc Acetate ☒ HCl - Hydrochloric Acid ☐ H3PO4 - Phosphoric Acid

Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets

Corrosive Chemicals- Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide- Zinc Acetate is a skin irritant.

Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BO#: 193742

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ANALYTICAL SUMMARY REPORT

June 27, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25061769 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 3 samples for Linkan Engineering on 6/19/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25061769-001	Outfall 001A	06/13/25 14:45	06/19/25	Aqueous	Solids, Total Suspended
B25061769-002	Outfall 001A	06/16/25 14:50	06/19/25	Aqueous	Same As Above
B25061769-003	Outfall 001A	06/18/25 14:10	06/19/25	Aqueous	Chemical Oxygen Demand Preparation for COD testing HACH 8000 Solids, Total Suspended

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: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061769-001
Client Sample ID: Outfall 001A

Report Date: 06/27/25
Collection Date: 06/13/25 14:45
Date Received: 06/19/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/20/25 10:01 / pjw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061769-002
Client Sample ID: Outfall 001A

Report Date: 06/27/25
Collection Date: 06/16/25 14:50
Date Received: 06/19/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/20/25 10:01 / pjw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061769-003
Client Sample ID: Outfall 001A

Report Date: 06/27/25
Collection Date: 06/18/25 14:10
Date Received: 06/19/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/20/25 10:01 / pjw
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		5		E410.4	06/20/25 14:16 / fap

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

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



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061769

Report Date: 06/25/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D								Batch: TSS20250620A		
Lab ID: MBLK_20250620-5	Method Blank					Run: BAL #30_250620D		06/20/25 09:59		
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: LCS_20250620-3	Laboratory Control Sample					Run: BAL #30_250620D		06/20/25 09:59		
Solids, Total Suspended TSS @ 105 C		106	mg/L	25	106	80	120			
Lab ID: B25061772-001BDUP	Sample Duplicate					Run: BAL #30_250620D		06/20/25 10:01		
Solids, Total Suspended TSS @ 105 C		14.3	mg/L	10				2.3	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061769

Report Date: 06/25/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E410.4								Analytical Run: SPEC3_250620B		
Lab ID: CCV-200809	Continuing Calibration Verification Standard									06/20/25 14:16
Oxygen Demand, Chemical (COD)		50.2	mg/L	5.0	100	90	110			
Method: E410.4								Batch: 200809		
Lab ID: MB-200809	Method Blank					Run: SPEC3_250620B			06/20/25 14:16	
Oxygen Demand, Chemical (COD)		ND	mg/L	3						
Lab ID: LCS-200809	Laboratory Control Sample					Run: SPEC3_250620B			06/20/25 14:16	
Oxygen Demand, Chemical (COD)		25.3	mg/L	5.0	104	90	110			
Lab ID: B25061769-003BMS	Sample Matrix Spike					Run: SPEC3_250620B			06/20/25 14:16	
Oxygen Demand, Chemical (COD)		22.8	mg/L	5.0	93	90	110			
Lab ID: B25061769-003BMSD	Sample Matrix Spike Duplicate					Run: SPEC3_250620B			06/20/25 14:16	
Oxygen Demand, Chemical (COD)		24.4	mg/L	5.0	100	90	110	7.1	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Linkan Engineering

B25061769

Login completed by: Darcy Chirrick

Date Received: 6/19/2025

Reviewed by: lcadreau

Received by: SRG

Reviewed Date: 6/26/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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 analysis was not selected on the chain of custody. The samples were logged in per the attached bottle order. LSC 06/26/25

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



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Chain of Custody & Analytical Request Record

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Page 1 of 1

Account Information (Billing information)

Company/Name	Linkan
Contact	Chris Prosper
Phone	775-777-8003
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	AP@linkan.com
Receive Invoice	<input type="checkbox"/> Hard Copy <input type="checkbox"/> Email
Purchase Order	Quote H17287
25-0152	Bottle Order 186843

Report Information (if different than Account Information)

Company/Name	Linkan
Contact	Alex Schwiebert
Phone	775-397-6779
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	see comments
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

Outfall 001A - Weekly Sample

Please email Report and EDD results to:
chris.prosper@linkan.com
adam.billin@linkan.com
alex.schwiebert@linkan.com
peter.hays@state.co.us

Project Information

Project Name, PWSID, Permit, etc.	Schwartzwalder Mine
Sampler Name	Byant Accardo
Sample Origin	State of Colorado
EPA/State Compliance	<input checked="" type="checkbox"/> Yes <input 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) 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

Total Suspended Solids	
Chemical Oxygen Demand	

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		Number of Containers	Matrix (See Codes Above)	TAT	ELI LAB ID Laboratory Use Only
	Date	Time				
1 Outfall 001A	6/13/25	1445	1	W		628061769
2 Outfall 001A	6/16/25	1450	1	W		
3 Outfall 001A	6/18/25	1410	2	W		
4						
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) Byant Accardo	Signature [Signature]	Date/Time 6/18/25/6:00						
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N	Payment Type CC 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.



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Billings, MT 406.252.6325 • Casper, WY 307.235.0515 • Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

BOTTLE ORDER 186843



***** This is a recurring bottle order. If you have received this in error please contact your laboratory *****

SHIPPED Linkan Engineering
TO:

To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us



Contact: Brendan Smith
400 Corporate Circle, Suite H
Golden CO 80401
Phone: (775) 389-5582
Project: Schwartzwalder Mine - Weekly

Order Created by: Yvonna E. Smith
Shipped From: Billings, MT
Ship Date: 9/10/2024
VIA: Ground
Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
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Outfall 001A Weekly COD

500 mL Plastic	1	E410.4 HACH 8000	Chemical Oxygen Demand Preparation for COD testing HACH 8000		<input checked="" type="checkbox"/> H2SO4		1
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Outfall 001A 3 Times Weekly TSS (3 Sets)

1 Liter Plastic Wide Mouth	1	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
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Comments

<input checked="" type="checkbox"/> HNO3 - Nitric Acid	<input checked="" type="checkbox"/> H2SO4 - Sulfuric Acid	<input checked="" type="checkbox"/> NaOH - Sodium Hydroxide
<input checked="" type="checkbox"/> ZnAc - Zinc Acetate	<input checked="" type="checkbox"/> HCl - Hydrochloric Acid	<input checked="" type="checkbox"/> H3PO4 - Phosphoric Acid

We strongly suggest that the samples are shipped the same day as they are collected.

Material Safety Data Sheets(MSDS) Available @ Energylab.com ->Services -> MSDS Sheets

Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.

Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BO#: 186843

1 of 1



ANALYTICAL SUMMARY REPORT

July 02, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25062376 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 3 samples for Linkan Engineering on 6/26/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25062376-001	Outfall 001A	06/20/25 14:45	06/26/25	Aqueous	Solids, Total Suspended
B25062376-002	Outfall 001A	06/23/25 13:30	06/26/25	Aqueous	Same As Above
B25062376-003	Outfall 001A	06/25/25 14:00	06/26/25	Aqueous	Chemical Oxygen Demand Preparation for COD testing HACH 8000 Solids, Total Suspended

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: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25062376-001
Client Sample ID: Outfall 001A

Report Date: 07/02/25
Collection Date: 06/20/25 14:45
DateReceived: 06/26/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/27/25 11:13 / pjw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25062376-002
Client Sample ID: Outfall 001A

Report Date: 07/02/25
Collection Date: 06/23/25 13:30
Date Received: 06/26/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/27/25 11:13 / pjw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25062376-003
Client Sample ID: Outfall 001A

Report Date: 07/02/25
Collection Date: 06/25/25 14:00
Date Received: 06/26/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/27/25 11:13 / pjw
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	4	mg/L	J	5		E410.4	06/27/25 15:21 / fap

**Report
Definitions:**

RL - Analyte Reporting Limit
QCL - Quality Control 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: B25062376

Report Date: 07/02/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D									Batch: TSS20250627A	
Lab ID: MBLK_20250627-5	Method Blank					Run: BAL #30_250627A			06/27/25 11:12	
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: LCS_20250627-3	Laboratory Control Sample					Run: BAL #30_250627A			06/27/25 11:12	
Solids, Total Suspended TSS @ 105 C		98.0	mg/L	25	98	80	120			
Lab ID: B25062349-003BDUP	Sample Duplicate					Run: BAL #30_250627A			06/27/25 11:13	
Solids, Total Suspended TSS @ 105 C		5.40	mg/L	10				10	J	

Qualifiers:

RL - Analyte Reporting Limit

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 Billings, MT Branch

Work Order: B25062376

Report Date: 07/02/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E410.4 Analytical Run: SPEC3_250627B										
Lab ID: CCV-201006 Continuing Calibration Verification Standard 06/27/25 15:21										
Oxygen Demand, Chemical (COD)		53.7	mg/L	5.0	107	90	110			
Method: E410.4 Batch: 201006										
Lab ID: MB-201006 Method Blank Run: SPEC3_250627B 06/27/25 15:20										
Oxygen Demand, Chemical (COD)		ND	mg/L	3						
Lab ID: LCS-201006 Laboratory Control Sample Run: SPEC3_250627B 06/27/25 15:20										
Oxygen Demand, Chemical (COD)		23.3	mg/L	5.0	95	90	110			
Lab ID: B25062319-004CMS Sample Matrix Spike Run: SPEC3_250627B 06/27/25 15:21										
Oxygen Demand, Chemical (COD)		50.7	mg/L	5.0	108	90	110			
Lab ID: B25062319-004CMSD Sample Matrix Spike Duplicate Run: SPEC3_250627B 06/27/25 15:21										
Oxygen Demand, Chemical (COD)		51.1	mg/L	5.0	110	90	110	0.7	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Linkan Engineering

B25062376

Login completed by: Laura M. Barlage

Date Received: 6/26/2025

Reviewed by: jmillier

Received by: NLA

Reviewed Date: 7/2/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	6.0°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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



www.energylab.com

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Report Information (if different than Account Information)

Company/Name	Linkan
Contact	Alex Schwiebert
Phone	775-397-6779
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	see comments
Receive Report	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Special Report/Formals:	
<input type="checkbox"/> LEVEL IV	<input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other

Comments

Comments

Outfall 001A - Weekly Sample

Please Email Report and EDD results to:

chris.prosper@linkan.com
edam.billin@linkan.com
alex.schwiebert@linkan.com
peter.hays@state.co.us

Project Information

Project Name, PWSID, Permit, etc.	Schwartzwalder Mine	
Sampler Name	Bryant Arceve	Sampler Phone 766-238-6169
Sample Origin	State	Colorado
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"/> 11m/2" Runproduct Material (Can Only Y be Submitted to ELI/Casper Location)		
EPA/State Compliance		<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Matrix Codes	
A -	Air
W -	Water
S -	Soils/ Solids
V -	Vegetation
B -	Bioassay
O -	Oil
DW -	Drinking Water

Analysis Requested

Project Name, PWSID, Permit, etc. Schwartzwalder Mine													
Sampler Name <i>Bryant Avenue</i>		Sampler Phone <i>788-238-6169</i>											
Sample Origin State Colorado		EPA/State Compliance <input checked="" type="checkbox"/> Yes <input 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)													
Sample Identification (Name, Location, Interval, etc.)		Collection Date _____ Time _____		Number of Containers		Matrix (See Codes Above)		Total Suspended Solids		Chemical Oxygen Demand		See Attached	
1	Outfall 001A	<i>6/20/25 1445</i>		1		<i>W</i>						●	
2	Outfall 001A	<i>6/23/25 1330</i>		1		<i>W</i>						●	
3	Outfall 001A	<i>6/25/25 1400</i>		2		<i>W</i>						●	
4													
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)	Signature	Date/Time	Received by (print)	Date/Time	Signature
	Relinquished by (print)	Signature	Date/Time	Received by Laboratory (print)	Date/Time	Signature
LABORATORY USE ONLY						
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N
					Payment Type CC 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.



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www.energylab.com

Billings, MT 406.252.6325 • Casper, WY 307.235.0515 • Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

BOTTLE ORDER 193742



SHIPPED Linkan Engineering
TO:

To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us



Contact: Chris Prosper
400 Corporate Circle, Suite H
Golden CO 80401
Phone: (719) 247-0564
Project: Schwartzwalder Mine-Outfall 001A Monthly + Weekly

Order Created by: Yvonna E. Smith
Shipped From: Billings, MT
Ship Date: 4/17/2025
VIA: Ground
Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
------------------	------------------	--------	-------	--------------------	--------------	-------	-------------

Outfall 001A Weekly COD (4 Sets)

500 mL Plastic	1	E410.4 HACH 8000	Chemical Oxygen Demand Preparation for COD testing HACH 8000		H2SO4		1
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Outfall 001A Three Times Weekly TSS (12 Sets) *







1 Liter Plastic Wide Mouth	1	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
----------------------------	---	---------	-------------------------	--	--	------------------------------------	---

Outfall 001A Bi-Weekly (2 Sets)

250 mL Plastic	1	A3500-Cr B E300.0	Chromium, Hexavalent Anions by Ion Chromatography	24.00 hrs			1
250 mL Plastic	1	E200.7_8	Metals by ICP/ICPMS, Dissolved		HNO3	Filter before preservation	1
250 mL Plastic	1	E200.7_8 Calculation E245.1 E200.2 E245.1	Metals by ICP/ICPMS, Total Recoverable Chromium, Total Recoverable Trivalent Mercury, Total Metals Digestion by E200.2 Mercury Digestion by E245.1		HNO3		1

BO#: 193742







1 of 2

250 mL Plastic	1	E200.7_8 MCAWW	Metals by ICP/ICPMS, Potentially Dissolved Preparation, Potentially Dissolved Filtration		 HNO3	1
500 mL Amber Plastic	1	Kelada-01	Cyanide, Weak Acid Dissociable		 NaOH	1
250 mL Plastic	1	A4500-S D	Sulfide, Methylene Blue Colorimetric		 ZnAc  NaOH	1
1 Gallon Plastic	1	E903.0	Radium 226, Dissolved		 HNO3	1
1 Gallon Plastic	1	A7500-RA E903.0 RA-05	Radium 226 + Radium 228 Radium 226, Total Radium 228, Total		 HNO3	1

Extra Weekly Supplies

1 Liter Plastic Wide Mouth	2	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
500 mL Plastic	1	E410.4	Chemical Oxygen Demand		 H2SO4		1

Comments

 HNO3 - Nitric Acid  H2SO4 - Sulfuric Acid  NaOH - Sodium Hydroxide
 ZnAc - Zinc Acetate  HCl - Hydrochloric Acid  H3PO4 - Phosphoric Acid

We strongly suggest that the samples are shipped the same day as they are collected.

Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets

Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.

Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BO#: 193742

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ANALYTICAL SUMMARY REPORT

July 14, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25070213 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 3 samples for Linkan Engineering on 7/2/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25070213-001	Outfall 001A	06/27/25 14:15	07/02/25	Aqueous	Solids, Total Suspended
B25070213-002	Outfall 001A	06/30/25 14:00	07/02/25	Aqueous	Same As Above
B25070213-003	Outfall 001A	07/01/25 14:10	07/02/25	Aqueous	Chemical Oxygen Demand Preparation for COD testing HACH 8000 Solids, Total Suspended

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: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25070213-001
Client Sample ID: Outfall 001A

Report Date: 07/14/25
Collection Date: 06/27/25 14:15
Date Received: 07/02/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	07/03/25 09:34 / pjw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25070213-002
Client Sample ID: Outfall 001A

Report Date: 07/14/25
Collection Date: 06/30/25 14:00
Date Received: 07/02/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	07/03/25 09:34 / pjw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25070213-003
Client Sample ID: Outfall 001A

Report Date: 07/14/25
Collection Date: 07/01/25 14:10
Date Received: 07/02/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	07/03/25 09:34 / pjw
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		5		E410.4	07/03/25 13:58 / fap

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

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



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25070213

Report Date: 07/14/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D								Batch: TSS20250703A		
Lab ID: MBLK_20250703-3	Method Blank					Run: BAL #30_250703B			07/03/25 09:34	
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: LCS_20250703-1	Laboratory Control Sample					Run: BAL #30_250703B			07/03/25 09:34	
Solids, Total Suspended TSS @ 105 C		101	mg/L	25	101	80	120			
Lab ID: B25070196-001CDUP	Sample Duplicate					Run: BAL #30_250703B			07/03/25 09:34	
Solids, Total Suspended TSS @ 105 C		75.8	mg/L	10				4.6	10	
Lab ID: B25070216-005BDUP	Sample Duplicate					Run: BAL #30_250703B			07/03/25 09:34	
Solids, Total Suspended TSS @ 105 C		85.0	mg/L	12				7.4	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25070213

Report Date: 07/14/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E410.4										
Analytical Run: SPEC3_250703B										
Lab ID: CCV-201171	Continuing Calibration Verification Standard									
Oxygen Demand, Chemical (COD)		49.2	mg/L	5.0	98	90	110			07/03/25 13:58
Method: E410.4										
Batch: 201171										
Lab ID: MB-201171	Method Blank									
Oxygen Demand, Chemical (COD)		ND	mg/L	3				Run: SPEC3_250703B		07/03/25 13:58
Lab ID: LCS-201171	Laboratory Control Sample									
Oxygen Demand, Chemical (COD)		23.1	mg/L	5.0	95	90	110			07/03/25 13:58
Lab ID: B25070255-001CMS	Sample Matrix Spike									
Oxygen Demand, Chemical (COD)		25.6	mg/L	5.0	105	90	110			07/03/25 13:58
Lab ID: B25070255-001CMSD	Sample Matrix Spike Duplicate									
Oxygen Demand, Chemical (COD)		25.3	mg/L	5.0	104	90	110	1.3	10	07/03/25 13:58

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Linkan Engineering

B25070213

Login completed by: Natasha L. Anthony

Date Received: 7/2/2025

Reviewed by: ysmith

Received by: DNH

Reviewed Date: 7/11/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	4.5°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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 chain of custody does not indicate which sample is to be analyzed for chemical oxygen demand analysis. Proceeded with chemical oxygen demand on the sample collected 07/01/25 per the sample containers received. YES



Work Order Receipt Checklist - Continued


Linkan Engineering

B25070213

07/11/25

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.

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Page 1 of 1

Account Information (Billing Information)

Company/Name Linkan	
Contact Chris Prosper	
Phone 775-777-8003	
Mailing Address 2720 Ruby Vista Dr	
City, State, Zip Elko, NV 89801	
Email AP@linkan.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 25-0152	Quote H17287
	Bottle Order 136995

Report Information (if different than Account Information)

Company/Name Linkan	
Contact Alex Schwiebert	
Phone 775-397-6779	
Mailing Address 2720 Ruby Vista Dr	
City, State, Zip Elko, NV 89801	
Email see comments	
Receive Report <input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email	
Special Report/Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

Outfall 001A - Weekly Sample
Please email Report and EDD results to: chris.prosper@linkan.com adam.billin@linkan.com alex.schwiebert@linkan.com peter.hays@state.co.us

Project Information

Project Name, PWSID, Permit, etc. Schwartzwalder Mine	
Sampler Name Robert Acubdo	Sampler Phone 775-7238-6169
Sample Origin State Colorado	EPA/State Compliance <input checked="" type="checkbox"/> Yes <input 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

Total Suspended Solids	
Chemical Oxygen Demand	

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)	See Attached	ELI LAB ID Laboratory Use Only
1 Outfall 001A	6/27/25	1415	1	W	•	95070213
2 Outfall 001A	6/30/25	1400	1	W	•	
3 Outfall 001A	7/1/25	1410	2	W	•	
4						
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) Bryant Acubdo	Date/Time 6/30/25	Signature
	Relinquished by (print)	Date/Time	Signature
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N
	Receipt Temp °C	Temp Blank Y N	On Ice Y N
LABORATORY USE ONLY		Payment Type CC Cash Check	Amount \$
Received by Laboratory (print) J. Schwiebert		Date/Time 6/30/25	Signature
Received by Laboratory (print)		Date/Time	Signature
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.



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Billings, MT 406.252.6325 • Casper, WY 307.235.0515 • Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

BOTTLE ORDER 186995



***** This is a recurring bottle order. If you have received this in error please contact your laboratory *****

SHIPPED TO: Linkan Engineering

To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us



Contact: Brendan Smith
400 Corporate Circle, Suite H
Golden CO 80401
Phone: (775) 389-5582
Project: Schwartzwalder Mine - Weekly

Order Created by: Yvonna E. Smith
Shipped From: Billings, MT
Ship Date: 9/17/2024
VIA: Ground
Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
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Outfall 001A Weekly COD

500 mL Plastic	1	E410.4 HACH 8000	Chemical Oxygen Demand Preparation for COD testing HACH 8000		<input checked="" type="checkbox"/> H2SO4		1
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Outfall 001A 3 Times Weekly TSS (3 Sets)

1 Liter Plastic Wide Mouth	1	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
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Comments

<input checked="" type="checkbox"/> HNO3 - Nitric Acid	<input checked="" type="checkbox"/> H2SO4 - Sulfuric Acid	<input checked="" type="checkbox"/> NaOH - Sodium Hydroxide	We strongly suggest that the samples are shipped the same day as they are collected.
<input checked="" type="checkbox"/> ZnAc - Zinc Acetate	<input checked="" type="checkbox"/> HCl - Hydrochloric Acid	<input checked="" type="checkbox"/> H3PO4 - Phosphoric Acid	
Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets			
Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.			
Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.			

BO#: 186995

1 of 1



ANALYTICAL SUMMARY REPORT

June 30, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25060950 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 1 sample for Linkan Engineering on 6/11/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25060950-001	Outfall 001A	06/10/25 14:50	06/11/25	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Potentially Dissolved Metals by ICP/ICPMS, Total Recoverable Cyanide, Weak Acid Dissociable Chromium, Hexavalent Chromium, Total Recoverable Trivalent Mercury, Total Anions by Ion Chromatography Metals Digestion by E200.2 Preparation, Potentially Dissolved Filtration Mercury Digestion by E245.1 Radium 226 + Radium 228 Radium 226, Dissolved Radium 226, Total Radium 228, Total Sulfide, Methylene Blue Colorimetric

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: Linkan Engineering
Project: Schwartzwalder Mine
Work Order: B25060950

Report Date: 06/30/25

CASE NARRATIVE

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, PO Box 247, Casper, WY, EPA Number WY00002.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25060950-001
Client Sample ID: Outfall 001A

Report Date: 06/30/25
Collection Date: 06/10/25 14:50
Date Received: 06/11/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	0.5	mg/L	J	1		E300.0	06/12/25 04:45 / caa
Sulfate	4	mg/L		1		E300.0	06/12/25 04:45 / caa
Fluoride	ND	mg/L		0.1		E300.0	06/12/25 04:45 / caa
Cyanide, Weak Acid Dissociable	ND	ug/L		1		Kelada-01	06/11/25 14:54 / fap
Sulfide	ND	mg/L		0.04		A4500-S D	06/13/25 12:24 / pmw
METALS, DISSOLVED							
Chromium, Hexavalent	ND	ug/L		10		A3500-Cr B	06/11/25 12:44 / aem
Iron	10	ug/L	J	20		E200.8	06/14/25 13:01 / jks
Manganese	0.4	ug/L	J	1		E200.8	06/14/25 13:01 / jks
METALS, POTENTIALLY DISSOLVED							
Cadmium	ND	ug/L		1		E200.8	06/14/25 13:05 / jks
Copper	0.1	ug/L	JL	0.5		E200.8	06/14/25 13:05 / jks
Nickel	0.1	ug/L	J	5		E200.8	06/14/25 13:05 / jks
Selenium	ND	ug/L		1		E200.8	06/14/25 13:05 / jks
Silver	ND	ug/L	L	0.04		E200.8	06/14/25 13:05 / jks
Zinc	ND	ug/L		10		E200.8	06/14/25 13:05 / jks
METALS, TOTAL RECOVERABLE							
Arsenic	208	ug/L		1		E200.8	06/18/25 00:26 / jks
Chromium	ND	ug/L		5		E200.8	06/18/25 00:26 / jks
Chromium, Trivalent	ND	ug/L		10		Calculation	06/19/25 09:23 / bap
Iron	20	ug/L	J	20		E200.8	06/18/25 00:26 / jks
Uranium	6.9	ug/L		0.3		E200.8	06/18/25 00:26 / jks
METALS, TOTAL							
Antimony	ND	ug/L		1		E200.8	06/18/25 00:26 / jks
Boron	180	ug/L		50		E200.7	06/17/25 18:05 / enb
Mercury	ND	ug/L		0.1		E245.1	06/18/25 13:44 / mjb
Thallium	ND	ug/L		0.5		E200.8	06/19/25 02:57 / jks
RADIONUCLIDES - DISSOLVED							
Radium 226	0.05	pCi/L	U			E903.0	06/23/25 10:05 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	06/23/25 10:05 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	06/23/25 10:05 / eli-ca
RADIONUCLIDES - TOTAL							
Radium 226	0.01	pCi/L	U			E903.0	06/23/25 10:22 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	06/23/25 10:22 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	06/23/25 10:22 / eli-ca
Radium 228	0.3	pCi/L	U			RA-05	06/18/25 13:10 / eli-ca
Radium 228 precision (±)	0.7	pCi/L				RA-05	06/18/25 13:10 / eli-ca
Radium 228 MDC	1.2	pCi/L				RA-05	06/18/25 13:10 / eli-ca
Radium 226 + Radium 228	0.7	pCi/L	U			A7500-RA	06/24/25 12:03 / eli-ca

Report Definitions:
 RL - Analyte Reporting Limit
 QCL - Quality Control Limit
 J - Estimated value - analyte was present but less than the Reporting Limit (RL)
 U - Not detected

MCL - Maximum Contaminant Level
 ND - Not detected at the Reporting Limit (RL)
 L - Lowest available reporting limit for the analytical method used and/or volume submitted



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25060950-001
Client Sample ID: Outfall 001A

Report Date: 06/30/25
Collection Date: 06/10/25 14:50
Date Received: 06/11/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Radium 226 + Radium 228 precision (\pm)	0.7	pCi/L				A7500-RA	06/24/25 12:03 / eli-ca
Radium 226 + Radium 228 MDC	1.2	pCi/L				A7500-RA	06/24/25 12:03 / eli-ca

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

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



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3500-Cr B								Analytical Run: SPEC3_250611B		
Lab ID: CCV	Continuing Calibration Verification Standard			06/11/25 12:44						
Chromium, Hexavalent		0.105	mg/L	0.010	105	90	110			
Method: A3500-Cr B								Batch: R443937		
Lab ID: MBLK	Method Blank			06/11/25 12:44						
Chromium, Hexavalent		ND	mg/L	0.003			Run: SPEC3_250611B			
Lab ID: LCS	Laboratory Control Sample			06/11/25 12:44						
Chromium, Hexavalent		0.107	mg/L	0.010	107	90	110			
Lab ID: B25060950-001AMS	Sample Matrix Spike			06/11/25 12:44						
Chromium, Hexavalent		0.106	mg/L	0.010	106	80	120			
Lab ID: B25060950-001AMSD	Sample Matrix Spike Duplicate			06/11/25 12:44						
Chromium, Hexavalent		0.105	mg/L	0.010	105	80	120	0.7	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: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-S D										Batch: R444083
Lab ID: MBLK		Method Blank					Run: SPEC3_250613A			06/13/25 12:24
Sulfide		ND	mg/L	0.01						
Lab ID: LCS		Laboratory Control Sample					Run: SPEC3_250613A			06/13/25 12:24
Sulfide		0.181	mg/L	0.040	93	85	115			
Lab ID: B25060950-001FMS		Sample Matrix Spike					Run: SPEC3_250613A			06/13/25 12:24
Sulfide		0.190	mg/L	0.040	97	70	130			
Lab ID: B25060950-001FMSD		Sample Matrix Spike Duplicate					Run: SPEC3_250613A			06/13/25 12:24
Sulfide		0.197	mg/L	0.040	101	70	130	4.0	20	
Lab ID: B25060950-001FMS		Sample Matrix Spike					Run: SPEC3_250613A			06/13/25 12:24
Sulfide		0.374	mg/L	0.040	96	70	130			
Lab ID: B25060950-001FMSD		Sample Matrix Spike Duplicate					Run: SPEC3_250613A			06/13/25 12:24
Sulfide		0.398	mg/L	0.040	102	70	130	6.3	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: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0						Analytical Run: IC METROHM 1_250609A				
Lab ID: ICV	3	Initial Calibration Verification Standard								06/09/25 12:27
Chloride		25.3	mg/L	1.0	101	90	110			
Sulfate		102	mg/L	1.0	102	90	110			
Fluoride		1.22	mg/L	0.10	97	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard								06/12/25 02:50
Chloride		25.3	mg/L	1.0	101	90	110			
Sulfate		102	mg/L	1.0	102	90	110			
Fluoride		1.21	mg/L	0.10	97	90	110			
Method: E300.0						Batch: R443847				
Lab ID: ICB	3	Method Blank								Run: IC METROHM 1_250609A 06/09/25 12:44
Chloride		ND	mg/L	0.1						
Sulfate		ND	mg/L	0.7						
Fluoride		ND	mg/L	0.009						
Lab ID: LFB	3	Laboratory Fortified Blank								Run: IC METROHM 1_250609A 06/09/25 13:00
Chloride		25.4	mg/L	1.0	102	90	110			
Sulfate		103	mg/L	1.1	103	90	110			
Fluoride		1.30	mg/L	0.10	104	90	110			
Lab ID: B25060921-001AMS	3	Sample Matrix Spike								Run: IC METROHM 1_250609A 06/12/25 03:23
Chloride		155	mg/L	1.3	103	90	110			
Sulfate		556	mg/L	5.3	105	90	110			
Fluoride		10.9	mg/L	0.10	105	90	110			
Lab ID: B25060921-001AMSD	3	Sample Matrix Spike Duplicate								Run: IC METROHM 1_250609A 06/12/25 03:39
Chloride		157	mg/L	1.3	104	90	110	1.1	20	
Sulfate		560	mg/L	5.3	106	90	110	0.8	20	
Fluoride		11.0	mg/L	0.10	107	90	110	1.1	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: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: Kelada-01								Analytical Run: SFA-202-B_250611A		
Lab ID: ICB	Initial Calibration Verification Standard			06/11/25 13:32						
Cyanide, Weak Acid Dissociable	0.00922	mg/L	0.0010	92	90	110				
Lab ID: CCV								06/11/25 14:34		
Cyanide, Weak Acid Dissociable	0.0101	mg/L	0.0010	101	90	110				
Method: Kelada-01								Batch: R443958		
Lab ID: ICB	Method Blank			Run: SFA-202-B_250611A				06/11/25 13:34		
Cyanide, Weak Acid Dissociable	ND	mg/L	0.0007							
Lab ID: LCS1-ZnCN	Laboratory Control Sample			Run: SFA-202-B_250611A				06/11/25 14:28		
Cyanide, Weak Acid Dissociable	0.00991	mg/L	0.0010	99	90	110				
Lab ID: B25060858-005DMS	Sample Matrix Spike			Run: SFA-202-B_250611A				06/11/25 14:46		
Cyanide, Weak Acid Dissociable	0.0105	mg/L	0.0010	105	80	120				
Lab ID: B25060858-005DMSD	Sample Matrix Spike Duplicate			Run: SFA-202-B_250611A				06/11/25 14:50		
Cyanide, Weak Acid Dissociable	0.00982	mg/L	0.0010	98	80	120	6.8	10		
Lab ID: LFB	Laboratory Fortified Blank			Run: SFA-202-B_250611A				06/11/25 15:00		
Cyanide, Weak Acid Dissociable	0.00954	mg/L	0.0010	95	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: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	E200.7							Analytical Run: ICP205-B_250617A		
Lab ID:	ICV	Continuing Calibration Verification Standard							06/17/25 13:16	
Boron		2.58	mg/L	0.10	103	95	105			
Lab ID:	CCV	Continuing Calibration Verification Standard							06/17/25 17:56	
Boron		2.54	mg/L	0.10	102	90	110			
Method:	E200.7							Batch: 200603		
Lab ID:	MB-200603	Method Blank			Run: ICP205-B_250617A			06/17/25 18:02		
Boron		ND	mg/L	0.008						
Lab ID:	LCS3-200603	Laboratory Control Sample			Run: ICP205-B_250617A			06/17/25 18:03		
Boron		1.07	mg/L	0.10	107	85	115			
Lab ID:	B25060955-006CMS3	Sample Matrix Spike			Run: ICP205-B_250617A			06/17/25 18:18		
Boron		1.11	mg/L	0.050	106	70	130			
Lab ID:	B25060955-006CMSD3	Sample Matrix Spike Duplicate			Run: ICP205-B_250617A			06/17/25 18:19		
Boron		1.11	mg/L	0.050	106	70	130	0.2	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: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS207-B_250613A				
Lab ID: QCS	2	Initial Calibration Verification Standard								06/14/25 11:48
Iron		0.198	mg/L	0.020	99	90	110			
Manganese		0.200	mg/L	0.0050	100	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								06/14/25 11:54
Iron		1.22	mg/L	0.020	94	90	110			
Manganese		0.0488	mg/L	0.0050	98	90	110			
Method: E200.8						Batch: R444116				
Lab ID: LRB	2	Method Blank								Run: ICPMS207-B_250613A 06/13/25 11:56
Iron		ND	mg/L	0.001						
Manganese		ND	mg/L	0.00003						
Lab ID: LFB	2	Laboratory Fortified Blank								Run: ICPMS207-B_250613A 06/13/25 12:14
Iron		5.04	mg/L	0.020	101	85	115			
Manganese		0.0474	mg/L	0.0050	95	85	115			
Lab ID: B25060977-001CMS	2	Sample Matrix Spike								Run: ICPMS207-B_250613A 06/14/25 13:31
Iron		4.81	mg/L	0.020	95	70	130			
Manganese		0.246	mg/L	0.0010	93	70	130			
Lab ID: B25060977-001CMSD	2	Sample Matrix Spike Duplicate								Run: ICPMS207-B_250613A 06/14/25 13:38
Iron		4.70	mg/L	0.020	93	70	130	2.2	20	
Manganese		0.243	mg/L	0.0010	87	70	130	1.2	20	
Method: E200.8						Analytical Run: ICPMS207-B_250618A				
Lab ID: QCS		Initial Calibration Verification Standard								06/19/25 00:56
Thallium		0.0415	mg/L	0.0050	104	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								06/19/25 02:20
Thallium		0.0493	mg/L	0.0050	99	90	110			
Method: E200.8						Batch: 200603				
Lab ID: MB-200603		Method Blank								Run: ICPMS207-B_250618A 06/19/25 02:51
Thallium		ND	mg/L	0.0002						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS208-B_250616A				
Lab ID: QCS	5	Initial Calibration Verification Standard							06/17/25 20:54	
Antimony		0.0411	mg/L	0.0050	103	90	110			
Arsenic		0.0385	mg/L	0.0050	96	90	110			
Chromium		0.0382	mg/L	0.010	95	90	110			
Iron		0.200	mg/L	0.020	100	90	110			
Uranium		0.0393	mg/L	0.00030	98	90	110			
Lab ID: CCV	5	Continuing Calibration Verification Standard							06/17/25 23:11	
Antimony		0.0485	mg/L	0.0050	97	90	110			
Arsenic		0.0472	mg/L	0.0050	94	90	110			
Chromium		0.0464	mg/L	0.010	93	90	110			
Iron		1.25	mg/L	0.020	96	90	110			
Uranium		0.0488	mg/L	0.00030	98	90	110			
Method: E200.8						Batch: 200603				
Lab ID: MB-200603	6	Method Blank				Run: ICPMS208-B_250616A		06/18/25 00:07		
Antimony		ND	mg/L	0.0004						
Arsenic		ND	mg/L	0.0002						
Chromium		ND	mg/L	0.0005						
Iron		0.007	mg/L	0.006						
Thallium		ND	mg/L	0.0003						
Uranium		ND	mg/L	0.00003						
Lab ID: LCS4-200603	6	Laboratory Control Sample				Run: ICPMS208-B_250616A		06/18/25 00:13		
Antimony		0.100	mg/L	0.0050	100	85	115			
Arsenic		0.0930	mg/L	0.0010	93	85	115			
Chromium		0.0910	mg/L	0.0010	91	85	115			
Iron		0.499	mg/L	0.010	100	85	115			
Thallium		0.109	mg/L	0.0010	109	85	115			
Uranium		0.0948	mg/L	0.00030	95	85	115			
Lab ID: B25060955-008CMS4	6	Sample Matrix Spike				Run: ICPMS208-B_250616A		06/18/25 01:40		
Antimony		0.101	mg/L	0.0010	101	70	130			
Arsenic		0.0989	mg/L	0.0010	96	70	130			
Chromium		0.0950	mg/L	0.0050	94	70	130			
Iron		0.605	mg/L	0.020	103	70	130			
Thallium		0.112	mg/L	0.00050	112	70	130			
Uranium		0.103	mg/L	0.00030	101	70	130			
Lab ID: B25060955-008CMSD4	6	Sample Matrix Spike Duplicate				Run: ICPMS208-B_250616A		06/18/25 01:46		
Antimony		0.100	mg/L	0.0010	100	70	130	1.2	20	
Arsenic		0.0992	mg/L	0.0010	96	70	130	0.3	20	
Chromium		0.0942	mg/L	0.0050	93	70	130	0.8	20	
Iron		0.608	mg/L	0.020	104	70	130	0.5	20	
Thallium		0.115	mg/L	0.00050	115	70	130	2.4	20	
Uranium		0.104	mg/L	0.00030	102	70	130	0.7	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: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS209-B_250613A				
Lab ID: QCS	6	Initial Calibration Verification Standard							06/14/25 07:07	
Cadmium		0.0202	mg/L	0.0010	101	90	110			
Copper		0.0378	mg/L	0.010	94	90	110			
Nickel		0.0380	mg/L	0.0050	95	90	110			
Selenium		0.0392	mg/L	0.0050	98	90	110			
Silver		0.0202	mg/L	0.0050	101	90	110			
Zinc		0.0384	mg/L	0.0050	96	90	110			
Lab ID: CCV	6	Continuing Calibration Verification Standard							06/14/25 12:20	
Cadmium		0.0484	mg/L	0.0010	97	90	110			
Copper		0.0461	mg/L	0.010	92	90	110			
Nickel		0.0467	mg/L	0.0050	93	90	110			
Selenium		0.0476	mg/L	0.0050	95	90	110			
Silver		0.0195	mg/L	0.0050	98	90	110			
Zinc		0.0462	mg/L	0.0050	92	90	110			
Method: E200.8						Batch: R444130				
Lab ID: LRB	6	Method Blank							Run: ICPMS209-B_250613A 06/13/25 14:18	
Cadmium		ND	mg/L	9E-6						
Copper		ND	mg/L	0.00005						
Nickel		ND	mg/L	0.00006						
Selenium		ND	mg/L	0.00002						
Silver		ND	mg/L	3E-6						
Zinc		ND	mg/L	0.001						
Lab ID: LFB	6	Laboratory Fortified Blank							Run: ICPMS209-B_250613A 06/13/25 14:35	
Cadmium		0.0461	mg/L	0.0010	92	85	115			
Copper		0.0451	mg/L	0.010	90	85	115			
Nickel		0.0455	mg/L	0.0050	91	85	115			
Selenium		0.0454	mg/L	0.0050	91	85	115			
Silver		0.0188	mg/L	0.0050	94	85	115			
Zinc		0.0458	mg/L	0.0050	92	85	115			
Lab ID: B25052422-004BMS	6	Sample Matrix Spike							Run: ICPMS209-B_250613A 06/13/25 15:36	
Cadmium		0.232	mg/L	0.0010	93	70	130			
Copper		0.230	mg/L	0.0050	92	70	130			
Nickel		0.228	mg/L	0.0050	91	70	130			
Selenium		0.234	mg/L	0.0010	94	70	130			
Silver		0.0957	mg/L	0.0010	96	70	130			
Zinc		0.235	mg/L	0.010	89	70	130			
Lab ID: B25052422-004BMSSD	6	Sample Matrix Spike Duplicate							Run: ICPMS209-B_250613A 06/13/25 15:41	
Cadmium		0.235	mg/L	0.0010	94	70	130	1.1	20	
Copper		0.230	mg/L	0.0050	92	70	130	0.3	20	
Nickel		0.231	mg/L	0.0050	92	70	130	1.1	20	
Selenium		0.236	mg/L	0.0010	94	70	130	0.5	20	
Silver		0.0955	mg/L	0.0010	95	70	130	0.2	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: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R444130
Lab ID: B25052422-004BMSD	6	Sample Matrix Spike Duplicate				Run: ICPMS209-B_250613A				06/13/25 15:41
Zinc		0.231	mg/L	0.010	88	70	130	1.4	20	
Lab ID: MB-200517										06/14/25 13:00
Cadmium		ND	mg/L	7E-6						
Copper		0.0003	mg/L	0.00005						
Nickel		ND	mg/L	0.00006						
Selenium		ND	mg/L	0.00002						
Silver		ND	mg/L	5E-6						
Zinc		ND	mg/L	0.001						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25060950

Report Date: 06/19/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1										
Analytical Run: HGCV205-B_250618A										
Lab ID: ICV-200540	Initial Calibration Verification Standard									
Mercury		0.00205	mg/L	0.00010	103	90	110			06/18/25 10:55
Lab ID: CCV1	Continuing Calibration Verification Standard									
Mercury		0.00245	mg/L	0.00010	98	95	105			06/18/25 11:00
Lab ID: CCV	Continuing Calibration Verification Standard									
Mercury		0.00228	mg/L	0.00010	91	90	110			06/18/25 13:41
Method: E245.1										
Batch: 200668										
Lab ID: MB-200668	Method Blank									
Mercury		ND	mg/L	0.00006						Run: HGCV205-B_250618A 06/18/25 13:29
Lab ID: LCS-200668	Laboratory Control Sample									
Mercury		0.00190	mg/L	0.00010	95	85	115			Run: HGCV205-B_250618A 06/18/25 13:31
Lab ID: B25060859-002GMS	Sample Matrix Spike									
Mercury		0.00191	mg/L	0.00010	95	70	130			Run: HGCV205-B_250618A 06/18/25 13:35
Lab ID: B25060859-002GMSD	Sample Matrix Spike Duplicate									
Mercury		0.00189	mg/L	0.00010	94	70	130	1.1	30	Run: HGCV205-B_250618A 06/18/25 13:37

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25060950

Report Date: 06/30/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: RA226-11707
Lab ID: LCS-RA226-11707	3	Laboratory Control Sample			Run: TENNELEC-4_250613D			06/23/25 10:05		
Radium 226		10	pCi/L	103		70	130			
Radium 226 precision (±)		1.7	pCi/L							
Radium 226 MDC		0.17	pCi/L							
Lab ID: MB-RA226-11707	3	Method Blank			Run: TENNELEC-4_250613D			06/23/25 10:05		
Radium 226		0.03	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Lab ID: C25060231-004EDUP	3	Sample Duplicate			Run: TENNELEC-4_250613D			06/23/25 10:05		
Radium 226		0.032	pCi/L					64	30	UR
Radium 226 precision (±)		0.099	pCi/L							
Radium 226 MDC		0.16	pCi/L							

- Duplicate RPD is outside of the acceptance range for this analysis. However, the RER is less than or equal to the limit of 3. The RER result is 0.20.

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

U - Not detected



QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25060950

Report Date: 06/30/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: RA228-7673
Lab ID: LCS-228-RA228-7673	3	Laboratory Control Sample				Run: TENNELEC-4_250613B				06/18/25 13:10
Radium 228		9.2	pCi/L	99		70	130			
Radium 228 precision (±)		2.4	pCi/L							
Radium 228 MDC		0.90	pCi/L							
Lab ID: MB-228-RA228-7673	3	Method Blank				Run: TENNELEC-4_250613B				06/18/25 13:10
Radium 228		-0.4	pCi/L							U
Radium 228 precision (±)		0.5	pCi/L							
Radium 228 MDC		0.9	pCi/L							
Lab ID: B25060950-001HDUP	3	Sample Duplicate				Run: TENNELEC-4_250613B				06/18/25 13:10
Radium 228		0.40	pCi/L					36	30	UR
Radium 228 precision (±)		0.72	pCi/L							
Radium 228 MDC		1.2	pCi/L							

- Duplicate RPD is outside of the acceptance range for this analysis. However, the RER is less than or equal to the limit of 3. The RER result is 0.12.

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

U - Not detected



Work Order Receipt Checklist

Linkan Engineering

B25060950

Login completed by: Crystal M. Jones

Date Received: 6/11/2025

Reviewed by: ysmith

Received by: NLA

Reviewed Date: 6/12/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	8.6°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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 sample for potentially dissolved metals analysis was subsampled and filtered in the laboratory. According to the Code of Colorado Regulation these samples should be filtered within 8 to 96 hours of preservation with nitric acid to a



Work Order Receipt Checklist - Continued

Linkan Engineering


B25060950

pH < 2.

The bottle order attached to the chain of custody indicates total suspended solids and chemical oxygen demand analyses. These are not needed per phone conversation with Chris Prosper on 06/12/25. CMJ 06/12/25

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 Linkan	
Contact	Chris Prosper
Phone	775-777-8003
Mailing Address 2720 Ruby Vista Dr	
City, State, Zip	Elko, NV 89801
Email	AP@linkan.com
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote
25-0152	H17287
Bottle Order	
193742	

Report Information (if different than Account Information)

Company/Name Linkan	
Contact	Alex Schwiebert
Phone	775-397-6779
Mailing Address 2720 Ruby Vista Dr	
City, State, Zip	Elko, NV 89801
Email	see comments
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

Outfall 001A - Bi-Weekly Sample

Please email Report and EDD results to:
chris.prosper@linkan.com
adam.billin@linkan.com
alex.schwiebert@linkan.com
peter.hays@state.co.us

Project Information

Project Name, PWSID, Permit, etc. Schwartzwalder Mine	
Sampler Name	Bryant Acuña
Sampler Phone	7/238/6669
Sample Origin State	Colorado
EPA/State Compliance	<input checked="" type="checkbox"/> Yes <input 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"/> 1(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

Hexavalent Chromium	Metals, Dissolved	Metals, Total Recoverable	Metals, Potentially Dissolved	Cyanide, WAD	Sulfide, Methylene Blue Colorimetric	Radium 226, Dissolved	Radium 226 + Radium 228	See Attached
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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		Number of Containers	Matrix (See Codes Above)											ELI LAB ID Laboratory Use Only		
	Date	Time			Hexavalent Chromium	Metals	Metals	Metals	Dissolved	Cyanide	Sulfide	Colorimetric	Radium	Radium 228		See /	RUSH TAT
1 Outfall 001A	6/10/25	1450	8	W													B25060980
2																	
3																	
4																	
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)	Date/Time	Signature	Received by (print)	Date/Time	Signature			
	Jeremy Acuña	6/10/25/1625	[Signature]	Vesna Anthony	6/10/25/1625	[Signature]			
Shipped By	Cooler ID(s)	Custody Seals	Intact	Receipt Temp °C	Temp Blank	On Ice	Payment Type	Amount	Receipt Number (cash/check only)
		Y N C B	Y N		Y N	Y N	Cash Check	\$	

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.



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 406.252.6325 • Casper, WY 307.235.0515 • Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

BOTTLE ORDER 193742



SHIPPED TO: Linkan Engineering

To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us



Contact: Chris Prosper
400 Corporate Circle, Suite H
Golden CO 80401
Phone: (719) 247-0564
Project: Schwartzwalder Mine-Outfall 001A Monthly + Weekly

Order Created by: Yvonna E. Smith
Shipped From: Billings, MT
Ship Date: 4/17/2025
VIA: Ground
Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
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Outfall 001A Weekly COD (4 Sets)

500 mL Plastic	1	E410.4 HACH 8000	Chemical Oxygen Demand Preparation for COD testing HACH 8000		H2SO4		1
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Outfall 001A Three Times Weekly TSS (12 Sets)







1 Liter Plastic Wide Mouth	1	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
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Outfall 001A Bi-Weekly (2 Sets)


250 mL Plastic	1	A3500-Cr B E300.0	Chromium, Hexavalent Anions by Ion Chromatography	24.00 hrs			1
250 mL Plastic	1	E200.7_8	Metals by ICP/ICPMS, Dissolved		HNO3	Filter before preservation	1
250 mL Plastic	1	E200.7_8 Calculation E245.1 E200.2 E245.1	Metals by ICP/ICPMS, Total Recoverable Chromium, Total Recoverable Trivalent Mercury, Total Metals Digestion by E200.2 Mercury Digestion by E245.1		HNO3		1

BO#: 193742






1 of 2

250 mL Plastic	1	E200.7_8 MCAWW	Metals by ICP/ICPMS, Potentially Dissolved Preparation, Potentially Dissolved Filtration		HNO3	1
500 mL Amber Plastic	1	Kelada-01	Cyanide, Weak Acid Dissociable		NaOH	1
250 mL Plastic	1	A4500-S D	Sulfide, Methylene Blue Colorimetric		ZnAc	1
1 Gallon Plastic	1	E903.0	Radium 226, Dissolved		NaOH	1
1 Gallon Plastic	1	A7500-RA E903.0 RA-05	Radium 226 + Radium 228 Radium 226, Total Radium 228, Total		HNO3	1
					HNO3	1

Extra Weekly Supplies

1 Liter Plastic Wide Mouth	2	A2540 D	Solids, Total Suspended		Fill to the neck of the container.	1
500 mL Plastic	1	E410.4	Chemical Oxygen Demand		H2SO4	1

Comments

 HNO3 - Nitric Acid  ZnAc - Zinc Acetate	 H2SO4 - Sulfuric Acid  HCl - Hydrochloric Acid	 NaOH - Sodium Hydroxide <input type="checkbox"/> H3PO4 - Phosphoric Acid	We strongly suggest that the samples are shipped the same day as they are collected.
Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets			
Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.			
Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.			

BO#: 193742



ANALYTICAL SUMMARY REPORT

July 14, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25061882 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 1 sample for Linkan Engineering on 6/20/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25061882-001	Outfall 001A	06/19/25 14:40	06/20/25	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Potentially Dissolved Metals by ICP/ICPMS, Total Recoverable Cyanide, Weak Acid Dissociable Chromium, Hexavalent Chromium, Total Recoverable Trivalent Mercury, Total Anions by Ion Chromatography Metals Digestion by E200.2 Preparation, Potentially Dissolved Filtration Mercury Digestion by E245.1 Radium 226 + Radium 228 Radium 226, Dissolved Radium 226, Total Radium 228, Total Sulfide, Methylene Blue Colorimetric

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: Linkan Engineering
Project: Schwartzwalder Mine
Work Order: B25061882

Report Date: 07/14/25

CASE NARRATIVE

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, PO Box 247, Casper, WY, EPA Number WY00002.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061882-001
Client Sample ID: Outfall 001A

Report Date: 07/14/25
Collection Date: 06/19/25 14:40
Date Received: 06/20/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
INORGANICS							
Chloride	0.6	mg/L	J	1		E300.0	06/22/25 00:38 / caa
Sulfate	2	mg/L		1		E300.0	06/22/25 00:38 / caa
Fluoride	ND	mg/L		0.1		E300.0	06/22/25 00:38 / caa
Cyanide, Weak Acid Dissociable	ND	ug/L		1		Kelada-01	06/20/25 13:42 / fap
Sulfide	ND	mg/L		0.04		A4500-S D	06/20/25 16:21 / pmw
METALS, DISSOLVED							
Chromium, Hexavalent	ND	ug/L		10		A3500-Cr B	06/20/25 12:12 / jks
Iron	6	ug/L	J	20		E200.8	06/24/25 02:28 / aem
Manganese	0.3	ug/L	J	1		E200.8	06/24/25 02:28 / aem
METALS, POTENTIALLY DISSOLVED							
Cadmium	ND	ug/L		1		E200.8	06/27/25 03:11 / aem
Copper	0.1	ug/L	JL	0.5		E200.8	06/29/25 04:29 / jks
Nickel	0.08	ug/L	J	5		E200.8	06/27/25 03:11 / aem
Selenium	0.1	ug/L	J	1		E200.8	06/29/25 04:29 / jks
Silver	ND	ug/L	L	0.04		E200.8	06/27/25 03:11 / aem
Zinc	ND	ug/L		10		E200.8	06/28/25 09:09 / jks
METALS, TOTAL RECOVERABLE							
Arsenic	10	ug/L		1		E200.8	06/27/25 00:13 / aem
Chromium	ND	ug/L		5		E200.8	06/27/25 17:55 / jks
Chromium, Trivalent	ND	ug/L		10		Calculation	07/01/25 08:42 / bap
Iron	20	ug/L	J	20		E200.8	06/27/25 00:13 / aem
Uranium	6.8	ug/L		0.3		E200.8	06/27/25 17:55 / jks
METALS, TOTAL							
Antimony	ND	ug/L		1		E200.8	06/27/25 00:13 / aem
Boron	170	ug/L		50		E200.7	06/25/25 18:31 / enb
Mercury	ND	ug/L		0.1		E245.1	06/24/25 14:11 / mjb
Thallium	ND	ug/L		0.5		E200.8	06/27/25 17:55 / jks
RADIONUCLIDES - DISSOLVED							
Radium 226	0.03	pCi/L	U			E903.0	06/30/25 16:24 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	06/30/25 16:24 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	06/30/25 16:24 / eli-ca
RADIONUCLIDES - TOTAL							
Radium 226	0.1	pCi/L	U			E903.0	07/08/25 14:55 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	07/08/25 14:55 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	07/08/25 14:55 / eli-ca
Radium 228	0.7	pCi/L	U			RA-05	07/03/25 12:32 / eli-ca
Radium 228 precision (±)	0.7	pCi/L				RA-05	07/03/25 12:32 / eli-ca
Radium 228 MDC	1.2	pCi/L				RA-05	07/03/25 12:32 / eli-ca
Radium 226 + Radium 228	0.7	pCi/L	U			A7500-RA	07/11/25 13:24 / eli-ca

Report Definitions:
 RL - Analyte Reporting Limit
 QCL - Quality Control Limit
 J - Estimated value - analyte was present but less than the Reporting Limit (RL)
 U - Not detected

MCL - Maximum Contaminant Level
 ND - Not detected at the Reporting Limit (RL)
 L - Lowest available reporting limit for the analytical method used and/or volume submitted



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061882-001
Client Sample ID: Outfall 001A

Report Date: 07/14/25
Collection Date: 06/19/25 14:40
Date Received: 06/20/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Radium 226 + Radium 228 precision (\pm)	0.8	pCi/L				A7500-RA	07/11/25 13:24 / eli-ca
Radium 226 + Radium 228 MDC	1.2	pCi/L				A7500-RA	07/11/25 13:24 / eli-ca

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

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



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A3500-Cr B										
Analytical Run: SPEC3_250620A										
Lab ID: CCV		Continuing Calibration Verification Standard								
Chromium, Hexavalent		0.104	mg/L	0.010	104	90	110			06/20/25 12:12
Method: A3500-Cr B										
Batch: R444502										
Lab ID: MBLK		Method Blank								
Chromium, Hexavalent		ND	mg/L	0.003						06/20/25 12:12
Run: SPEC3_250620A										
Lab ID: LCS		Laboratory Control Sample								
Chromium, Hexavalent		0.101	mg/L	0.010	101	90	110			06/20/25 12:12
Run: SPEC3_250620A										
Lab ID: B25061882-001AMS		Sample Matrix Spike								
Chromium, Hexavalent		0.106	mg/L	0.010	106	80	120			06/20/25 12:12
Run: SPEC3_250620A										
Lab ID: B25061882-001AMSD		Sample Matrix Spike Duplicate								
Chromium, Hexavalent		0.102	mg/L	0.010	102	80	120			06/20/25 12:12
Run: SPEC3_250620A										

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-S D Analytical Run: SPEC3_250620C										
Lab ID: CCV	Continuing Calibration Verification Standard									
Sulfide		0.498	mg/L	0.040	100	90	110			06/20/25 16:21
Method: A4500-S D Batch: R444568										
Lab ID: MBLK	Method Blank									
Sulfide		ND	mg/L	0.01						06/20/25 16:21
Lab ID: LCS	Laboratory Control Sample									
Sulfide		0.204	mg/L	0.040	106	85	115			06/20/25 16:21
Lab ID: B25061768-001DMS	Sample Matrix Spike									
Sulfide		0.197	mg/L	0.040	103	70	130			06/20/25 16:21
Lab ID: B25061768-001DMSD	Sample Matrix Spike Duplicate									
Sulfide		0.196	mg/L	0.040	102	70	130	0.2	20	06/20/25 16:21

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0						Analytical Run: IC METROHM 1_250619A				
Lab ID: ICV	3	Initial Calibration Verification Standard								06/19/25 11:38
Chloride		25.3	mg/L	1.0	101	90	110			
Sulfate		104	mg/L	1.0	104	90	110			
Fluoride		1.23	mg/L	0.10	99	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard								06/21/25 22:10
Chloride		25.7	mg/L	1.0	103	90	110			
Sulfate		104	mg/L	1.0	104	90	110			
Fluoride		1.25	mg/L	0.10	100	90	110			
Method: E300.0						Batch: R444488				
Lab ID: ICB	3	Method Blank								Run: IC METROHM 1_250619A 06/19/25 11:55
Chloride		ND	mg/L	0.1						
Sulfate		ND	mg/L	0.5						
Fluoride		ND	mg/L	0.01						
Lab ID: LFB	3	Laboratory Fortified Blank								Run: IC METROHM 1_250619A 06/19/25 12:11
Chloride		24.8	mg/L	1.0	99	90	110			
Sulfate		103	mg/L	1.1	103	90	110			
Fluoride		1.28	mg/L	0.10	102	90	110			
Lab ID: B25061873-002AMS	3	Sample Matrix Spike								Run: IC METROHM 1_250619A 06/21/25 22:59
Chloride		29.9	mg/L	1.0	104	90	110			
Sulfate		184	mg/L	1.1	103	90	110			
Fluoride		1.43	mg/L	0.10	102	90	110			
Lab ID: B25061873-002AMSD	3	Sample Matrix Spike Duplicate								Run: IC METROHM 1_250619A 06/21/25 23:16
Chloride		30.4	mg/L	1.0	106	90	110	1.4	20	
Sulfate		187	mg/L	1.1	106	90	110	1.5	20	
Fluoride		1.46	mg/L	0.10	104	90	110	1.8	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: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: Kelada-01										Analytical Run: SFA-202-B_250620A
Lab ID: ICB	Initial Calibration Verification Standard									
Cyanide, Weak Acid Dissociable		0.00966	mg/L	0.0010	97	90	110			06/20/25 11:54
Lab ID: CCV	Continuing Calibration Verification Standard									
Cyanide, Weak Acid Dissociable		0.0109	mg/L	0.0010	109	90	110			06/20/25 12:50
Method: Kelada-01										Batch: R444536
Lab ID: ICB	Method Blank									
Cyanide, Weak Acid Dissociable		ND	mg/L	0.0007						Run: SFA-202-B_250620A 06/20/25 11:56
Lab ID: LCS1-ZnCN	Laboratory Control Sample									
Cyanide, Weak Acid Dissociable		0.0107	mg/L	0.0010	107	90	110			Run: SFA-202-B_250620A 06/20/25 12:00
Lab ID: B25061579-001GMS	Sample Matrix Spike									
Cyanide, Weak Acid Dissociable		0.0104	mg/L	0.0010	104	80	120			Run: SFA-202-B_250620A 06/20/25 12:18
Lab ID: B25061579-001GMSD	Sample Matrix Spike Duplicate									
Cyanide, Weak Acid Dissociable		0.0109	mg/L	0.0010	109	80	120	4.2	10	Run: SFA-202-B_250620A 06/20/25 12:22
Lab ID: LFB	Laboratory Fortified Blank									
Cyanide, Weak Acid Dissociable		0.0110	mg/L	0.0010	110	90	110			Run: SFA-202-B_250620A 06/20/25 12:44

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7 Analytical Run: ICP205-B_250625B										
Lab ID: ICV	Continuing Calibration Verification Standard									
Boron		2.55	mg/L	0.10	102	95	105			06/25/25 13:49
Lab ID: CCV	Continuing Calibration Verification Standard									
Boron		2.56	mg/L	0.10	102	90	110			06/25/25 18:29
Method: E200.7 Batch: 200879										
Lab ID: MB-200879	Method Blank									
Boron		ND	mg/L	0.008						Run: ICP205-B_250625B 06/25/25 18:07
Lab ID: LCS3-200879	Laboratory Control Sample									
Boron		1.07	mg/L	0.10	107	85	115			Run: ICP205-B_250625B 06/25/25 18:08
Lab ID: B25061876-001DMS3	Sample Matrix Spike									
Boron		1.12	mg/L	0.050	112	70	130			Run: ICP205-B_250625B 06/25/25 18:25
Lab ID: B25061876-001DMSD3	Sample Matrix Spike Duplicate									
Boron		1.08	mg/L	0.050	108	70	130	4.2	20	Run: ICP205-B_250625B 06/25/25 18:26

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS207-B_250627A				
Lab ID: QCS	3	Initial Calibration Verification Standard								06/28/25 03:30
Copper		0.0388	mg/L	0.010	97	90	110			
Selenium		0.0402	mg/L	0.0050	100	90	110			
Zinc		0.0391	mg/L	0.0050	98	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard								06/28/25 08:11
Copper		0.0474	mg/L	0.010	95	90	110			
Selenium		0.0500	mg/L	0.0050	100	90	110			
Zinc		0.0475	mg/L	0.0050	95	90	110			
Lab ID: QCS	3	Initial Calibration Verification Standard								06/29/25 02:03
Copper		0.0398	mg/L	0.010	99	90	110			
Selenium		0.0397	mg/L	0.0050	99	90	110			
Zinc		0.0392	mg/L	0.0050	98	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard								06/29/25 03:43
Copper		0.0475	mg/L	0.010	95	90	110			
Selenium		0.0488	mg/L	0.0050	97	90	110			
Zinc		0.0482	mg/L	0.0050	96	90	110			
Method: E200.8						Batch: R444978				
Lab ID: LRB	3	Method Blank				Run: ICPMS207-B_250627A			06/27/25 11:19	
Copper		ND	mg/L	0.00005						
Selenium		ND	mg/L	0.00003						
Zinc		ND	mg/L	0.001						
Lab ID: LFB	3	Laboratory Fortified Blank				Run: ICPMS207-B_250627A			06/27/25 11:36	
Copper		0.0455	mg/L	0.010	91	85	115			
Selenium		0.0477	mg/L	0.0050	95	85	115			
Zinc		0.0470	mg/L	0.0050	94	85	115			
Lab ID: MB-200823	3	Method Blank				Run: ICPMS207-B_250627A			06/28/25 08:52	
Copper		0.0001	mg/L	0.00005						
Selenium		ND	mg/L	0.00003						
Zinc		0.001	mg/L	0.001						
Lab ID: B25062399-006BMS	3	Sample Matrix Spike				Run: ICPMS207-B_250627A			06/28/25 14:56	
Copper		0.0458	mg/L	0.0050	88	70	130			
Selenium		0.0468	mg/L	0.0010	93	70	130			
Zinc		0.0471	mg/L	0.010	91	70	130			
Lab ID: B25062399-006BMSD	3	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250627A			06/28/25 15:14	
Copper		0.0445	mg/L	0.0050	86	70	130	2.9	20	
Selenium		0.0466	mg/L	0.0010	92	70	130	0.4	20	
Zinc		0.0460	mg/L	0.010	88	70	130	2.5	20	
Lab ID: MB-200823	3	Method Blank				Run: ICPMS207-B_250627A			06/29/25 04:24	
Copper		0.0003	mg/L	0.00005						
Selenium		0.00006	mg/L	0.00003						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R444978
Lab ID: MB-200823	3	Method Blank					Run: ICPMS207-B_250627A			06/29/25 04:24
Zinc		ND	mg/L	0.001						
Lab ID: B25061189-001BMS	3	Sample Matrix Spike					Run: ICPMS207-B_250627A			06/29/25 08:46
Copper		0.224	mg/L	0.0050	89	70	130			
Selenium		0.734	mg/L	0.0010	100	70	130			
Zinc		0.537	mg/L	0.010	89	70	130			
Lab ID: B25061189-001BMSD	3	Sample Matrix Spike Duplicate					Run: ICPMS207-B_250627A			06/29/25 08:52
Copper		0.231	mg/L	0.0050	92	70	130	2.8	20	
Selenium		0.743	mg/L	0.0010	99	70	130	1.2	20	
Zinc		0.534	mg/L	0.010	85	70	130	0.5	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: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS208-B_250625B				
Lab ID: QCS	3	Initial Calibration Verification Standard							06/26/25 18:52	
Antimony		0.0414	mg/L	0.0050	104	90	110			
Arsenic		0.0377	mg/L	0.0050	94	90	110			
Iron		0.199	mg/L	0.020	100	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard							06/26/25 23:02	
Antimony		0.0500	mg/L	0.0050	100	90	110			
Arsenic		0.0462	mg/L	0.0050	92	90	110			
Iron		1.18	mg/L	0.020	90	90	110			
Method: E200.8						Batch: 200879				
Lab ID: MB-200879	6	Method Blank				Run: ICPMS208-B_250625B			06/26/25 19:28	
Antimony		ND	mg/L	0.0004						
Arsenic		ND	mg/L	0.0002						
Chromium		ND	mg/L	0.0005						
Iron		ND	mg/L	0.006						
Thallium		ND	mg/L	0.0003						
Uranium		ND	mg/L	0.00003						
Lab ID: LCS4-200879	6	Laboratory Control Sample				Run: ICPMS208-B_250625B			06/26/25 19:46	
Antimony		0.101	mg/L	0.0050	101	85	115			
Arsenic		0.0923	mg/L	0.0010	92	85	115			
Chromium		0.0900	mg/L	0.0010	90	85	115			
Iron		0.494	mg/L	0.010	99	85	115			
Thallium		0.109	mg/L	0.0010	109	85	115			
Uranium		0.101	mg/L	0.00030	101	85	115			
Lab ID: B25061875-001EMS4	6	Sample Matrix Spike				Run: ICPMS208-B_250625B			06/26/25 23:43	
Antimony		0.102	mg/L	0.0010	102	70	130			
Arsenic		0.127	mg/L	0.0010	98	70	130			
Chromium		0.0931	mg/L	0.0050	93	70	130			
Iron		10.9	mg/L	0.020		70	130			A
Thallium		0.105	mg/L	0.0010	105	70	130			
Uranium		24.0	mg/L	0.00030		70	130			A
Lab ID: B25061875-001EMSD4	6	Sample Matrix Spike Duplicate				Run: ICPMS208-B_250625B			06/26/25 23:49	
Antimony		0.0996	mg/L	0.0010	100	70	130	2.4	20	
Arsenic		0.122	mg/L	0.0010	93	70	130	4.2	20	
Chromium		0.0890	mg/L	0.0050	89	70	130	4.6	20	
Iron		10.9	mg/L	0.020		70	130	0.1	20	A
Thallium		0.103	mg/L	0.0010	103	70	130	2.2	20	
Uranium		23.1	mg/L	0.00030		70	130	4.0	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



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS209-B_250623A				
Lab ID: QCS	2	Initial Calibration Verification Standard								06/23/25 20:02
Iron		0.200	mg/L	0.020	100	90	110			
Manganese		0.195	mg/L	0.0050	97	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								06/24/25 02:11
Iron		1.26	mg/L	0.020	97	90	110			
Manganese		0.0480	mg/L	0.0050	96	90	110			
Method: E200.8						Batch: R444636				
Lab ID: LRB	2	Method Blank								Run: ICPMS209-B_250623A 06/23/25 11:40
Iron		ND	mg/L	0.001						
Manganese		ND	mg/L	0.00007						
Lab ID: LFB	2	Laboratory Fortified Blank								Run: ICPMS209-B_250623A 06/23/25 20:29
Iron		4.76	mg/L	0.020	95	85	115			
Manganese		0.0452	mg/L	0.0050	90	85	115			
Lab ID: B25061815-001AMS	2	Sample Matrix Spike								Run: ICPMS209-B_250623A 06/24/25 01:28
Iron		4.97	mg/L	0.020	99	70	130			
Manganese		0.0505	mg/L	0.0010	92	70	130			
Lab ID: B25061815-001AMSD	2	Sample Matrix Spike Duplicate								Run: ICPMS209-B_250623A 06/24/25 01:33
Iron		4.90	mg/L	0.020	98	70	130	1.4	20	
Manganese		0.0487	mg/L	0.0010	88	70	130	3.6	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: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS209-B_250625B				
Lab ID: QCS	3	Initial Calibration Verification Standard								06/26/25 23:47
Cadmium		0.0198	mg/L	0.0010	99	90	110			
Nickel		0.0384	mg/L	0.0050	96	90	110			
Silver		0.0201	mg/L	0.0050	100	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard								06/27/25 02:26
Cadmium		0.0468	mg/L	0.0010	94	90	110			
Nickel		0.0453	mg/L	0.0050	91	90	110			
Silver		0.0192	mg/L	0.0050	96	90	110			
Method: E200.8						Batch: R444817				
Lab ID: LRB	3	Method Blank								Run: ICPMS209-B_250625B 06/25/25 14:02
Cadmium		0.00001	mg/L	9E-6						
Nickel		ND	mg/L	0.00006						
Silver		5E-6	mg/L	3E-6						
Lab ID: LFB	3	Laboratory Fortified Blank								Run: ICPMS209-B_250625B 06/25/25 14:19
Cadmium		0.0466	mg/L	0.0010	93	85	115			
Nickel		0.0451	mg/L	0.0050	90	85	115			
Silver		0.0188	mg/L	0.0050	94	85	115			
Lab ID: MB-200823	3	Method Blank								Run: ICPMS209-B_250625B 06/27/25 02:21
Cadmium		8E-6	mg/L	7E-6						
Nickel		0.0002	mg/L	0.00006						
Silver		ND	mg/L	5E-6						
Lab ID: B25061882-001DMS	3	Sample Matrix Spike								Run: ICPMS209-B_250625B 06/27/25 03:16
Cadmium		0.0452	mg/L	0.0010	90	70	130			
Nickel		0.0432	mg/L	0.0050	86	70	130			
Silver		0.0182	mg/L	0.0010	91	70	130			
Lab ID: B25061882-001DMSD	3	Sample Matrix Spike Duplicate								Run: ICPMS209-B_250625B 06/27/25 03:22
Cadmium		0.0470	mg/L	0.0010	94	70	130	4.0	20	
Nickel		0.0440	mg/L	0.0050	88	70	130	1.8	20	
Silver		0.0190	mg/L	0.0010	95	70	130	4.3	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: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Analytical Run: ICPMS209-B_250627A			
Lab ID: QCS	3	Initial Calibration Verification Standard								06/27/25 13:39
Chromium		0.0400	mg/L	0.010	100	90	110			
Thallium		0.0419	mg/L	0.0050	105	90	110			
Uranium		0.0433	mg/L	0.00030	108	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard								06/27/25 17:22
Chromium		0.0491	mg/L	0.010	98	90	110			
Thallium		0.0488	mg/L	0.0050	97	90	110			
Uranium		0.0514	mg/L	0.00030	103	90	110			
Method: E200.8							Batch: 200879			
Lab ID: MB-200879	3	Method Blank								Run: ICPMS209-B_250627A 06/27/25 16:50
Chromium		ND	mg/L	0.0003						
Thallium		ND	mg/L	0.00008						
Uranium		ND	mg/L	0.00001						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061882

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1										
Analytical Run: HGCV203-B_250624A										
Lab ID: ICV-200839	Initial Calibration Verification Standard									
Mercury		0.00201	mg/L	0.00010	101	90	110			06/24/25 12:51
Lab ID: CCV1	Continuing Calibration Verification Standard									
Mercury		0.00250	mg/L	0.00010	100	95	105			06/24/25 12:54
Lab ID: CCV	Continuing Calibration Verification Standard									
Mercury		0.00251	mg/L	0.00010	100	90	110			06/24/25 14:07
Method: E245.1										
Batch: 200857										
Lab ID: MB-200857	Method Blank									
Mercury		ND	mg/L	0.00006						Run: HGCV203-B_250624A 06/24/25 13:38
Lab ID: LCS-200857	Laboratory Control Sample									
Mercury		0.00207	mg/L	0.00010	104	85	115			Run: HGCV203-B_250624A 06/24/25 13:40
Lab ID: B25061934-001BMS	Sample Matrix Spike									
Mercury		0.00201	mg/L	0.00010	100	70	130			Run: HGCV203-B_250624A 06/24/25 14:15
Lab ID: B25061934-001BMSD	Sample Matrix Spike Duplicate									
Mercury		0.00217	mg/L	0.00010	109	70	130	7.8	30	Run: HGCV203-B_250624A 06/24/25 14:16

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061882

Report Date: 07/11/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0								Batch: RA226-11718		
Lab ID: LCS-RA226-11718	3	Laboratory Control Sample				Run: TENNELEC-4_250624A		06/30/25 14:01		
Radium 226		12	pCi/L	118		70	130			
Radium 226 precision (±)		1.9	pCi/L							
Radium 226 MDC		0.24	pCi/L							
Lab ID: MB-RA226-11718	3	Method Blank				Run: TENNELEC-4_250624A		06/30/25 14:01		
Radium 226		0.03	pCi/L							U
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Lab ID: C25060318-005DDUP	3	Sample Duplicate				Run: TENNELEC-4_250624A		06/30/25 14:01		
Radium 226		90	pCi/L					3.3	30	
Radium 226 precision (±)		14	pCi/L							
Radium 226 MDC		0.26	pCi/L							
- The RER result is 0.15.										
Method: E903.0								Batch: RA226-11723		
Lab ID: LCS-RA226-11723	3	Laboratory Control Sample				Run: TENNELEC-4_250630C		07/08/25 10:04		
Radium 226		9.3	pCi/L	93		70	130			
Radium 226 precision (±)		1.5	pCi/L							
Radium 226 MDC		0.17	pCi/L							
Lab ID: MB-RA226-11723	3	Method Blank				Run: TENNELEC-4_250630C		07/08/25 10:04		
Radium 226		0.1	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Lab ID: B25061882-001HDUP	3	Sample Duplicate				Run: TENNELEC-4_250630C		07/08/25 14:55		
Radium 226		0.012	pCi/L					170	30	UR
Radium 226 precision (±)		0.11	pCi/L							
Radium 226 MDC		0.19	pCi/L							
- Duplicate RPD is outside of the acceptance range for this analysis. However, the RER is less than or equal to the limit of 3. The RER result is 0.70.										

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

U - Not detected



QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061882

Report Date: 07/11/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: RA228-7691
Lab ID: LCS-228-RA226-11723	3	Laboratory Control Sample				Run: TENNELEC-4_250630A				07/03/25 12:32
Radium 228		10	pCi/L	112		70	130			
Radium 228 precision (±)		2.7	pCi/L							
Radium 228 MDC		1.1	pCi/L							
Lab ID: MB-RA226-11723	3	Method Blank				Run: TENNELEC-4_250630A				07/03/25 12:32
Radium 228		0.4	pCi/L							U
Radium 228 precision (±)		0.6	pCi/L							
Radium 228 MDC		1	pCi/L							
Lab ID: B25061882-001HDUP	3	Sample Duplicate				Run: TENNELEC-4_250630A				07/03/25 12:32
Radium 228		0.31	pCi/L					81	30	UR
Radium 228 precision (±)		0.64	pCi/L							
Radium 228 MDC		1.0	pCi/L							

- Duplicate RPD is outside of the acceptance range for this analysis. However, the RER is less than or equal to the limit of 3. The RER result is 0.43.

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

U - Not detected



Work Order Receipt Checklist

Linkan Engineering

B25061882

Login completed by: Crystal M. Jones

Date Received: 6/20/2025

Reviewed by: cindy

Received by: NLA

Reviewed Date: 6/21/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	4.6°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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 sample for potentially dissolved metals analysis was subsampled and filtered in the laboratory. According to the Code of Colorado Regulation these samples should be filtered within 8 to 96 hours of preservation with nitric acid to a



Work Order Receipt Checklist - Continued

Linkan Engineering

B25061882

pH < 2. CMJ 06/20/25

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.
www.energylab.com

Billings, MT 406.252.6325 • Casper, WY 307.235.0515 • Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

BOTTLE ORDER 193742



SHIPPED Linkan Engineering

TO: To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us



Contact: Chris Prosper
400 Corporate Circle, Suite H
Golden CO 80401
Phone: (719) 247-0564
Project: Schwartzwalder Mine-Outfall 001A Monthly + Weekly

Order Created by: Yvonna E. Smith
Shipped From: Billings, MT
Ship Date: 4/17/2025
VIA: Ground
Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
------------------	------------------	--------	-------	--------------------	--------------	-------	-------------

Outfall 001A Weekly COD (4 Sets)

500 mL Plastic	1	E410.4 HACH 8000	Chemical Oxygen Demand Preparation for COD testing HACH 8000		<input checked="" type="checkbox"/> H2SO4		1
----------------	---	---------------------	---	--	---	--	---

Outfall 001A Three Times Weekly TSS (12 Sets)







1 Liter Plastic Wide Mouth	1	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
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Outfall 001A Bi-Weekly (2 Sets)

250 mL Plastic	1	A3500-Cr B E300.0	Chromium, Hexavalent Anions by Ion Chromatography	24.00 hrs			1
250 mL Plastic	1	E200.7_8	Metals by ICP/ICPMS, Dissolved		<input checked="" type="checkbox"/> HNO3	Filter before preservation	1
250 mL Plastic	1	E200.7_8 Calculation E245.1 E200.2 E245.1	Metals by ICP/ICPMS, Total Recoverable Chromium, Total Recoverable Trivalent Mercury, Total Metals Digestion by E200.2 Mercury Digestion by E245.1		<input checked="" type="checkbox"/> HNO3		1

BO#: 193742







1 of 2

250 mL Plastic	1	E200.7_8 MCAWW	Metals by ICP/ICPMS, Potentially Dissolved Preparation, Potentially Dissolved Filtration		HNO3	1
500 mL Amber Plastic	1	Kelada-01	Cyanide, Weak Acid Dissociable		NaOH	1
250 mL Plastic	1	A4500-S D	Sulfide, Methylene Blue Colorimetric	 	ZnAc NaOH	1
1 Gallon Plastic	1	E903.0	Radium 226, Dissolved		HNO3	1
1 Gallon Plastic	1	A7500-RA E903.0 RA-05	Radium 226 + Radium 228 Radium 226, Total Radium 228, Total		HNO3	1

Extra Weekly Supplies

1 Liter Plastic Wide Mouth	2	A2540 D	Solids, Total Suspended		Fill to the neck of the container.	1
500 mL Plastic	1	E410.4	Chemical Oxygen Demand		H2SO4	1

Comments

 HNO3 - Nitric Acid	 H2SO4 - Sulfuric Acid	 NaOH - Sodium Hydroxide	We strongly suggest that the samples are shipped the same day as they are collected.
 ZnAc - Zinc Acetate	 HCl - Hydrochloric Acid	 H3PO4 - Phosphoric Acid	
Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets			
Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.			
Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.			

BO#: 193742

2 of 2



Permits and Enforcement Section
Water Quality Control Division
CPDHE
4300 Cherry Creek Dr. South
Denver, CO 80246-1530

07/27/2025
25US0221

**Re: Discharge Monitoring Report for June 2024
Schwartzwalder Mine CO0001244**

TO WHOM IT MAY CONCERN:

On February 10th, 2025 the operations contract for the Schwartzwalder Mine was awarded and the contract started on April 1st, 2025.

During the month of June 2025, there was an exceedance for Total Recoverable arsenic at Outfall 001A. Section 7 of *Amendment Number One to Compliance Order on Consent, Number: IC-150123-1*, amended the Total Recoverable arsenic value to "Report" for the 30-day average. As a new permit has not been issued and discussions with the State indicated no deviation from the "Report" only at this time.

A WET test was taken in June. This resulted in a pass.

Best regards,
Linkan

Patrick M. Delaney
Operator Responsible in Charge (ORC)
Black Fox Mining, LLC

A handwritten signature in black ink, appearing to read "Patrick Delaney", is written in a cursive style.



Enclosures:

June 2025 DMR Submittal
2nd Quarter 2025 TDS Submittal
2nd Quarter 2025 WET Test Submittal

CC List:

Electronic Copy sent to the following:

Peter Hays, CDNR, peter.hays@state.co.us
Quinn Westmoreland, Linkan, quinn.westmoreland@linkan.com
Adam Billin, Linkan, adam.billin@linkan.com
Chris Prosper, Linkan, chris.prosper@linkan.com
Sam Billin, Linkan, sam.billin@linkan.com
Jared Buck, Linkan, jared.buck@linkan.com
Brandy Wadford, Linkan, brandy.wadford@linkan.com
Alex Schwiebert, Linkan, alex.schwiebert@linkan.com

EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. Pursuant to 40 CFR 2.203(a), EPA is providing you with notice that all CBI claims must be asserted at the time of submission. EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact the [NPDES eReporting Help Desk](#) for further guidance. Please note that EPA may contact you after you submit this report for more information.

This collection of information is approved by OMB under the Paperwork Reduction Act, 44 U.S.C. 3501 et seq. (OMB Control No. 2040-0004). Responses to this collection of information are mandatory in accordance with this permit and EPA NPDES regulations 40 CFR 122.41(l)(4)(i). An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. The public reporting and recordkeeping burden for this collection of information are estimated to average 2 hours per outfall. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates and any suggested methods for minimizing respondent burden to the Regulatory Support Division Director, U.S. Environmental Protection Agency (2821T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.

Permit

Permit #:

CO0001244

Major:

No

Permittee:

Colo Div of Reclamation, Mining and Safety

Permittee Address:

1001 E 62 Ave Room 215
Denver, CO 80216

Facility:

SCHWARTZWALDER MINE

Facility Location:

8300 GLENCOE VALLEY RD
GOLDEN, CO 80402

Permitted Feature:

001
External Outfall

Discharge:

001-Q
Quarterly Monitoring for 002A

Report Dates & Status

Monitoring Period:

From 04/01/25 to 06/30/25

DMR Due Date:

07/28/25

Status:

NetDMR Validated

Considerations for Form Completion

Quarterly monitoring - see C.15, pg 9.

Principal Executive Officer

First Name:

Last Name:

Title:

Telephone:

No Data Indicator (NODI)

Form NODI:

--

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration							# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units			
70295	Solids, total dissolved	1 - Effluent Gross	0	--	Sample								=	92.0	=	92.0	19 - mg/L	0	01/90 - Quarterly	CP - Composite
					Permit Req.									Req Mon 30DA AVG		Req Mon DAILY MX	19 - mg/L		01/90 - Quarterly	CP - Composite
					Value NODI															

Submission Note

If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.

Edit Check Errors

No errors.

Comments

Attachments

Name	Type	Size
2025_06_Schwartzwalder_Outfall_001A_Cover_Letter.pdf	pdf	242956.0
2025_2ndQ_Schwartzwalder_TDS_Results.pdf	pdf	2003147.0

Report Last Saved By

Colo Div of Reclamation, Mining and Safety

User:

pdelaney@alexcoresource.com

Name:

Patrick Delaney

E-Mail:

pdelaney@blackfoxmining.com

Date/Time:

2025-07-28 18:09 (Time Zone: -06:00)

Report Last Signed By

User:

pdelaney@alexcoresource.com

Name:

Patrick Delaney

E-Mail:

pdelaney@blackfoxmining.com

Date/Time:

2025-07-28 18:14 (Time Zone: -06:00)

EPA may make all the information submitted through this form (including all attachments) available to the public without further notice to you. Do not use this online form to submit personal information (e.g., non-business cell phone number or non-business email address), confidential business information (CBI), or if you intend to assert a CBI claim on any of the submitted information. Pursuant to 40 CFR 2.203(a), EPA is providing you with notice that all CBI claims must be asserted at the time of submission. EPA cannot accommodate a late CBI claim to cover previously submitted information because efforts to protect the information are not administratively practicable since it may already be disclosed to the public. Although we do not foresee a need for persons to assert a claim of CBI based on the types of information requested in this form, if persons wish to assert a CBI claim we direct submitters to contact the [NPDES eReporting Help Desk](#) for further guidance. Please note that EPA may contact you after you submit this report for more information.

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Permit

Permit #:

CO0001244

Major:

No

Permittee:

Colo Div of Reclamation, Mining and Safety

Permittee Address:

1001 E 62 Ave Room 215
Denver, CO 80216

Facility:

SCHWARTZWALDER MINE

Facility Location:

8300 GLENCOE VALLEY RD
GOLDEN, CO 80402

Permitted Feature:

001
External Outfall

Discharge:

001-X
Chronic WET Testing for 001A

Report Dates & Status

Monitoring Period:

From 04/01/25 to 06/30/25

DMR Due Date:

07/28/25

Status:

NetDMR Validated

Considerations for Form Completion

Rpt lowest % at which statistically signif diff in lethality control (LOEC) & any concentration less than or equal to the IWC using test code "S". Rpt IC25 using test code "P". Use test code "T" to report highest % lethality reported for IC25 and stat signif diff for ceriodaphnia & pimephales.

Principal Executive Officer

First Name:

Last Name:

Title:

Telephone:

No Data Indicator (NODI)

Form NODI: --

Parameter		Monitoring Location	Season #	Param. NODI		Quantity or Loading					Quality or Concentration						# of Ex.	Frequency of Analysis	Sample Type
Code	Name					Qualifier 1	Value 1	Qualifier 2	Value 2	Units	Qualifier 1	Value 1	Qualifier 2	Value 2	Qualifier 3	Value 3	Units		
61426	Toxicity [chronic], Ceriodaphnia dubia	P - See Comments	0	--	Sample					=	84.5					2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.						Req Mon MN VALUE					2G - tox chronic		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
61426	Toxicity [chronic], Ceriodaphnia dubia	S - See Comments	0	--	Sample					>	100.0					2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.						Req Mon MN VALUE					2G - tox chronic		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
61428	Toxicity [chronic], Pimephales promelas [Fathead Minnow]	P - See Comments	0	--	Sample					=	99.5					2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.						Req Mon MN VALUE					2G - tox chronic		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
61428	Toxicity [chronic], Pimephales promelas [Fathead Minnow]	S - See Comments	0	--	Sample					>	100.0					2G - tox chronic	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.						Req Mon MN VALUE					2G - tox chronic		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
TCP3B	%Effect Static Renewal 7 Day Chronic Ceriodaphnia dubia	P - See Comments	0	--	Sample					=	84.2					23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.						Req Mon MN VALUE					23 - %		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
TCP3B	%Effect Static Renewal 7 Day Chronic Ceriodaphnia dubia	S - See Comments	0	--	Sample					>	100.0					23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.						Req Mon MN VALUE					23 - %		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
TCP3B	%Effect Static Renewal 7 Day Chronic Ceriodaphnia dubia	T - See Comments	0	--	Sample					>	100.0					23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.					>=	100.0 MN VALUE					23 - %		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
TCP6C	%Effect Static Renewal 7Day Chronic Pimephales promelas	P - See Comments	0	--	Sample					=	87.0					23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.						Req Mon MN VALUE					23 - %		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
TCP6C	%Effect Static Renewal 7Day Chronic Pimephales promelas	S - See Comments	0	--	Sample					=	100.0					23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.						Req Mon MN VALUE					23 - %		01/90 - Quarterly	3C - 3 Composite Samples
					Value NODI														
TCP6C	%Effect Static Renewal 7Day Chronic Pimephales promelas	T - See Comments	0	--	Sample					=	100.0					23 - %	0	01/90 - Quarterly	3C - 3 Composite Samples
					Permit Req.					>=	100.0 MN VALUE					23 - %		01/90 - Quarterly	3C - 3 Composite Samples

					Value NODI														
Submission Note																			
If a parameter row does not contain any values for the Sample nor Effluent Trading, then none of the following fields will be submitted for that row: Units, Number of Excursions, Frequency of Analysis, and Sample Type.																			
Edit Check Errors																			
No errors.																			
Comments																			
Attachments																			
Name															Type			Size	
2025_2ndQ_Schwartzwalder_Outfall_001A_WET_Test_Results.pdf															pdf			5174718.0	
2025_06_Schwartzwalder_Outfall_001A_Cover_Letter.pdf															pdf			242956.0	
Report Last Saved By																			
Colo Div of Reclamation, Mining and Safety																			
User:		pdelaney@alexcoresource.com																	
Name:		Patrick Delaney																	
E-Mail:		pdelaney@blackfoxmining.com																	
Date/Time:		2025-07-28 21:46 (Time Zone: -06:00)																	
Report Last Signed By																			
User:		pdelaney@alexcoresource.com																	
Name:		Patrick Delaney																	
E-Mail:		pdelaney@blackfoxmining.com																	
Date/Time:		2025-07-28 21:47 (Time Zone: -06:00)																	



ANALYTICAL SUMMARY REPORT

June 23, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25061225 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 2 samples for Linkan Engineering on 6/12/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25061225-001	Outfall 001A	06/09/25 14:16	06/12/25	Aqueous	Solids, Total Suspended
B25061225-002	Outfall 001A	06/11/25 14:50	06/12/25	Aqueous	Chemical Oxygen Demand Preparation for COD testing HACH 8000 Solids, Total Dissolved Solids, Total Suspended

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: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061225-001
Client Sample ID: Outfall 001A

Report Date: 06/23/25
Collection Date: 06/09/25 14:16
DateReceived: 06/12/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/13/25 09:44 / pjw

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061225-002
Client Sample ID: Outfall 001A

Report Date: 06/23/25
Collection Date: 06/11/25 14:50
DateReceived: 06/12/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	ND	mg/L		10		A2540 D	06/13/25 09:44 / pjw
Solids, Total Dissolved TDS @ 180 C	92	mg/L		20		A2540 C	06/13/25 14:10 / etv
AGGREGATE ORGANICS							
Oxygen Demand, Chemical (COD)	ND	mg/L		5		E410.4	06/13/25 15:12 / fap

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

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



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061225

Report Date: 06/23/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS20250613C
Lab ID: MBLK_20250613-6		Method Blank					Run: Bal #30_250613D			06/13/25 14:09
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	20						
Lab ID: LCS_20250613-4										06/13/25 14:09
Solids, Total Dissolved TDS @ 180 C		929	mg/L	25	93	90	110			
Lab ID: B25061181-001ADUP										06/13/25 14:09
Solids, Total Dissolved TDS @ 180 C		517	mg/L	25				0.6	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061225

Report Date: 06/23/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D										Batch: TSS20250613A
Lab ID: MBLK_20250613-4		Method Blank					Run: BAL #30_250613B			06/13/25 09:42
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: LCS_20250613-2										Run: BAL #30_250613B
Solids, Total Suspended TSS @ 105 C		102	mg/L	25	102	80	120			06/13/25 09:43
Lab ID: B25061153-001BDUP										Run: BAL #30_250613B
Solids, Total Suspended TSS @ 105 C		14.0	mg/L	10				9.3	10	06/13/25 09:44

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061225

Report Date: 06/23/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E410.4										Analytical Run: SPEC3_250613B
Lab ID: CCV-200579										Continuing Calibration Verification Standard
Oxygen Demand, Chemical (COD)										06/13/25 15:12
		51.1	mg/L	5.0	102	90	110			
Method: E410.4										Batch: 200579
Lab ID: MB-200579										Method Blank
Oxygen Demand, Chemical (COD)										Run: SPEC3_250613B
		ND	mg/L	3						06/13/25 15:11
Lab ID: LCS-200579										Laboratory Control Sample
Oxygen Demand, Chemical (COD)										Run: SPEC3_250613B
		23.9	mg/L	5.0	98	90	110			06/13/25 15:11
Lab ID: B25061225-002CMS										Sample Matrix Spike
Oxygen Demand, Chemical (COD)										Run: SPEC3_250613B
		23.6	mg/L	5.0	97	90	110			06/13/25 15:12
Lab ID: B25061225-002CMSD										Sample Matrix Spike Duplicate
Oxygen Demand, Chemical (COD)										Run: SPEC3_250613B
		23.3	mg/L	5.0	95	90	110	1.4	10	06/13/25 15:12

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Linkan Engineering

B25061225

Login completed by: Leslie S. Cadreau

Date Received: 6/12/2025

Reviewed by: cindy

Received by: SRG

Reviewed Date: 6/21/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	5.6°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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



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Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 1

Account Information (Billing information)

Company/Name Linkan	
Contact Chris Prosper	
Phone 775-777-8003	
Mailing Address 2720 Ruby Vista Dr	
City, State, Zip Elko, NV 89801	
Email AP@linkan.com	
Receive Invoice <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email <input type="checkbox"/> Email	
Purchase Order 25-0152	Quote H17287
Bottle Order 193742	
193743	

Report Information (if different than Account Information)

Company/Name Linkan	
Contact Alex Schwiebert	
Phone 775-397-6779	
Mailing Address 2720 Ruby Vista Dr	
City, State, Zip Elko, NV 89801	
Email see comments	
Receive Report <input type="checkbox"/> Hard Copy <input type="checkbox"/> Email <input type="checkbox"/> Email	
Special Report/Format: <input type="checkbox"/> LEVEL IV <input type="checkbox"/> NELAC <input type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

Outfall 001A - Weekly Sample
+ Outfall 001A - Quarterly TDS
Please email Report and EDD results to:
chris.prosper@linkan.com
adam.billin@linkan.com
alex.schwiebert@linkan.com
peter.hays@state.co.us
Times per container 5.
26-06/12/25

Project Information

Project Name, PWSID, Permit, etc. Schwartzwalder Mine	
Sampler Name Bigcat Truck	Sampler Phone 7/238/6169
Sample Origin State Colorado	EPA/State Compliance <input type="checkbox"/> Yes <input 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	Matrix (See Codes Above)
W - Water	Number of Containers
S - Solids	1 W
V - Vegetation	2 W
B - Bioassay	1 W
O - Oil	26-06/12/25
DW - Drinking Water	

Analysis Requested

Total Suspended Solids	
Chemical Oxygen Demand	
Total Dissolved Solids	

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	Matrix (See Codes Above)	Number of Containers	Total Suspended Solids	Chemical Oxygen Demand	Total Dissolved Solids	See Attached	ELI LAB ID RUSH TAT	Laboratory Use Only
1 Outfall 001A	6/9/25	14:10	W	1	X					B35061225
2 Outfall 001A	6/11/25	14:50	W	2	X	X				
3 Outfall 001A	6/11/25	14:50	W	1			X			
4										
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) Ryan Hays	Date/Time 6/10/25	Signature	Received by (print) Alex Schwiebert	Date/Time 6/12/25 10:35	Signature
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N	Receipt Temp °C	Temp Blank Y N	On Ice Y N
LABORATORY USE ONLY				Payment Type CC 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.



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BOTTLE ORDER 193743

SHIPPED Linkan Engineering

To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us



Contact: Chris Prosper

400 Corporate Circle, Suite H
Golden CO 80401

Phone: (719) 247-0564

Project: Schwartzwalder Mine - Outfall 001A Quarterly

Order Created by: Yvonna E. Smith

Shipped From: Billings, MT

Ship Date: 4/17/2025

VIA: Ground

Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
------------------	------------------	--------	-------	--------------------	--------------	-------	-------------

Outfall 001A Quarterly

1 Liter Plastic	1	A2540 C	Solids, Total Dissolved				1
-----------------	---	---------	-------------------------	--	--	--	---

Comments

☒ HNO3 - Nitric Acid ☒ H2SO4 - Sulfuric Acid ☒ NaOH - Sodium Hydroxide
☒ ZnAc - Zinc Acetate ☒ HCl - Hydrochloric Acid ☒ H3PO4 - Phosphoric Acid

We strongly suggest that the samples are shipped the same day as they are collected.

Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets

Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.

Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BO#: 193743

1 of 1



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BOTTLE ORDER 193742

SHIPPED Linkan Engineering

TO:



To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us

Contact: Chris Prosper

400 Corporate Circle, Suite H

Golden CO 80401

Phone: (719) 247-0564

Project: Schwartzwalder Mine-Outfall 001A Monthly + Weekly

Order Created by: Yvonna E. Smith

Shipped From: Billings, MT

Ship Date: 4/17/2025

VIA: Ground

Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
------------------	------------------	--------	-------	--------------------	--------------	-------	-------------

Outfall 001A Weekly COD (4 Sets)

500 mL Plastic	1	E410.4 HACH 8000	Chemical Oxygen Demand Preparation for COD testing HACH 8000		<input checked="" type="checkbox"/> H2SO4		1
----------------	---	---------------------	---	--	---	--	---

Outfall 001A Three Times Weekly TSS (12 Sets)

1 Liter Plastic Wide Mouth	1	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
----------------------------	---	---------	-------------------------	--	--	------------------------------------	---

Outfall 001A Bi-Weekly (2 Sets)

250 mL Plastic	1	A3500-Cr B E300.0	Chromium, Hexavalent Anions by Ion Chromatography	24.00 hrs			1
250 mL Plastic	1	E200.7_8	Metals by ICP/ICPMS, Dissolved		<input checked="" type="checkbox"/> HNO3	Filter before preservation	1
250 mL Plastic	1	E200.7_8	Metals by ICP/ICPMS, Total Recoverable		<input checked="" type="checkbox"/> HNO3		1
		Calculation E245.1	Chromium, Total Recoverable Trivalent Mercury, Total				
		E200.2	Metals Digestion by E200.2				
		E245.1	Mercury Digestion by E245.1				

BO#: 193742

1 of 2

250 mL Plastic	1	E200.7_8 MCAWW	Metals by ICP/ICPMS, Potentially Dissolved Preparation, Potentially Dissolved Filtration	<input checked="" type="checkbox"/> HNO3	1
500 mL Amber Plastic	1	Kelada-01	Cyanide, Weak Acid Dissociable	<input checked="" type="checkbox"/> NaOH	1
250 mL Plastic	1	A4500-S D	Sulfide, Methylene Blue Colorimetric	<input checked="" type="checkbox"/> ZnAc <input checked="" type="checkbox"/> NaOH	1
1 Gallon Plastic	1	E903.0	Radium-226, Dissolved	<input checked="" type="checkbox"/> HNO3	1
1 Gallon Plastic	1	A7500-RA E903.0 RA-05	Radium 226 + Radium 228 Radium 226, Total Radium 228, Total	<input checked="" type="checkbox"/> HNO3	1

Extra Weekly Supplies

1 Liter Plastic Wide Mouth	2	A2540-D	Solids, Total Suspended		1
500 mL Plastic	1	E410.4	Chemical Oxygen Demand	<input type="checkbox"/> H2SO4	1

Comments

We strongly suggest that the samples are shipped the same day as they are collected.

☒ HNO3 - Nitric Acid ☐ H2SO4 - Sulfuric Acid ☒ NaOH - Sodium Hydroxide
☒ ZnAc - Zinc Acetate ☒ HCl - Hydrochloric Acid ☐ H3PO4 - Phosphoric Acid

Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets

Corrosive Chemicals- Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide- Zinc Acetate is a skin irritant.

Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.

BO#: 193742

2 of 2



SEACREST GROUP

ENVIRONMENTAL SERVICES LABORATORY

July 2, 2025

Jared Buck
Linkan Engineering
400 Corporate Circle Suite H
Golden, CO 80401

Dear Jared:

Enclosed is the report for chronic biomonitoring tests performed for Linkan Engineering on effluent from the Schwartzwalder Mine 001A outfall. There was no statistically significant toxicity to either test species at any effluent concentration. The effluent passes WET (Whole Effluent Toxicity) testing requirements for this sampling period.

If you have any questions or concerns, please do not hesitate to contact me at (303) 661-9324.

Best regards,

A handwritten signature in black ink, appearing to read 'E White', with a stylized, cursive script.

Ethan White
Aquatic Toxicologist II

**REPORT OF CHRONIC BIOMONITORING TESTS
CONDUCTED FOR
LINKAN ENGINEERING
ON EFFLUENT FROM
THE SCHWARTZWALDER MINE 001A OUTFALL**

Prepared for:

Jared Buck
Linkan Engineering
400 Corporate Circle Suite H
Golden, CO 80401

Prepared by:

Ethan White
SeaCrest Group
500 S Arthur Ave. Suite 450
Louisville, Colorado 80027-3065
(303) 661-9324

July 2, 2025

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Chronic Toxicity Test Summary

Test:	7-day static renewal using <i>Ceriodaphnia dubia</i> 7-day static renewal using fathead minnow (<i>Pimephales promelas</i>)
Client:	Linkan Engineering
Test Procedure Followed:	<i>Ceriodaphnia dubia</i> : EPA/821/R-02-013. Method 1002.0 (2002) fathead minnow: EPA/821/R-02-013. Method 1000.0 (2002)
Sample Number:	525317.B
Dilution Water:	moderately hard laboratory reconstituted water
Test Organism Source:	SeaCrest Group
Reference Toxicant:	Sodium Chloride

Sample	Time of Collection	Date of Collection	Time of Receipt	Date of Receipt
Effluent 1	1330	06-23-2025	1600	06-23-2025
Effluent 2	1400	06-24-2025	1530	06-24-2025
Effluent 3	1400	06-25-2025	1620	06-25-2025

	<i>Ceriodaphnia dubia</i>	fathead minnow
Test Initiation Time	1145	1620
Test Initiation Date	06-24-2025	06-23-2025
Test Completion Time	1205	1520
Test Completion Date	06-30-2025	06-30-2025

Abstract with Results

Test Concentrations:	Control (0%), 20%, 40%, 60%, 80%, 100%
Number of Organisms/Concentration:	10 for <i>Ceriodaphnia dubia</i> 40 for fathead minnow
Replicates at each Concentration:	10 for <i>Ceriodaphnia dubia</i> 4 for fathead minnow

	<i>Ceriodaphnia dubia</i>	fathead minnow
Test vessel size/Exposure volume	30ml/15ml	500ml/200ml
Lethal LOEL/LC25	>100%/>100%	>100%/>100%
Pass/Fail Status	PASS	PASS
Temperature Range (°C)	24.1 – 25.9	24.1 – 25.9
Dissolved Oxygen Range (mg/L)	6.4 – 8.0	3.8 – 8.1
pH Range	7.7 – 8.6	7.6 – 8.2
	Control (<i>Cerio</i>/FHM)	Effluent Sample
Hardness (mg/L as CaCO ₃)	96/100	0/0/2
Alkalinity (mg/L as CaCO ₃)	62/63	75/79/85
Total residual chlorine (mg/L)	<0.01	<0.01/<0.01/0.02
Total ammonia (mg/L as NH ₃)	<0.03	0.03/<0.03/<0.03

INTRODUCTION

Biomonitoring provides an effective means by which the toxicity of discharges from municipal, industrial, and mining operations can be tested. Among the advantages of biomonitoring is the ability to test complex effluents containing a broad range of contaminants. Biomonitoring, when used in conjunction with chemical analyses, can generate data capable of identifying a much wider range of contaminants.

The Colorado Water Quality Control Division requires certain NPDES permittees to perform acute and/or chronic biomonitoring tests. The chronic test measures significant differences in lethality and in reproduction (*Ceriodaphnia dubia*) or growth (fathead minnow – *Pimephales promelas*) between control and effluent-exposed organisms.

The present report discusses the results of chronic biomonitoring tests conducted on effluent from the Linkan Engineering Schwartzwalder Mine 001A discharge. These tests were conducted in accordance with EPA and State of Colorado procedures in June 2025.

MATERIALS AND METHODS

Sample Collection

Two gallons of the effluent were collected on three separate dates as specified in Permit CO-0001244. Samples were delivered chilled to the SeaCrest lab where they were held at 0-6°C. Chain of custody forms showing sample collection and laboratory arrival times are included (Appendix 1).

Dilution Water

Laboratory reconstituted water was used as both the dilution water source and the control for the tests. Reconstituted water for the *Ceriodaphnia dubia* test was produced by adding sodium bicarbonate, calcium sulfate, magnesium sulfate, potassium chloride, and sodium selenate to deionized water. Reconstituted water for the fathead minnow test was produced by adding sodium bicarbonate, calcium sulfate, magnesium sulfate, and potassium chloride to deionized water.

Test Organisms

The biomonitoring test used *Ceriodaphnia dubia*, cultured in the SeaCrest laboratory. The organisms are cultured in brood culture boards from which individual females are monitored for survival and reproduction for periods of up to two weeks. Neonates less than 24-hours old, released from third or subsequent broods of eight or more within an 8-hour period, are collected from the brood chambers and used in tests. The animals are fed daily with a mixture of Yeast, Cereal Leaves, and Trout Chow (YCT), produced in-house. This is supplemented with cultured green algae (*Selenastrum capricornutum*) provided by Aquatic Biosystems.

Less than one-day-old fathead minnow, cultured in the laboratory, were also used in the test. Adult fish are maintained in 10-gallon aquaria where females deposit their eggs on the under-surface of split PVC pipe sections. The eggs are collected daily and transferred to aerated containers where they hatch after three to four days. The larval fish are fed newly hatched brine shrimp (*Artemia* sp.) at least twice per day.

In-house organisms are tested monthly in a reference toxicant test using sodium chloride to monitor overall health and test reproducibility. (Appendix 4).

Test Procedures

Upon receipt at the lab, samples were analyzed for alkalinity, ammonia, chlorine, conductivity, dissolved oxygen, hardness, and pH.

Methods used in chemical analysis

Alkalinity	EPA 310.2	Hach 8203	I-2030-85.2
Ammonia	SM4500-NH ₃ , C-E1997	ASTM D1426-08	
Chlorine	SM4500-Cl D	Hach 10026	
Conductivity	SM2510		
Dissolved Oxygen	SM4500-O	Electrode: G-2001	Winkler (QC): B-F-2001
Hardness	SM2340 B or C	Hach 8213	
pH	SM4500-H+ B-2000		

The test followed procedures in EPA³ and CDPHE⁴ guidelines. Exposure concentrations included control (0%), 20%, 40%, 60%, 80%, and 100% mixtures, diluted with moderately hard laboratory reconstituted water.

Individual *Ceriodaphnia dubia* were placed in 30ml plastic containers containing approximately 15ml of exposure medium. Ten replicates at each concentration were used. The animals were fed daily with the YCT mixture and an equal volume of the green algae (*Selenastrum capricornutum*). The exposure medium was changed daily in each container and the number of young released overnight were counted and recorded. Young were removed from the containers daily and discarded. Routine measurements were made each day of temperature, dissolved oxygen, and pH before and after the water changes.

Fathead minnow were exposed in 500ml plastic cups to which 250ml of media was replaced daily. Four replicates were used at each concentration. Ten fish, less than 24-hours old, were placed in each cup. The fish were monitored daily for survival and fed live brine shrimp at least twice per day. After seven days, the fish were removed from the cups, euthanized with isopropyl alcohol, and then placed in aluminum pans and dried in an oven for a minimum of six hours at 100°C. The pans were then weighed on a five-place analytical balance to determine the average dry weight of the fish from each replicate.

Data Analysis

Data from the tests were analyzed on a personal computer using the CETIS program (developed by Tidepool Scientific Software). Statistical tests used in the analyses are shown in Table 1. Test acceptability was determined using control survival and reproduction/growth criteria, concentration-response relationships, and percent minimum significant differences (USEPA ^{5,6}).

Table 1. Statistical methods used in testing for significant differences in test parameters.

Variance		Distribution		
Bartlett Equality of Variance Test		Shapiro-Wilk W Normality Test		
Statistical Difference				
Species	Survival	Growth	Reproduction	IC ₂₅
<i>Ceriodaphnia dubia</i>	Fisher Exact/Bonferroni-Holm Test	N/A	Steel Many-One Rank Sum Test	IC _p
fathead minnow	Steel Many-One Rank Sum Test	Dunnett Multiple Comparison Test	N/A	IC _p

RESULTS

Ceriodaphnia dubia Test Results

Test results for the *Ceriodaphnia dubia* are summarized in Table 2 and provided on the data sheets located in Appendix 2. Survival was 0% in the 100% effluent and ranged from 90-100% in the remaining effluent concentrations. Control survival was 100%. Statistically significant lethality was measured in the 100% effluent concentration when compared to the control. The LOEL (Lowest Observed Effect Level) for lethality was >100% and the LC₂₅ (Lethal Concentration 25) for lethality was 84.5%.

Average number of neonates was 0.4 in the 100% effluent concentration and ranged from 24.9 – 28.5 in the remaining effluent concentrations. Average number of neonates in the control was 25.3 for statistical analyses and test acceptability criteria. Statistically significant differences in the number of neonates were found between the control and the 100% effluent concentration. The LOEL for reproduction was >100% and the IC₂₅ (Inhibition Concentration 25) for reproduction was 84.2%.

Table 2. Summary of *Ceriodaphnia dubia* test results. An asterisk (*) denotes a statistically significant difference from the control.

Concentration	Percent Survival	Mean Neonates	Min.	Max.	Significant Difference	
					Lethality	Reprod.
Control (0%)	100	25.3	16	34		
20%	100	28.5	23	32		
40%	90	24.9	0	39		
60%	100	25.3	16	35		
80%	100	26.3	20	31		
100%	0	0.4	0	3	*	*

Fathead Minnow Test Results

Fathead minnow results are summarized in Table 3 and are provided on data sheets in Appendix 3. Survival was 72.5% in the 100% effluent concentration and ranged from 95% – 97.5% in the remaining effluent concentrations. Control survival was 97.5%. No statistically significant lethality was measured in any effluent concentration when compared to the control. The LOEL (Lowest Observed Effect Level) for lethality was >100% and the LC₂₅ (Lethal Concentration 25) for lethality was 99.5%.

Average weight in the 100% effluent concentration was 0.233mg and ranged from 0.553mg - 0.586mg per individual in the remaining effluent concentrations. Average weight for the control fish was 0.587mg for statistical analyses and test acceptability criteria. Statistically significant differences for growth were measured in the 100% effluent concentration when compared to the control. The LOEL for growth was 100% and the IC₂₅ for growth was 87%.

Table 3. Summary of fathead minnow test results. An asterisk (*) denotes a statistically significant difference from the control.

Concentration	Percent Survival	Average Weight (mg)	Min.	Max.	Significant Difference	
					Lethality	Growth
Control (0%)	98	0.587	0.544	0.644		
20%	95	0.586	0.564	0.614		
40%	98	0.565	0.442	0.675		
60%	98	0.562	0.522	0.610		
80%	98	0.553	0.501	0.601		
100%	73	0.233	0.151	0.308		*

Test Acceptability

Acceptable control survival (80%) was achieved in both tests. Similarly, *Ceriodaphnia dubia* reproduction (average 15 neonates/organism) and fathead minnow growth (average 0.250mg/test container) in control organisms met required levels. PMSD was within the required limits for an acceptable test (Table 4).

Table 4. PMSD for chronic test parameters.

PMSD (% Minimum significant difference)	fathead minnow growth		<i>C. dubia</i> reproduction	
	Lower bound	Upper bound	Lower bound	Upper bound
	12	30	13	47
	16.5		23.3	

DISCUSSION

A failed test for this discharge occurs when there is a statistical difference and LC_{25} less than the IWC (Instream Waste Concentration) of 100%. The LOEL represents the lowest effluent concentration at which a statistically significant effect is observed. The LC_{25} represents an estimate of the effluent concentration that would cause a 25 percent reduction in survival. Since there was no statistically significant differences meeting this criterion, the effluent passes WET (Whole Effluent Toxicity) testing for this sampling period.

REFERENCES

1. **Hach Chemical Company.** 2008. *Hach's Water Analysis Handbook*. Fifth Edition. Hach Chemical Company, Loveland, Colorado. Digital Medium.
2. **APHA/AWWA/WEF.** 1998. *Standard Methods for the Examination of Water and Wastewater*. 20th Edition. American Public Health Association, Washington, D.C.
3. **USEPA.** 2002. *Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms*. EPA-821-R-02-013. 335 pp.
4. **CDPHE (Colorado Department of Public Health and Environment).** 1998. *Laboratory Guidelines for Conducting Whole Effluent Toxicity Tests*. Water Quality Control Division.
5. **USEPA.** 2000. *Method of Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing* (40 CFR Part 136). EPA/821/B-00/004.
6. **USEPA.** 2000. *Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications under the National Pollutant Discharge Elimination System Program*. EPA/833/R-00/003.

Appendix 1 – Chain of Custody with Sample Receipt Forms



CHAIN OF CUSTODY

500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027
(303) 661.9324 - FAX (303) 661.9325

Client/Project Name: <u>Linkan / Schwartzwelder Mine</u>		Analysis (Check all applicable)	
P. O./Project Number:		Total Volume	
Contact: <u>Alex Schwiebert</u>		Number of Containers	
Address: <u>2720 Ruby Vista Dr Elko, NV 89801</u>		Other Analysis (List Below)	
Phone # <u>775-397-6779</u> E-Mail: <u>alex.schwiebert@linkan.com</u>		BOD/COD (Circle)	
Fax #		Coliform (Total/Fecal/E-Coli) (Circle)	
Sampler: <u>Bryant Acevedo</u>		Oil and Grease	
Report By: <input type="checkbox"/> Mail <input checked="" type="checkbox"/> PDF <input type="checkbox"/> FAX		Chromium III/VI (Circle)	
Sample Location or ID		Anions (List Below)	
<u>Outfall 001A</u>	<u>6/23/25</u>	Solids (TS/TDS/TSS) (Circle)	
	<u>1330</u>	Metals (List Below)	
		WET: Acute (Indicate Below)	
		WET: Chronic (Indicate Below)	
		WET: Accelerated (Indicate Below)	
		WET: PTI/TIE/TRE (Indicate Below)	
Grab/Comp		Ceriodaphnia	
<u>Comp</u>	<u>525 317 off</u>	Daphnia magna	
		Daphnia pulex	
		Other (List Below)	
Turnaround Requirements (Analytical Testing Only)		Test Species: <input checked="" type="checkbox"/> Fathead Minnow <input checked="" type="checkbox"/> Cerio daphnia	
<input checked="" type="checkbox"/> Standard (10 days)	6-9 Day	Special Instructions/Comments:	
<input type="checkbox"/> 3-5 Day	1-2 Day	<u>WET # 1</u>	
Requested Report Date:		<u>Email results to : Chris.prosper@linkan.com</u>	
		<u>adam.billing@linkan.com</u>	
		<u>peter.hay@state.co.us</u>	
		<u>as well</u>	
Relinquished By (1)		Relinquished By (2)	
Signature <u>[Signature]</u>	Date/Time <u>6/23/25</u>	Signature	Date/Time
	<u>16:20</u>		
Received By (1)		Received By (2)	
Signature <u>[Signature]</u>	Date/Time <u>06/23/25</u>	Signature	Date/Time
	<u>1600</u>		

SeaCrest Group
Louisville, CO

Sample Receipt Form

Form #: 42
Effective: January 2024

Project # 525 ^{317.B} ~~314.B~~

Date: 0102325

Samples Were:

1. FedEx UPS Courier

Notes:

Sample #: 1

Initials: HT

Hand Delivery (circle one)

2. Chilled to Ship

Ambient Chilled

3. Cooler Received Broken or Leaking

Y N NA

Notes:

4. Sample Received Broken or Leaking

Y N

Notes:

5. Received Within 36hr Holding Time

Y N

Notes:

6. Aeration necessary

Y N

7. pH adjustment necessary

Y N

8. Sample Received at Temperature between 0-6° C .

Y N NA

Notes: same day sample

9. Description of Sample (Color, Odor, and/or Presence of Particulate Matter):

Effluent: clear no visible P.M

Receiving: NA

Presence of native species:

Y N

525

Lab #	Temp	D.O.	pH	Cond
317.B	8.7	7.6	7.9	150

Custody Seals:

- Present on Outer Package
- Unbroken on Outer Package
- Present on Sample
- Unbroken on Sample

Y N NA
Y N NA
Y N NA

Custody Documentation (Chain of Custody):

- Present Upon Receipt of Sample

Y N CC

CHAIN OF CUSTODY

500 S. Arthur Avenue, Unit 450 - Louisville, CO 80027
(303) 661.9324 - FAX (303) 661.9325

[illegible]

SeaCrest Group
Louisville, CO

Sample Receipt Form

Form #: 42
Effective: January 2024

Project # 525317.B

Date: 062425

Samples Were:

1. FedEx UPS Courier

Notes:

Sample #: 2

Initials: EW

Hand Delivery (circle one)

2. Chilled to Ship

Ambient Chilled

3. Cooler Received Broken or Leaking

Y N NA

Notes:

4. Sample Received Broken or Leaking

Y N

Notes:

5. Received Within 36hr Holding Time

Y N

Notes:

6. Aeration necessary

Y N

7. pH adjustment necessary

Y N

8. Sample Received at Temperature between 0-6° C .

Y N NA

Notes: Same day

9. Description of Sample (Color, Odor, and/or Presence of Particulate Matter):

Effluent: low fine PM

Receiving: N/A

Presence of native species:

Y N

Lab #	Temp	D.O.	pH	Cond
<u>317.B#2</u>	<u>10.5</u>	<u>7.2</u>	<u>7.8</u>	<u>158</u>

Custody Seals:

1. Present on Outer Package

Y N

2. Unbroken on Outer Package

Y N NA

3. Present on Sample

Y N

4. Unbroken on Sample

Y N NA

Custody Documentation (Chain of Custody):

1. Present Upon Receipt of Sample

Y N

SeaCrest Group
Louisville, CO

Sample Receipt Form

Form #: 42
Effective: January 2024

Project # 525317.B

Date: 062525

Samples Were:

1. FedEx UPS Courier

Notes:

Sample #: 3

Initials: EW

Hand Delivery (circle one)

2. Chilled to Ship

Ambient Chilled

3. Cooler Received Broken or Leaking

Y N NA

Notes:

4. Sample Received Broken or Leaking

Y N

Notes:

5. Received Within 36hr Holding Time

Y N

Notes:

6. Aeration necessary

Y N

7. pH adjustment necessary

Y N

8. Sample Received at Temperature between 0-6°C .

Y N NA

Notes: same day

9. Description of Sample (Color, Odor, and/or Presence of Particulate Matter):

Effluent: clear, no PM

Receiving: N/A

Presence of native species:

Y N

Lab #	Temp	D.O.	pH	Cond
<u>317.B#3</u>	<u>10.8</u>	<u>7.8</u>	<u>7.8</u>	<u>151</u>

Custody Seals:

1. Present on Outer Package

Y N

2. Unbroken on Outer Package

Y N NA

3. Present on Sample

Y N

4. Unbroken on Sample

Y N NA

Custody Documentation (Chain of Custody):

1. Present Upon Receipt of Sample

Y N

Appendix 2 – Data Sheets for the *Ceriodaphnia dubia* Test

WET TEST REPORT FORM – CHRONIC

Permittee: Linkan Engineering-Schwartzwalder Mine

Permit No.: CO-0001244

Outfall: 001A – IWC: 100%

Test Type: Routine ☒ Accelerated ☐ Screen ☐

Test Species: *Ceriodaphnia dubia*

Test Start Time	Test Start Date	Test End Time	Test End Date
1145	06-24-2025	1205	06-30-2025

Test Results	Lethality/TCP3B	Reproduction/TKP3B
S code: LOEL	100%	100%
	PASS	N/A
P code: LC ₂₅ /IC ₂₅	84.5%	84.2%
	PASS	N/A
T code:	100%	100%

Test Summary

Measurements	Control (0%)	20%	40%	60%	80%	100%
Exposed organisms	10	10	10	10	10	10
Survival for day 1	10	10	10	10	10	10
Survival for day 2	10	10	10	10	10	6
Survival for day 3	10	10	9	10	10	2
Survival for day 4	10	10	9	10	10	0
Survival for day 5	10	10	9	10	10	0
Survival for day 6	10	10	9	10	10	0
Mean 3 Brood Total	25.3	28.5	24.9	25.3	26.3	0.4

Hardness (mg/L) – Receiving Water: N/A

Effluent: 0/0/2

Recon Water: 96

Alkalinity (mg/L) – Receiving Water: N/A

Effluent: 75/79/85

Recon Water: 62

Chlorine (mg/L) – Effluent: <0.01/<0.01/0.02

pH (initial/final) – Control: 7.9/8.3

100%: 7.8/7.8

Total Ammonia as NH₃ (mg/L) - Effluent: 0.03/<0.03/<0.03

Were all Test Conditions in Conformance with Division Guidelines? YES ☒ NO ☐

If **NO**, list deviations from test specifications: N/A

Laboratory: SeaCrest Group

Comments:

Analyst's Name: Haley West, Cat Cash, Hannah Tiede, and Katie Maranowski

Signature

Date July 2, 2025

SeaCrest Group
Louisville, CO

Ceriodaphnia Chronic Benchsheet

Form #: 101a
Effective: March 2023

Permittee: Linkan Engineering Lab #: 525317.B Site: 001A
IWC %: 100 Template #: 5 Dilution Water: MH25-014 Sample Date: 062325
Age & Source: 1197 062425 Test Start: 062425 1145 Test End: 062525 1205

Test Conditions:

	0	1	2	3	4	5	6	7	Total
(C)	0	0	0	6	0	13	13		32
	0	0	0	5	0	10	10		25
	0	0	0	6	0	11	17		34
	0	0	0	6	0	12	16		34
	0	0	0	4	0	5	8		17
	0	0	0	5	0	9	12		26
	0	0	0	4	0	10	10		24
	0	0	0	0	4	6	11		21
	0	0	0	7	0	5	2		24
	0	0	0	4	0	8	0		16
DO	7.2	7.5	6.8	6.8	6.9	6.9	7.3	7.4	
Temp	24.8	25.8	25.5	25.3	24.1	25.9	25.9	25.5	25.3
pH	7.9	8.2	8.0	8.0	8.1	8.2	7.9	8.1	
Cond	317	318	327	318	327	314	339		
(1)	0	0	0	8	0	9	12		29
	0	0	0	6	0	9	13		28
	0	0	0	3	0	6	14		23
	0	0	0	5	0	12	12		29
	0	0	0	4	0	10	10		24
	0	0	0	7	0	10	15		32
	0	0	0	4	3	10	14		32
	0	0	0	4	0	10	13		31
	0	0	0	4	0	10	13		27
	0	0	0	8	6	0	6		30
DO	7.1	7.5	6.8	6.8	7.2	6.9	7.2	7.4	
Temp	24.8	25.8	25.5	25.3	24.4	25.9	25.9	25.5	25.3
pH	7.8	8.2	7.9	8.0	8.1	8.2	7.9	8.1	
Cond	287	288	298	297	298	287	310		
(2)	0	0	0	0	6	11	15		32
	0	0	0	7	0	14	18		39
	0	0	0	4	0	10	14		28
	0	0	0	6	0	10	11		26
	0	0	0	5	0	10	13		28
	0	0	0	0	0	11	13		24
	0	0	0	5	0	9	12		26
	0	0	0	4	0	9	11		24
	0	0	0	3	4	11	0		18
DO	7.0	7.6	6.9	6.7	7.4	6.9	7.3	7.1	
Temp	24.8	25.8	25.5	25.3	24.9	25.9	25.9	25.5	24.9
pH	7.8	8.3	7.8	8.1	8.3	8.0	7.8	8.2	
Cond	259	259	270	270	268	256	275		
(3)	0	0	0	7	0	10	12		29
	0	0	0	6	0	10	12		28
	0	0	0	4	0	12	14		30
	0	0	0	4	0	7	15		26
	0	0	0	4	0	5	13		22
	0	0	0	6	0	12	15		33
	0	0	0	4	0	7	10		21
	0	0	0	4	0	11	17		27
	0	0	0	3	7	3	0		16
DO	7.1	7.7	6.9	6.6	7.0	6.9	7.1	7.9	
Temp	24.8	25.8	25.5	25.3	25.1	25.9	25.9	25.5	25.3
pH	7.7	8.3	7.8	8.2	8.0	8.1	7.8	8.4	
Cond	232	230	233	238	233	227	248		

CC

SeaCrest Group
Louisville, CO

Ceriodaphnia Chronic Benchsheet

Form #: 101a
Effective: March 2023

	0	1	2	3	4	5	6	7	Total
(4)	0	0	0	4	0	9	12		25
	0	0	0	5	0	10	16		31
	0	0	0	0	0	10	10		20
	0	0	0	4	0	10	10		25
	0	0	0	5	0	12	13		30
	0	0	0	5	0	11	13		29
	0	0	0	0	4	6	12		22
	0	0	0	0	3	8	14		25
	0	0	0	6	0	5	13		24
	0	0	0	0	5+2	7	13		27
DO	7.1	7.6	6.8	6.5	7.8	6.9	6.9	7.2	7.7
Temp	24.8	25.9	26.5	25.3	25.3	25.9	25.7	25.8	24.1
pH	7.1	8.4	7.7	8.7	8.0	8.5	8.0	8.2	7.8
Cond	182	185	190	190	185	193	223		
(5)	0	0	0	0	1				1
	0	0	0	0	3				3
	0	0	0	0					0
	0	0	0	0					0
	0	0	0	0					0
	0	0	0	0	4				4
	0	0	0	0	0				0
	0	0	0	0	0				0
	0	0	0	0	0				0
	0	0	0	0	0				0
DO	7.2	7.9	6.9	6.4	8.0	6.9	6.9	7.2	7.9
Temp	24.8	25.9	26.5	25.3	25.3	25.9	25.7	25.8	24.1
pH	7.1	8.4	7.7	8.7	8.0	8.5	8.0	8.2	7.8
Cond	182	185	190	190	185	193	223		
Algae	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS	ABS
YCT	2504	2504	2504	2504	2504	2504	2504	2504	2504
H ₂ O	1	2	1	2	3	3	3	3	3
Initials	KM	KM	CC	HW	HT	KM	KM		
	Eff #1		Eff #2		Eff #3		Recon		
Hardness	0		0		0		96		
Alkalinity	75		79		75		102		
Chlorine	20.01		20.01		20.02		20.01		
Ammonia	0.03		0.03		0.03		0.03		

Exposure Chamber:
Total Capacity: 30mL
Total Solution Volume: 15mL

Feeding Schedule:
Fed daily
Food used: YCT, Algae

Units:
DO: mg/L
Temp: °C
pH: N/A
Cond: µS/cm³
Hardness: mg/L
Alkalinity: mg/L
Chlorine: mg/L
Ammonia: mg/L

Comments:

1	2	3	4	5	6	7	8	9	10
A1	A3	A4	A5	A6	A8	A9	C2	C6	C7

x:y:z = board #:row:column

CETIS Analytical Report

Report Date: 30 Jun-25 15:55 (p 1 of 1)
Test Code/ID: 525317cd / 11-5089-2388

Ceriodaphnia 7-d Survival and Reproduction Test

SeaCrest Group

Analysis ID: 06-7225-8130 Endpoint: 7d Survival Rate CETIS Version: CETIS v2.1.6
Analyzed: 30 Jun-25 15:54 Analysis: STP 2xK Contingency Tables Status Level: 1
Edit Date: 30 Jun-25 0:00 MD5 Hash: 26D148ECA29703B9A09023057D92E2A4 Editor ID: 000-346-492-2

Batch ID: 19-1490-5435 Test Type: Reproduction-Survival (7d) Analyst:
Start Date: 24 Jun-25 Protocol: EPA/821/R-02-013 (2002) Diluent: Mod-Hard Synthetic Water
Ending Date: 30 Jun-25 Species: Ceriodaphnia dubia Brine: Not Applicable
Test Length: 6d 0h Taxon: Branchiopoda Source: In-House Culture Age:

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units
Untransformed	C > T	80	100	89.44	1.2

Fisher Exact/Bonferroni-Holm Test

Control	vs	Conc-%	Test Stat	P-Type	P-Value	Decision(α:5%)
Dilution Water		20	1.0000	Exact	1.0000	Non-Significant Effect
		40	0.5000	Exact	1.0000	Non-Significant Effect
		60	1.0000	Exact	1.0000	Non-Significant Effect
		80	1.0000	Exact	1.0000	Non-Significant Effect
		100*	0.0000	Exact	2.7E-05	Significant Effect

Test Acceptability Criteria

TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

7d Survival Rate Frequencies

Conc-%	Code	NR	R	NR + R	Prop NR	Prop R	%Effect
0	D	10	0	10	1.0000	0.0000	0.00%
20		10	0	10	1.0000	0.0000	0.00%
40		9	1	10	0.9000	0.1000	10.00%
60		10	0	10	1.0000	0.0000	0.00%
80		10	0	10	1.0000	0.0000	0.00%
100		0	10	10	0.0000	1.0000	100.00%

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
20		10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
40		10	0.9000	0.6738	1.0000	1.0000	0.0000	1.0000	0.1000	35.14%	10.00%
60		10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
80		10	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	0.0000	0.00%	0.00%
100		10	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	---	100.00%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst: EW QA: CC

CETIS Analytical Report

Report Date: 30 Jun-25 15:55 (p 1 of 2)
Test Code/ID: 525317cd / 11-5089-2388

Ceriodaphnia 7-d Survival and Reproduction Test

SeaCrest Group

Analysis ID: 00-9292-1898	Endpoint: 7d Survival Rate	CETIS Version: CETIS v2.1.6
Analyzed: 30 Jun-25 15:54	Analysis: Linear Interpolation (ICPIN)	Status Level: 1
Edit Date: 30 Jun-25 0:00	MD5 Hash: 26D148ECA29703B9A09023057D92E2A4	Editor ID: 000-346-492-2
Batch ID: 19-1490-5435	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 24 Jun-25	Protocol: EPA/821/R-02-013 (2002)	Diluent: Mod-Hard Synthetic Water
Ending Date: 30 Jun-25	Species: Ceriodaphnia dubia	Brine: Not Applicable
Test Length: 6d 0h	Taxon: Branchiopoda	Source: In-House Culture Age:

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	2140199	1000	Yes	Two-Point Interpolation

Test Acceptability Criteria TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	1	0.8	>>	Yes	Passes Criteria

Point Estimates

Level	%	95% LCL	95% UCL	Tox Units	95% LCL	95% UCL
LC15	82.41	81.11	83	1.2	1.2	1.2
LC20	83.45	82.22	84	1.2	1.2	1.2
LC25	84.48	83.33	85	1.2	1.2	1.2
LC40	87.59	86.67	88	1.1	1.1	1.2
LC50	89.66	88.89	90	1.1	1.1	1.1

7d Survival Rate Summary

Conc-%	Code	Count	Calculated Variate(A/B)						Isotonic Variate	
			Mean	Median	Min	Max	CV%	%Effect	ΣA/ΣB	%Effect
0	D	10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000 0.00%
20		10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	1.0000 0.00%
40		10	0.9000	1.0000	0.0000	1.0000	35.14%	10.00%	9/10	0.9667 3.33%
60		10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	0.9667 3.33%
80		10	1.0000	1.0000	1.0000	1.0000	0.00%	0.00%	10/10	0.9667 3.33%
100		10	0.0000	0.0000	0.0000	0.0000	---	100.00%	0/10	0.0000 100.00%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst: EW QA: CC

CETIS Analytical Report

Report Date: 30 Jun-25 15:55 (p 1 of 1)
Test Code/ID: 525317cd / 11-5089-2388

Ceriodaphnia 7-d Survival and Reproduction Test

SeaCrest Group

Analysis ID: 21-0611-3581 Endpoint: Reproduction CETIS Version: CETIS v2.1.6
Analyzed: 30 Jun-25 15:54 Analysis: Nonparametric-Control vs Treatments Status Level: 1
Edit Date: 30 Jun-25 0:00 MD5 Hash: 01EF4325381070C52D74167D967455C4 Editor ID: 000-346-492-2

Batch ID: 19-1490-5435 Test Type: Reproduction-Survival (7d) Analyst:
Start Date: 24 Jun-25 Protocol: EPA/821/R-02-013 (2002) Diluent: Mod-Hard Synthetic Water
Ending Date: 30 Jun-25 Species: Ceriodaphnia dubia Brine: Not Applicable
Test Length: 6d 0h Taxon: Branchiopoda Source: In-House Culture Age:

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Untransformed	C > T	80	100	89.44	1.2	5.885	23.26%

Steel Many-One Rank Sum Test

Control	vs	Conc-%	df	Test Stat	Critical	Ties	P-Type	P-Value	Decision(α:5%)
Dilution Water		20	18	119	75	2	CDF	0.9875	Non-Significant Effect
		40	18	111.5	75	4	CDF	0.9403	Non-Significant Effect
		60	18	108	75	3	CDF	0.8923	Non-Significant Effect
		80	18	113	75	1	CDF	0.9548	Non-Significant Effect
		100*	18	55	75	0	CDF	0.0004	Significant Effect

Test Acceptability Criteria

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	25.3	15	>>	Yes	Passes Criteria
PMSD	0.2326	0.13	0.47	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	5572.08	1114.42	5	33.73	<1.0E-05	Significant Effect
Error	1784.1	33.0389	54			
Total	7356.18		59			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test	39.62	15.09	<1.0E-05	Unequal Variances
Distribution	Shapiro-Wilk W Normality Test	0.8851	0.9459	3.9E-05	Non-Normal Distribution

Reproduction Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	10	25.3	20.69	29.91	24.5	16	34	2.039	25.48%	0.00%
20		10	28.5	26.28	30.72	29	23	32	0.9804	10.88%	-12.65%
40		10	24.9	17.53	32.27	27	0	39	3.257	41.37%	1.58%
60		10	25.3	21.5	29.1	26	16	35	1.68	21.00%	0.00%
80		10	26.3	23.84	28.76	27	20	31	1.086	13.06%	-3.95%
100		10	0.4	-0.2911	1.091	0	0	3	0.3055	241.52%	98.42%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst: EW QA: CC

CETIS Analytical Report

Report Date: 30 Jun-25 15:55 (p 2 of 2)
Test Code/ID: 525317cd / 11-5089-2388

Ceriodaphnia 7-d Survival and Reproduction Test

SeaCrest Group

Analysis ID: 18-8463-6412	Endpoint: Reproduction	CETIS Version: CETIS v2.1.6
Analyzed: 30 Jun-25 15:54	Analysis: Linear Interpolation (ICPIN)	Status Level: 1
Edit Date: 30 Jun-25 0:00	MD5 Hash: 01EF4325381070C52D74167D967455C4	Editor ID: 000-346-492-2
Batch ID: 19-1490-5435	Test Type: Reproduction-Survival (7d)	Analyst:
Start Date: 24 Jun-25	Protocol: EPA/821/R-02-013 (2002)	Diluent: Mod-Hard Synthetic Water
Ending Date: 30 Jun-25	Species: Ceriodaphnia dubia	Brine: Not Applicable
Test Length: 6d 0h	Taxon: Branchiopoda	Source: In-House Culture Age:

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	1115090	1000	Yes	Two-Point Interpolation

Test Acceptability Criteria

TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	25.3	15	>>	Yes	Passes Criteria

Point Estimates

Level	%	95% LCL	95% UCL	Tox Units	95% LCL	95% UCL
IC15	82.1	38.35	83.07	1.2	1.2	2.6
IC20	83.17	80.62	84.09	1.2	1.2	1.2
IC25	84.24	81.86	85.12	1.2	1.2	1.2
IC40	87.46	85.58	88.19	1.1	1.1	1.2
IC50	89.6	88.07	90.24	1.1	1.1	1.1

Reproduction Summary

Calculated Variate

Isotonic Variate

Conc-%	Code	Count	Mean	Median	Min	Max	CV%	%Effect	Mean	%Effect
0	D	10	25.3	24.5	16	34	25.48%	0.00%	26.9	0.00%
20		10	28.5	29	23	32	10.88%	-12.65%	26.9	0.00%
40		10	24.9	27	0	39	41.37%	1.58%	25.5	5.20%
60		10	25.3	26	16	35	21.00%	0.00%	25.5	5.20%
80		10	26.3	27	20	31	13.06%	-3.95%	25.5	5.20%
100		10	0.4	0	0	3	241.52%	98.42%	0.4	98.51%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst:

QA:

EW CC

Appendix 3 – Data Sheets for the Fathead Minnow Test

WET TEST REPORT FORM – CHRONIC

Permittee: Linkan Engineering-Schwartzwalder Mine
Permit No.: CO-0001244
Outfall: 001A – IWC: 100%
Test Type: Routine ☒ Accelerated ☐ Screen ☐
Test Species: fathead minnow

Test Start Time	Test Start Date	Test End Time	Test End Date
1620	06-23-2025	1520	06-30-2025

Test Results	Lethality/TCP6C	Growth/TKP6C
S code: LOEL	>100%	100%
	PASS	N/A
P code: LC ₂₅ /IC ₂₅	99.5%	87%
	PASS	N/A
T code:	>100%	100%

Test Summary

Measurements	Control (0%)	12.5%	25%	50%	75%	100%
Exposed organisms	40	40	40	40	40	40
Survival for day 1	40	40	40	40	40	40
Survival for day 2	40	40	40	40	40	40
Survival for day 3	40	40	40	40	40	39
Survival for day 4	40	39	40	39	39	38
Survival for day 5	40	38	40	39	39	33
Survival for day 6	40	38	39	39	39	30
Survival for day 7	39	38	39	39	39	29
Mean Dry Wt. (mg)	0.587	0.586	0.565	0.562	0.553	0.233

Hardness (mg/L) – Receiving Water: N/A Effluent: 0/0/2 Recon Water: 100
Alkalinity (mg/L) – Receiving Water: N/A Effluent: 75/79/85 Recon Water: 63
Chlorine (mg/L) – Effluent: pH (initial/final) – Control: 8.1/7.6 100%: 7.9/7.8
<0.01/<0.01/0.02
Total Ammonia as NH₃ (mg/L) -Effluent: 0.03/<0.03/<0.03


Were all Test Conditions in Conformance with Division Guidelines? YES ☒ NO ☐

If **NO**, list deviations from test specifications: N/A

Laboratory: SeaCrest Group

Comments:

Analyst's Name: Cat Cash, Ethan White, and Hannah Tiede

Signature 

Date July 2, 2025

Form #: 103a
Effective: March 2022

Fathead Minnow Chronic Benchsheet

SeaCrest Group
Louisville, CO

Client: Linkan Engineering Site: 001A Lab #: 525317.B Sample Date: 06/05/25 IWC: 100 Dilution H₂O: M125-043
Test Start: 06/05/2020 Test End: 06/05/25 Species Info: 100275 Template: FHM Test Conditions: 100

Conc	Read	0	1	2	3	4	5	6	7	0	1	2	3	4	5	6	7	#	Fish & Tare	Tare	Fish Wt mg	Ave wt
0	DO	7.2	4.4	6.9	4.4	6.8	4.3	6.8	4.2	6.8	4.4	6.8	4.4	6.8	4.4	6.8	4.4	#1	1.05292	1.07618	1.0494	1.0494
	Temp	24.1	24.5	24.1	24.1	24.1	25.0	24.8	25.1	24.5	25.1	24.5	25.1	24.5	25.1	24.5	25.1	#2	1.07491	1.07391	0.510	0.510
	pH	8.1	7.6	8.0	7.8	8.1	7.7	8.1	7.7	8.1	7.7	8.1	7.7	8.1	7.7	8.1	7.7	#3	1.08333	1.07784	0.580	0.580
	Cond	293	320	316	314	306	311	314	311	314	311	314	311	314	311	314	311	#4	1.08138	1.07634	0.544	0.544
20	DO	7.3	4.3	7.0	4.4	7.3	4.3	7.0	4.3	7.0	4.3	7.0	4.3	7.0	4.3	7.0	4.3	#5	1.07247	1.06658	0.591	0.591
	Temp	24.1	24.5	24.1	24.1	24.1	25.0	24.8	25.1	24.5	25.1	24.5	25.1	24.5	25.1	24.5	25.1	#6	1.09018	1.08404	0.614	0.614
	pH	8.1	7.6	8.0	7.8	8.0	7.7	8.1	7.7	8.1	7.7	8.1	7.7	8.1	7.7	8.1	7.7	#7	1.07864	1.07294	0.515	0.515
	Cond	299	296	292	288	282	285	292	285	292	285	292	285	292	285	292	285	#8	1.07574	1.07010	0.502	0.502
40	DO	7.4	4.2	7.1	4.4	7.3	4.3	7.0	4.3	7.0	4.3	7.0	4.3	7.0	4.3	7.0	4.3	#9	1.07824	1.07199	0.675	0.675
	Temp	24.1	24.5	24.1	24.1	24.1	25.0	24.8	25.1	24.5	25.1	24.5	25.1	24.5	25.1	24.5	25.1	#10	1.08154	1.07551	0.583	0.583
	pH	8.1	7.6	7.9	7.8	7.9	7.7	8.0	7.7	8.0	7.7	8.0	7.7	8.0	7.7	8.0	7.7	#11	1.08498	1.07940	0.558	0.558
	Cond	296	290	287	283	277	279	282	279	282	279	282	279	282	279	282	279	#12	1.07428	1.07480	0.442	0.442
60	DO	7.5	4.0	7.3	4.4	7.5	4.3	7.2	4.4	7.3	4.3	7.2	4.4	7.3	4.3	7.2	4.4	#13	1.07460	1.06850	0.610	0.610
	Temp	24.1	24.5	24.1	24.1	24.1	25.0	24.8	25.1	24.5	25.1	24.5	25.1	24.5	25.1	24.5	25.1	#14	1.08438	1.07912	0.570	0.570
	pH	7.9	7.7	7.8	7.8	7.7	7.9	7.8	7.7	7.8	7.7	7.8	7.7	7.8	7.7	7.8	7.7	#15	1.07153	1.06603	0.522	0.522
	Cond	293	294	296	296	296	296	296	296	296	296	296	296	296	296	296	296	#16	1.07235	1.06694	0.580	0.580
80	DO	7.6	3.9	7.4	4.6	7.4	4.6	7.4	4.6	7.4	4.6	7.4	4.6	7.4	4.6	7.4	4.6	#17	1.07161	1.06500	0.601	0.601
	Temp	24.1	24.5	24.1	24.1	24.1	25.0	24.8	25.1	24.5	25.1	24.5	25.1	24.5	25.1	24.5	25.1	#18	1.07556	1.07053	0.501	0.501
	pH	7.8	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	#19	1.08321	1.08280	0.541	0.541
	Cond	181	183	187	177	182	182	182	182	182	182	182	182	182	182	182	182	#20	1.07448	1.07081	0.501	0.501
100	DO	7.0	3.8	7.5	4.6	7.2	4.5	7.0	4.3	7.3	4.3	7.0	4.3	7.0	4.3	7.0	4.3	#21	1.07464	1.07240	0.724	0.724
	Temp	24.1	24.5	24.1	24.1	24.1	25.0	24.8	25.1	24.5	25.1	24.5	25.1	24.5	25.1	24.5	25.1	#22	1.07187	1.07034	0.151	0.151
	pH	7.9	7.7	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	7.8	#23	1.07501	1.07193	0.405	0.405
	Cond	150	152	153	149	151	150	150	150	150	150	150	150	150	150	150	150	#24	1.07845	1.06632	0.443	0.443
	DO																	#				
	Temp																	#				
	pH																	#				
	Cond																	#				
	Initials	CL	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	pretest	1.05475	1.05131		
	Water #	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2					
	Eff 1																					
	Eff 2																					
	Recom																					
	MR																					
	Hard	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					
	Alk	15	79	85	103																	
	Chlor	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0					
	NH ₃	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02					
	Feeding	0	1	2	3	4	5	6	7													
	AM																					
	Initials	CL	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW					
	PM																					
	Initials	CL	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW	EW					

Units: DO: mg/L Hard: mg/L
Temp: °C Alk: mg/L
pH: N/A Chlor: mg/L
Cond: µS/cm³ NH₃: mg/L

Exposure Chamber
Total Capacity: 500 mL
Test Solution Volume: 250 mL
Test Solution Surface Area: 50.2 cm
Water Depth (constant): 6.5 cm

Feeding Schedule
2x per day
<24hr antenna

Food Used:
HT

CETIS Analytical Report

Report Date: 01 Jul-25 12:34 (p 1 of 2)
Test Code/ID: 525317fhm / 14-7334-1503

Fathead Minnow 7-d Larval Survival and Growth Test

SeaCrest Group

Analysis ID: 00-4636-1892	Endpoint: 7d Survival Rate	CETIS Version: CETIS v2.1.6
Analyzed: 01 Jul-25 12:34	Analysis: Nonparametric-Control vs Treatments	Status Level: 1
Edit Date: 01 Jul-25 0:00	MD5 Hash: 5178D78A35C7343301782BCC17BE66C	Editor ID: 000-346-492-2
Batch ID: 01-7884-4059	Test Type: Growth-Survival (7d)	Analyst:
Start Date: 23 Jun-25	Protocol: EPA/821/R-02-013 (2002)	Diluent: Mod-Hard Synthetic Water
Ending Date: 30 Jun-25	Species: Pimephales promelas	Brine: Not Applicable
Test Length: 7d 0h	Taxon: Actinopterygii	Source: In-House Culture Age:

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Angular (Corrected)	C > T	100	>100	---	1	0.1507	15.46%

Steel Many-One Rank Sum Test

Control	vs	Conc-%	df	Test Stat	Critical	Ties	P-Type	P-Value	Decision(α:5%)
Dilution Water		20	6	16	10	2	CDF	0.6105	Non-Significant Effect
		40	6	18	10	2	CDF	0.8333	Non-Significant Effect
		60	6	18	10	2	CDF	0.8333	Non-Significant Effect
		80	6	18	10	2	CDF	0.8333	Non-Significant Effect
		100	6	12.5	10	1	CDF	0.1834	Non-Significant Effect

Test Acceptability Criteria

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	0.975	0.8	>>	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.337039	0.0674078	5	3.596	0.0198	Significant Effect
Error	0.337422	0.0187457	18			
Total	0.674461		23			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test	9.263	15.09	0.0990	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.8289	0.884	0.0009	Non-Normal Distribution

7d Survival Rate Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	0.9750	0.8954	1.0000	1.0000	0.9000	1.0000	0.0250	5.13%	0.00%
20		4	0.9500	0.8581	1.0000	0.9500	0.9000	1.0000	0.0289	6.08%	2.56%
40		4	0.9750	0.8954	1.0000	1.0000	0.9000	1.0000	0.0250	5.13%	0.00%
60		4	0.9750	0.8954	1.0000	1.0000	0.9000	1.0000	0.0250	5.13%	0.00%
80		4	0.9750	0.8954	1.0000	1.0000	0.9000	1.0000	0.0250	5.13%	0.00%
100		4	0.7250	0.3722	1.0000	0.7000	0.5000	1.0000	0.1109	30.58%	25.64%

Angular (Corrected) Transformed Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	1.3710	1.2420	1.5010	1.4120	1.2490	1.4120	0.0407	5.94%	0.00%
20		4	1.3310	1.1810	1.4800	1.3310	1.2490	1.4120	0.0471	7.07%	2.97%
40		4	1.3710	1.2420	1.5010	1.4120	1.2490	1.4120	0.0407	5.94%	0.00%
60		4	1.3710	1.2420	1.5010	1.4120	1.2490	1.4120	0.0407	5.94%	0.00%
80		4	1.3710	1.2420	1.5010	1.4120	1.2490	1.4120	0.0407	5.94%	0.00%
100		4	1.0480	0.6059	1.4890	0.9966	0.7854	1.4120	0.1388	26.50%	23.60%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst: EW QA: CC

CETIS Analytical Report

Report Date: 01 Jul-25 12:34 (p 1 of 2)
Test Code/ID: 525317fhn / 14-7334-1503

Fathead Minnow 7-d Larval Survival and Growth Test

SeaCrest Group

Analysis ID: 06-6049-6880	Endpoint: 7d Survival Rate	CETIS Version: CETIS v2.1.6
Analyzed: 01 Jul-25 12:34	Analysis: Linear Interpolation (ICPIN)	Status Level: 1
Edit Date: 01 Jul-25 0:00	MD5 Hash: 5178D78A35C73433301782BCC17BE66C	Editor ID: 000-346-492-2
Batch ID: 01-7884-4059	Test Type: Growth-Survival (7d)	Analyst:
Start Date: 23 Jun-25	Protocol: EPA/821/R-02-013 (2002)	Diluent: Mod-Hard Synthetic Water
Ending Date: 30 Jun-25	Species: Pimephales promelas	Brine: Not Applicable
Test Length: 7d 0h	Taxon: Actinopterygii	Source: In-House Culture Age:

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	579220	1000	Yes	Two-Point Interpolation

Test Acceptability Criteria

TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	0.975	0.8	>>	Yes	Passes Criteria

Point Estimates

Level	%	95% LCL	95% UCL	Tox Units	95% LCL	95% UCL
LC15	91.49	82.25	---	1.1	---	1.2
LC20	95.49	84.13	---	1	---	1.2
LC25	99.49	85.7	---	1	---	1.2
LC40	>100	---	---	<1	---	---
LC50	>100	---	---	<1	---	---

7d Survival Rate Summary

Calculated Variate(A/B)

Isotonic Variate

Conc.-%	Code	Count	Mean	Median	Min	Max	CV%	%Effect	ΣA/ΣB	Mean	%Effect
0	D	4	0.9750	1.0000	0.9000	1.0000	5.13%	0.00%	39/40	0.9750	0.00%
20		4	0.9500	0.9500	0.9000	1.0000	6.08%	2.56%	38/40	0.9688	0.64%
40		4	0.9750	1.0000	0.9000	1.0000	5.13%	0.00%	39/40	0.9688	0.64%
60		4	0.9750	1.0000	0.9000	1.0000	5.13%	0.00%	39/40	0.9688	0.64%
80		4	0.9750	1.0000	0.9000	1.0000	5.13%	0.00%	39/40	0.9688	0.64%
100		4	0.7250	0.7000	0.5000	1.0000	30.58%	25.64%	29/40	0.7250	25.64%

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst: EW QA: CC

CETIS Analytical Report

Report Date: 01 Jul-25 12:38 (p 1 of 1)
Test Code/ID: 525317fhm / 14-7334-1503

Fathead Minnow 7-d Larval Survival and Growth Test

SeaCrest Group

Analysis ID: 17-5089-0904 Endpoint: Mean Dry Biomass-mg CETIS Version: CETIS v2.1.6
Analyzed: 01 Jul-25 12:34 Analysis: Parametric-Control vs Treatments Status Level: 1
Edit Date: 01 Jul-25 0:00 MD5 Hash: C2529A1E80770A100269DEC1F360114B Editor ID: 000-346-492-2

Batch ID: 01-7884-4059 Test Type: Growth-Survival (7d) Analyst:
Start Date: 23 Jun-25 Protocol: EPA/821/R-02-013 (2002) Diluent: Mod-Hard Synthetic Water
Ending Date: 30 Jun-25 Species: Pimephales promelas Brine: Not Applicable
Test Length: 7d 0h Taxon: Actinopterygii Source: In-House Culture Age:

Data Transform	Alt Hyp	NOEL	LOEL	TOEL	Tox Units	MSDu	PMSD
Untransformed	C > T	80	100	89.44	1.2	0.09674	16.49%

Dunnett Multiple Comparison Test

Control	vs	Conc-%	df	Test Stat	Critical	MSD	P-Type	P-Value	Decision(α:5%)
Dilution Water		20	6	0.01876	2.407	0.09674	CDF	0.8278	Non-Significant Effect
		40	6	0.5537	2.407	0.09674	CDF	0.6240	Non-Significant Effect
		60	6	0.6221	2.407	0.09674	CDF	0.5934	Non-Significant Effect
		80	6	0.8524	2.407	0.09674	CDF	0.4883	Non-Significant Effect
		100*	6	8.809	2.407	0.09674	CDF	2.7E-05	Significant Effect

Test Acceptability Criteria

TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	0.5868	0.25	>>	Yes	Passes Criteria
PMSD	0.1649	0.12	0.3	Yes	Passes Criteria

ANOVA Table

Source	Sum Squares	Mean Square	DF	F Stat	P-Value	Decision(α:5%)
Between	0.383565	0.076713	5	23.75	<1.0E-05	Significant Effect
Error	0.0581447	0.0032303	18			
Total	0.44171		23			

ANOVA Assumptions Tests

Attribute	Test	Test Stat	Critical	P-Value	Decision(α:1%)
Variance	Bartlett Equality of Variance Test	6.105	15.09	0.2961	Equal Variances
Distribution	Shapiro-Wilk W Normality Test	0.986	0.884	0.9766	Normal Distribution

Mean Dry Biomass-mg Summary

Conc-%	Code	Count	Mean	95% LCL	95% UCL	Median	Min	Max	Std Err	CV%	%Effect
0	D	4	0.5868	0.5193	0.6542	0.5795	0.544	0.644	0.0212	7.22%	0.00%
20		4	0.586	0.5515	0.6205	0.583	0.564	0.614	0.01085	3.70%	0.13%
40		4	0.5645	0.4119	0.7171	0.5705	0.442	0.675	0.04796	16.99%	3.79%
60		4	0.5617	0.491	0.6325	0.5575	0.522	0.61	0.02223	7.91%	4.26%
80		4	0.5525	0.4853	0.6197	0.554	0.501	0.601	0.02111	7.64%	5.84%
100		4	0.2327	0.1302	0.3353	0.236	0.151	0.308	0.03223	27.69%	60.33%

Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	0.644	0.57	0.589	0.544
20		0.591	0.614	0.575	0.564
40		0.675	0.583	0.558	0.442
60		0.61	0.526	0.522	0.589
80		0.601	0.501	0.541	0.567
100		0.229	0.151	0.308	0.243

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst: EW QA: CC

CETIS Analytical Report

Report Date: 01 Jul-25 12:38 (p 1 of 1)
Test Code/ID: 525317fhm / 14-7334-1503

Fathead Minnow 7-d Larval Survival and Growth Test

SeaCrest Group

Analysis ID: 11-9556-5134	Endpoint: Mean Dry Biomass-mg	CETIS Version: CETIS v2.1.6
Analyzed: 01 Jul-25 12:34	Analysis: Linear Interpolation (ICPIN)	Status Level: 1
Edit Date: 01 Jul-25 0:00	MD5 Hash: C2529A1E80770A100269DEC1F360114B	Editor ID: 000-346-492-2
Batch ID: 01-7884-4059	Test Type: Growth-Survival (7d)	Analyst:
Start Date: 23 Jun-25	Protocol: EPA/821/R-02-013 (2002)	Diluent: Mod-Hard Synthetic Water
Ending Date: 30 Jun-25	Species: Pimephales promelas	Brine: Not Applicable
Test Length: 7d 0h	Taxon: Actinopterygii	Source: In-House Culture Age:

Linear Interpolation Options

X Transform	Y Transform	Seed	Resamples	Exp 95% CL	Method
Linear	Linear	1401857	1000	Yes	Two-Point Interpolation

Test Acceptability Criteria

TAC Limits

Attribute	Test Stat	Lower	Upper	Overlap	Decision
Control Resp	0.5868	0.25	>>	Yes	Passes Criteria

Point Estimates

Level	%	95% LCL	95% UCL	Tox Units	95% LCL	95% UCL
IC15	83.36	78.61	85.75	1.2	1.2	1.3
IC20	85.2	80.8	87.67	1.2	1.1	1.2
IC25	87.03	82.8	89.66	1.1	1.1	1.2
IC40	92.54	88.4	96.62	1.1	1	1.1
IC50	96.21	91.75	101.7	1	1	1.1

Mean Dry Biomass-mg Summary

Calculated Variate

Isotonic Variate

Conc-%	Code	Count	Mean	Median	Min	Max	CV%	%Effect	Mean	%Effect
0	D	4	0.5868	0.5795	0.544	0.644	7.22%	0.00%	0.5868	0.00%
20		4	0.586	0.583	0.564	0.614	3.70%	0.13%	0.586	0.13%
40		4	0.5645	0.5705	0.442	0.675	16.99%	3.79%	0.5645	3.79%
60		4	0.5617	0.5575	0.522	0.61	7.91%	4.26%	0.5617	4.26%
80		4	0.5525	0.554	0.501	0.601	7.64%	5.84%	0.5525	5.84%
100		4	0.2327	0.236	0.151	0.308	27.69%	60.33%	0.2327	60.33%

Mean Dry Biomass-mg Detail

Conc-%	Code	Rep 1	Rep 2	Rep 3	Rep 4
0	D	0.644	0.57	0.589	0.544
20		0.591	0.614	0.575	0.564
40		0.675	0.583	0.558	0.442
60		0.61	0.526	0.522	0.589
80		0.601	0.501	0.541	0.567
100		0.229	0.151	0.308	0.243

Convergent Rounding (4 sf)

CETIS™ v2.1.6.2 x64 (000-346-492-2)

Analyst EW QA: CC

Appendix 4 – QA/QC and Reference Toxicant Test Chart

Quality Assurance Check List – Chronic Whole Effluent Toxicity Test

Client: Linkan Engineering-Schwartzwalder Mine
SeaCrest Sample No: 525317.B
Species Tested: *Ceriodaphnia dubia* and fathead minnow

Sample Dates	Start Date of Test (<i>Ceriodaphnia dubia</i>)	Start Date of Test (fathead minnow)
06-23-2025		
06-24-2025		
06-25-2025	06-24-2025	06-23-2025

Sample received in lab properly preserved (0-6°C)?	N*
Sample received at laboratory within 36 hours of collection?	Y
Sample delivered on ice or equivalent?	Y
Test initiated within 36-hours of collection?	Y
Test protocol conforms to CDPHE guidelines (<i>Ceriodaphnia dubia</i>)?	Y
Test protocol conforms to CDPHE guidelines (fathead minnow)?	Y
Average test temp. $\pm 1^{\circ}\text{C}$ (<i>Ceriodaphnia dubia</i>)?	Y
Average test temp. $\pm 1^{\circ}\text{C}$ (fathead minnow)?	Y
DO level $\geq 4.0\text{mg/L}$; no super-saturation (<i>Ceriodaphnia dubia</i>)?	Y
DO level $\geq 4.0\text{mg/L}$; no super-saturation (fathead minnow)?	Y
Survival in control $\geq 80\%$ (<i>Ceriodaphnia dubia</i>)?	Y
Survival in control $\geq 80\%$ (fathead minnow)?	Y
<i>Ceriodaphnia dubia</i> neonates <24-hours old?	Y
Fathead minnow larvae <24-hours old?	Y
Appropriate reference toxicity test conducted?	Y
Reference toxicity test results within the confidence limits for the lab?	Y

* The samples were received at 8.7°C, 10.5°C and 10.8°C on the same day as sampling.

Author



Date July 2, 2025

Position: Aquatic Toxicologist II

Quality Control



Date July 2, 2025

METHOD QC



Method	Analyte	Date	LCS (rec)	%REC	%RPD	QC LIMITS
2320 B	Alkalinity - Total	5/8/2025	104.80%	100.19%	-0.74%	± 5.00%
2320 B	Alkalinity - Total	5/14/2025	104.80%	100.97%	2.79%	± 5.00%
2320 B	Alkalinity - Total	5/22/2025	104.00%	101.03%	0.84%	± 5.00%
2320 B	Alkalinity - Total	5/28/2025	103.60%	101.97%	-1.92%	± 5.00%
4500 NH ₃ D	Ammonia	5/7/2025	96.60%	99.77%	1.01%	± 10.00%
4500 NH ₃ D	Ammonia	5/14/2025	96.00%	95.17%	0.80%	± 10.00%
4500 NH ₃ D	Ammonia	5/23/2025	104.00%	95.80%	-2.26%	± 10.00%
4500 NH ₃ D	Ammonia	5/27/2025	95.00%	97.84%	-2.17%	± 10.00%
4500 Cl D	Chlorine	5/29/2025	97.48%	100.00%	0.00%	± 5.00, ± 20.00%
2340 B	Hardness - Total	5/9/2025	96.49%	102.97%	-2.32%	± 5.00%
2340 B	Hardness - Total	5/16/2025	96.50%	103.00%	4.72%	± 5.00%
2340 B	Hardness - Total	5/23/2025	95.00%	103.00%	-1.83%	± 5.00%
2340 B	Hardness - Total	5/29/2025	103.51%	98.14%	-1.12%	± 5.00%
4500 O	DO - Winkler	5/8/2025	N/A	100.00%	98.57%	QC Limits ± 5.00%
4500 O	DO - Winkler	5/16/2025	N/A	95.77%	98.55%	± 5.00%
4500 O	DO - Winkler	5/24/2025	N/A	95.77%	98.55%	± 5.00%
4500 O	DO - Winkler	5/30/2025	N/A	98.68%	96.00%	± 5.00%
2540 D	Suspended Solids (TTL)	5/26/2025	Blank	%REC MR S	%RPD	QC Limits
2540 C	Dissolved Solids (TTL)	5/26/2025	100.00%	108.11%	0.00%	± 15%
			100.00%	114.50%	0.00%	± 15%

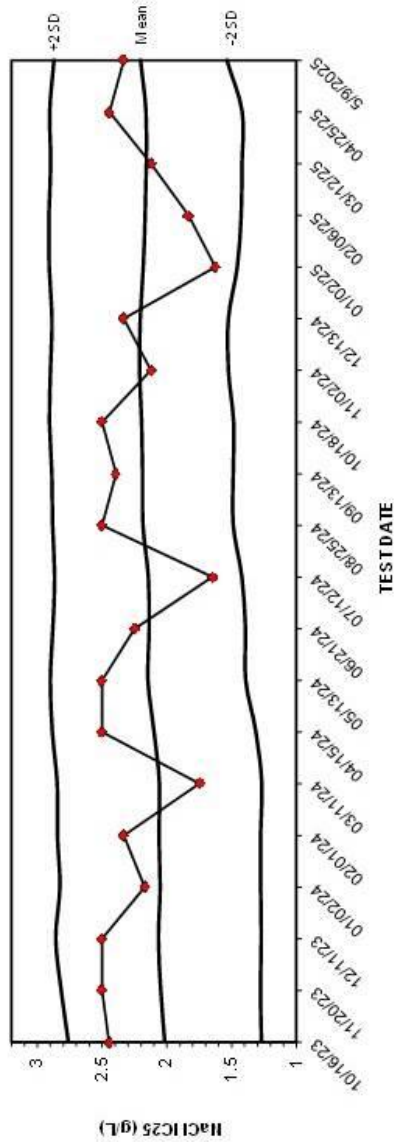
Signature: Valery West

Date: June 2, 2025

Signature: Cat Cash

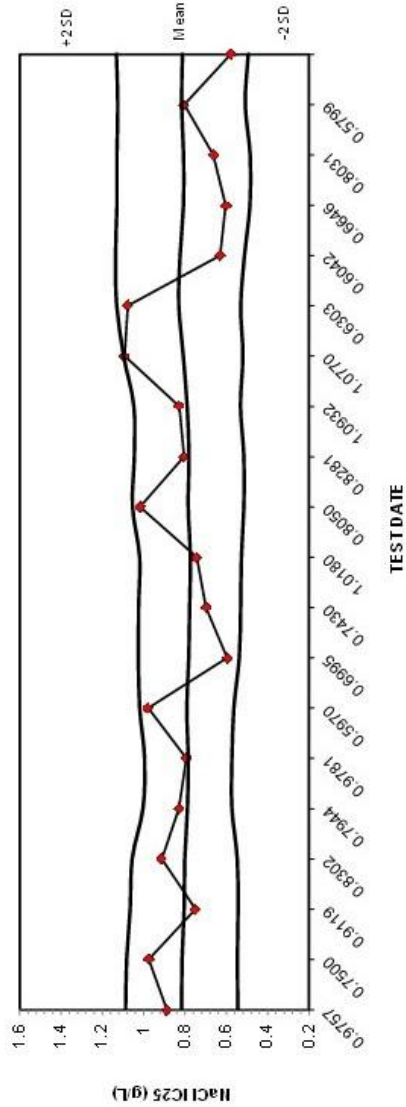
Date: June 2, 2025

CERIODAPHNIA SURVIVAL LC25 NaCl REFTOX



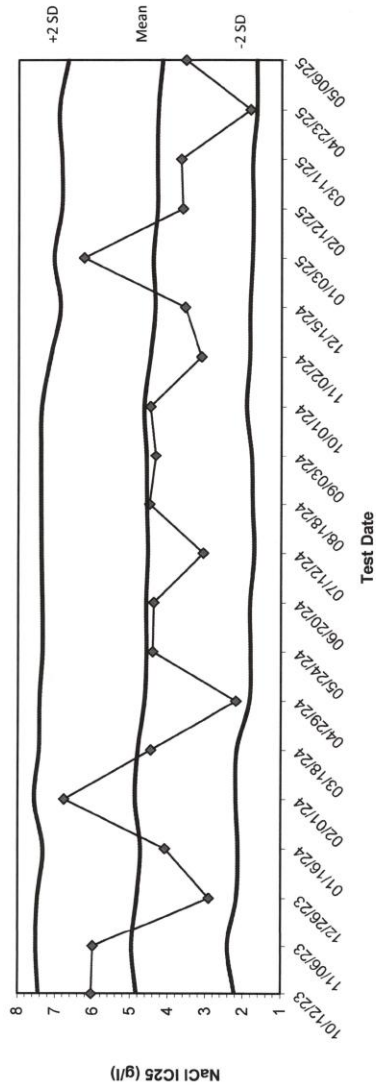
Date	LC25	Mean	-2 SD	+2 SD
10/16/23	2.4480	2.0158	1.2703	2.7613
11/20/23	2.5000	2.0476	1.2784	2.8168
12/11/23	2.5000	2.0655	1.2717	2.8592
01/02/24	2.1720	2.0518	1.2767	2.8269
02/01/24	2.3330	2.0617	1.2774	2.8460
03/11/24	1.7500	2.0578	1.2678	2.8477
04/15/24	2.5000	2.0995	1.3131	2.8858
05/13/24	2.5000	2.1471	1.3927	2.9014
06/21/24	2.2500	2.1378	1.3941	2.8816
07/12/24	1.6500	2.1444	1.4215	2.8672
08/25/24	2.5000	2.1860	1.4885	2.8836
09/13/24	2.3930	2.1889	1.4883	2.8895
10/18/24	2.5000	2.1968	1.4857	2.9080
11/02/24	2.1250	2.2130	1.5260	2.8999
12/13/24	2.3330	2.2075	1.5266	2.8894
01/02/25	1.6250	2.1835	1.4569	2.9100
02/06/25	1.8330	2.1695	1.4273	2.9118
03/12/25	2.1250	2.1596	1.4210	2.8983
04/25/25	2.4440	2.1628	1.4197	2.9059
5/9/2025	2.3330	2.2054	1.5383	2.8726

CERIODAPHNIA REPRODUCTION IC25 NaCl REFTOX



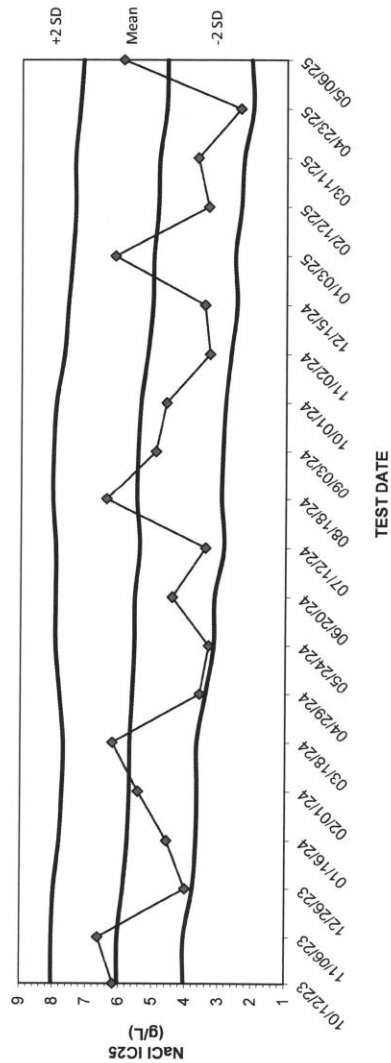
Date	IC25	Mean	-2 SD	+2 SD
10/16/23	0.8875	0.8164	0.5450	1.0878
11/20/2023	0.9757	0.81499255	0.547401472	1.082583628
12/11/23	0.7500	0.8049	0.5440	1.0658
01/02/24	0.9119	0.8019	0.5477	1.0560
02/01/24	0.8302	0.7888	0.5736	1.0040
03/11/24	0.7944	0.7848	0.5734	0.9962
04/15/24	0.9781	0.7923	0.5644	1.0202
05/13/24	0.5970	0.7824	0.5384	1.0265
06/21/24	0.6995	0.7784	0.5315	1.0252
07/12/24	0.7430	0.7741	0.5279	1.0202
08/25/24	1.0180	0.7853	0.5160	1.0545
09/13/24	0.8050	0.7810	0.5161	1.0458
10/18/24	0.8281	0.7901	0.5324	1.0478
11/02/24	1.0932	0.8090	0.5208	1.0972
12/13/24	1.0770	0.8310	0.5311	1.1309
01/02/25	0.6303	0.8248	0.5133	1.1362
02/06/25	0.6042	0.8080	0.4866	1.1295
03/12/25	0.6646	0.8078	0.4860	1.1297
04/25/25	0.8031	0.8175	0.5094	1.1256
05/09/25	0.5799	0.8135	0.4950	1.1321

FHM SURVIVAL LC25 NaCl REFTOX



Date	IC25	Mean	-2 SD	+2 SD
10/12/23	6.0360	4.8354	2.2221	7.4487
11/06/23	6.0000	4.9627	2.4111	7.5142
12/26/23	2.9120	4.8223	2.1721	7.4725
01/16/24	4.0800	4.7287	2.1284	7.3289
02/01/24	6.7670	4.8732	2.1868	7.5596
03/18/24	4.4550	4.7999	2.1625	7.4374
04/29/24	2.1900	4.8245	1.8268	7.4222
05/24/24	4.4090	4.5749	1.8037	7.3461
06/20/24	4.3800	4.5839	1.8168	7.3510
07/12/24	3.0670	4.5415	1.7090	7.3739
08/18/24	4.5000	4.5714	1.7560	7.3867
09/03/24	4.3333	4.5865	1.7805	7.3926
10/01/24	4.4760	4.4760	1.9181	7.3779
11/02/24	3.1230	4.4893	1.8336	7.1450
12/15/24	3.5620	4.3567	1.8292	6.8841
01/03/25	6.2500	4.4135	1.7718	7.0552
02/12/25	3.6250	4.3019	1.7493	6.8545
03/11/25	3.6670	4.3085	1.7635	6.8534
04/23/25	1.8150	4.2837	1.6502	6.9172
05/06/25	3.5380	4.1641	1.6533	6.6748

FHM GROWTH IC25 NaCl REFTOX



Date	IC25	Mean	-2 SD	+2 SD
10/12/23	6.1750	6.0363	4.0372	8.0354
11/06/23	6.6360	6.0352	4.0375	8.0330
12/26/23	4.0036	5.8797	3.7796	7.9799
01/16/24	4.5690	5.7497	3.6808	7.8186
02/01/24	5.4310	5.6958	3.6572	7.7345
03/18/24	6.2100	5.6820	3.6624	7.7017
04/29/24	3.5807	5.6121	3.4072	7.8170
05/24/24	3.3150	5.5507	3.1637	7.9377
06/20/24	4.4150	5.5436	3.1435	7.9437
07/12/24	3.4180	5.4037	2.8641	7.9433
08/18/24	6.4180	5.4925	2.9474	8.0376
09/03/24	4.9250	5.4628	2.9061	8.0194
10/01/24	4.6060	5.3852	2.8281	7.9423
11/02/24	3.3070	5.1862	2.6657	7.7066
12/15/24	3.4660	5.0417	2.4899	7.5935
01/03/25	6.1720	5.0062	2.5449	7.4674
02/12/25	3.3550	4.8745	2.3681	7.3809
03/11/25	3.6790	4.8385	2.2844	7.3927
04/23/25	2.3840	4.6342	2.0116	7.2567
05/06/25	5.9270	4.6037	2.0618	7.1455



Inactive Mine Reclamation Program
Division of Reclamation, Mining & Safety
1313 Sherman Street
Denver, CO 80203

07/30/2025
25US0221

**Re: Monthly Mine Pool Results for June 2025
Schwartzwalder Mine CO0001244**

TO WHOM IT MAY CONCERN:

On February 10th, 2025 the operations contract for the Schwartzwalder Mine was awarded and the contract started on April 1st, 2025.

Attached are the monthly mine pool results for June 2025. The sample was taken on June 19th.

Best regards,
Linkan

Patrick M. Delaney
Operator Responsible in Charge (ORC)
Black Fox Mining, LLC

A handwritten signature in black ink, appearing to read "Patrick Delaney", is written in a cursive style.



Enclosures:

June 2025 Mine Pool Results

CC List:

Electronic Copy sent to the following:

Peter Hays, CDNR, peter.hays@state.co.us
Quinn Westmoreland, Linkan, quinn.westmoreland@linkan.com
Adam Billin, Linkan, adam.billin@linkan.com
Chris Prosper, Linkan, chris.prosper@linkan.com
Sam Billin, Linkan, sam.billin@linkan.com
Jared Buck, Linkan, jared.buck@linkan.com
Brandy Wadford, Linkan, brandy.wadford@linkan.com
Alex Schwiebert, Linkan, alex.schwiebert@linkan.com



ANALYTICAL SUMMARY REPORT

July 15, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25061875 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 1 sample for Linkan Engineering on 6/20/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25061875-001	Mine Pool	06/19/25 9:40	06/20/25	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Total Alkalinity to pH 4.5 Cyanide, Weak Acid Dissociable Mercury, Dissolved Mercury, Total Oxygen, Dissolved Anions by Ion Chromatography Nitrogen, Nitrate + Nitrite Metals Digestion by E200.2 Mercury Digestion by E245.1 E365.1 Digestion, Total P Low Level Phosphorus, Orthophosphate as P Low level Phosphorus, Total Gross Alpha, Gross Beta, Total Radium 226 + Radium 228 Radium 226, Dissolved Radium 226, Total Radium 228, Total Solids, Total Dissolved Solids, Total Suspended

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: Linkan Engineering
Project: Schwartzwalder Mine
Work Order: B25061875

Report Date: 07/15/25

CASE NARRATIVE

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, PO Box 247, Casper, WY, EPA Number WY00002.

"J" qualified analyte concentrations are below the laboratory minimum recommended Reporting Limit (RL) and above the calculated method detection limit (MDL). The laboratory reporting limits are based on the lowest calibration standard for the method and are set at levels which can be reliably quantitated. Metals reporting limits are based on the MDL and through examination of blank performance. MDL's are statistically calculated values determined through analysis of a clean sample matrix.

Inorganic analytes reported with "J" qualifiers should be verified against the corresponding method blank. Inorganic "J" quantitations near the MDL 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: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061875-001
Client Sample ID: Mine Pool

Report Date: 07/15/25
Collection Date: 06/19/25 09:40
Date Received: 06/20/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	28	mg/L		10		A2540 D	06/20/25 14:42 / pjw
Solids, Total Dissolved TDS @ 180 C	3950	mg/L		100		A2540 C	06/20/25 14:35 / etv
INORGANICS							
Alkalinity, Total as CaCO ₃	878	mg/L		4		A2320 B	06/20/25 16:58 / spb
Bicarbonate as CaCO ₃	878	mg/L		3		A2320 B	06/20/25 16:58 / spb
Carbonate as CaCO ₃	ND	mg/L		7		A2320 B	06/20/25 16:58 / spb
Chloride	65	mg/L		5		E300.0	06/21/25 23:49 / caa
Sulfate	2110	mg/L		20		E300.0	06/21/25 23:49 / caa
Fluoride	1.4	mg/L		0.2		E300.0	06/21/25 23:49 / caa
Hydroxide as CaCO ₃	ND	mg/L		10		A2320 B	06/20/25 16:58 / spb
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		Kelada-01	06/23/25 11:51 / fap
Oxygen, Dissolved	4.3	mg/L	H	0.1		A4500-O G	06/20/25 13:51 / mbs
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	0.01	mg/L		0.01		E353.2	06/27/25 14:05 / rs4
Phosphorus, Orthophosphate as P	0.012	mg/L		0.002		E365.1	06/20/25 17:24 / taz
Phosphorus, Total as P	0.118	mg/L		0.002		E365.1	06/25/25 12:48 / taz
METALS, DISSOLVED							
Aluminum	0.002	mg/L	J	0.03		E200.8	06/24/25 02:00 / aem
Antimony	ND	mg/L		0.001		E200.8	06/27/25 00:25 / aem
Arsenic	0.024	mg/L		0.001		E200.8	06/24/25 02:00 / aem
Boron	0.34	mg/L		0.05		E200.7	06/23/25 17:12 / enb
Calcium	358	mg/L		1		E200.7	06/23/25 17:12 / enb
Chromium	ND	mg/L		0.005		E200.8	06/24/25 02:00 / aem
Copper	ND	mg/L		0.005		E200.8	06/24/25 02:00 / aem
Iron	8.98	mg/L		0.02		E200.8	06/24/25 02:00 / aem
Lead	ND	mg/L		0.001		E200.8	06/24/25 02:00 / aem
Magnesium	308	mg/L		1		E200.7	06/23/25 17:12 / enb
Manganese	0.593	mg/L		0.001		E200.8	06/24/25 02:00 / aem
Mercury	ND	mg/L		0.0001		E245.1	06/24/25 15:16 / mjb
Molybdenum	1.25	mg/L		0.001		E200.8	06/24/25 02:00 / aem
Potassium	33	mg/L		2		E200.7	06/23/25 17:12 / enb
Silver	ND	mg/L		0.001		E200.8	06/25/25 18:49 / aem
Sodium	379	mg/L		1		E200.7	06/23/25 17:12 / enb
Thallium	ND	mg/L		0.0005		E200.8	06/24/25 02:00 / aem
Uranium	23.8	mg/L		0.5		E200.7	06/23/25 17:12 / enb
Zinc	ND	mg/L		0.01		E200.8	06/24/25 02:00 / aem
METALS, TOTAL							
Aluminum	0.006	mg/L	J	0.03		E200.8	06/26/25 23:37 / aem
Antimony	ND	mg/L		0.001		E200.8	06/26/25 23:37 / aem
Arsenic	0.029	mg/L		0.001		E200.8	06/26/25 23:37 / aem

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
H - Analysis performed past the method holding time

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)



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061875-001
Client Sample ID: Mine Pool

Report Date: 07/15/25
Collection Date: 06/19/25 09:40
DateReceived: 06/20/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL							
Boron	0.35	mg/L		0.05		E200.7	06/25/25 18:20 / enb
Chromium	ND	mg/L		0.005		E200.8	06/27/25 17:39 / jks
Copper	0.001	mg/L	J	0.005		E200.8	06/26/25 23:37 / aem
Iron	10.3	mg/L		0.02		E200.8	06/26/25 23:37 / aem
Lead	ND	mg/L		0.001		E200.8	06/26/25 23:37 / aem
Manganese	0.560	mg/L		0.001		E200.8	06/26/25 23:37 / aem
Mercury	ND	mg/L		0.0001		E245.1	06/24/25 15:18 / mjb
Molybdenum	1.24	mg/L		0.001		E200.8	06/26/25 23:37 / aem
Silver	0.00001	mg/L	J	0.001		E200.8	06/26/25 23:37 / aem
Thallium	ND	mg/L		0.0005		E200.8	06/27/25 17:39 / jks
Zinc	0.003	mg/L	J	0.01		E200.8	06/26/25 23:37 / aem
RADIONUCLIDES - DISSOLVED							
Radium 226	95.5	pCi/L				E903.0	06/30/25 14:44 / eli-ca
Radium 226 precision (±)	14.7	pCi/L				E903.0	06/30/25 14:44 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	06/30/25 14:44 / eli-ca
RADIONUCLIDES - TOTAL							
Gross Alpha	24000	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Gross Alpha precision (±)	5200	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Gross Alpha MDC	33.1	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Gross Beta	5740	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Gross Beta precision (±)	374	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Gross Beta MDC	21.8	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Radium 226	70.6	pCi/L				E903.0	07/08/25 12:11 / eli-ca
Radium 226 precision (±)	10.8	pCi/L				E903.0	07/08/25 12:11 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	07/08/25 12:11 / eli-ca
Radium 228	0.5	pCi/L	U			RA-05	07/03/25 12:53 / eli-ca
Radium 228 precision (±)	0.6	pCi/L				RA-05	07/03/25 12:53 / eli-ca
Radium 228 MDC	0.9	pCi/L				RA-05	07/03/25 12:53 / eli-ca
Radium 226 + Radium 228	71.0	pCi/L				A7500-RA	07/11/25 13:24 / eli-ca
Radium 226 + Radium 228 precision (±)	10.9	pCi/L				A7500-RA	07/11/25 13:24 / eli-ca
Radium 226 + Radium 228 MDC	0.9	pCi/L				A7500-RA	07/11/25 13:24 / eli-ca

**Report
Definitions:**

RL - Analyte Reporting Limit
QCL - Quality Control 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)
U - Not detected



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2320 B										Batch: R444476
Lab ID: LCS										
		Laboratory Control Sample				Run: METROHM 2_250620A				06/20/25 15:58
Alkalinity, Total as CaCO ₃		102	mg/L	4.0	102	90	110			
Lab ID: MBLK										
		Method Blank				Run: METROHM 2_250620A				06/20/25 16:27
Alkalinity, Total as CaCO ₃		ND	mg/L	4						
Lab ID: B25061894-005BDUP										
		7 Sample Duplicate				Run: METROHM 2_250620A				06/20/25 17:51
Alkalinity, Total as CaCO ₃		180	mg/L	4.0				0.1	10	
Bicarbonate as HCO ₃		220	mg/L	4.0				0.1	10	
Carbonate as CO ₃		ND	mg/L	4.0					10	
Hydroxide as OH		ND	mg/L	4.0					10	
Bicarbonate as CaCO ₃		180	mg/L	3.3				0.1	10	
Carbonate as CaCO ₃		ND	mg/L	6.7					10	
Hydroxide as CaCO ₃		ND	mg/L	12						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C									Batch: TDS20250620B	
Lab ID: MBLK_20250620-6		Method Blank					Run: Bal #30_250620B		06/20/25 14:31	
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	20						
Lab ID: LCS_20250620-4		Laboratory Control Sample					Run: Bal #30_250620B		06/20/25 14:31	
Solids, Total Dissolved TDS @ 180 C		925	mg/L	25	93	90	110			
Lab ID: B25061872-001ADUP		Sample Duplicate					Run: Bal #30_250620B		06/20/25 14:32	
Solids, Total Dissolved TDS @ 180 C		37100	mg/L	1200				0.1	10	
Lab ID: B25061344-010ADUP		Sample Duplicate					Run: Bal #30_250620B		06/20/25 14:36	
Solids, Total Dissolved TDS @ 180 C		5500	mg/L	250				1.2	10	H

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

H - Analysis performed past the method holding time



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D										Batch: TSS20250620B
Lab ID: MBLK_20250620-7		Method Blank					Run: BAL #30_250620E			06/20/25 14:41
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: LCS_20250620-5										Run: BAL #30_250620E
Solids, Total Suspended TSS @ 105 C		103	mg/L	25	103	80	120			06/20/25 14:41
Lab ID: B25061875-001CDUP										Run: BAL #30_250620E
Solids, Total Suspended TSS @ 105 C		27.8	mg/L	10				1.4	10	06/20/25 14:42

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A4500-O G									Batch: R444534	
Lab ID: B25061875-001BDUP		Sample Duplicate		Run: DO_METER_250620A					06/20/25 13:58	
Oxygen, Dissolved		4.69	mg/L	0.10				8.7	30	H

Qualifiers:

RL - Analyte Reporting Limit
H - Analysis performed past the method holding time

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0										
Analytical Run: IC METROHM 1_250619A										
Lab ID: CCV	3	Continuing Calibration Verification Standard								06/21/25 22:10
Chloride		25.7	mg/L	1.0	103	90	110			
Sulfate		104	mg/L	1.0	104	90	110			
Fluoride		1.25	mg/L	0.10	100	90	110			
Method: E300.0										
Batch: R444488										
Lab ID: ICB	3	Method Blank								06/19/25 11:55
Chloride		ND	mg/L	0.1						
Sulfate		ND	mg/L	0.5						
Fluoride		ND	mg/L	0.01						
Lab ID: LFB	3	Laboratory Fortified Blank								06/19/25 12:11
Chloride		24.8	mg/L	1.0	99	90	110			
Sulfate		103	mg/L	1.1	103	90	110			
Fluoride		1.28	mg/L	0.10	102	90	110			
Lab ID: B25061873-002AMS	3	Sample Matrix Spike								06/21/25 22:59
Chloride		29.9	mg/L	1.0	104	90	110			
Sulfate		184	mg/L	1.1	103	90	110			
Fluoride		1.43	mg/L	0.10	102	90	110			
Lab ID: B25061873-002AMSD	3	Sample Matrix Spike Duplicate								06/21/25 23:16
Chloride		30.4	mg/L	1.0	106	90	110	1.4	20	
Sulfate		187	mg/L	1.1	106	90	110	1.5	20	
Fluoride		1.46	mg/L	0.10	104	90	110	1.8	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: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E353.2								Analytical Run: FIA203-B_250627A		
Lab ID: ICV	Initial Calibration Verification Standard								06/27/25	10:50
Nitrogen, Nitrate+Nitrite as N		0.550	mg/L	0.010	97	90	110			
Lab ID: CCV_20250627-10	Continuing Calibration Verification Standard								06/27/25	13:53
Nitrogen, Nitrate+Nitrite as N		1.02	mg/L	0.010	102	90	110			
Method: E353.2								Batch: R444974		
Lab ID: FilterMBLK	Method Blank					Run: FIA203-B_250627A			06/27/25	10:51
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.009						
Lab ID: MBLK_20250627-3	Method Blank					Run: FIA203-B_250627A			06/27/25	10:52
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.009						
Lab ID: FilterLFB	Laboratory Fortified Blank					Run: FIA203-B_250627A			06/27/25	10:53
Nitrogen, Nitrate+Nitrite as N		0.969	mg/L	0.010	97	90	110			
Lab ID: LFB_20250627-1	Laboratory Fortified Blank					Run: FIA203-B_250627A			06/27/25	10:54
Nitrogen, Nitrate+Nitrite as N		0.999	mg/L	0.010	100	90	110			
Lab ID: B25061847-001CMS	Sample Matrix Spike					Run: FIA203-B_250627A			06/27/25	13:57
Nitrogen, Nitrate+Nitrite as N		1.00	mg/L	0.010	100	90	110			
Lab ID: B25061847-001CMSD	Sample Matrix Spike Duplicate					Run: FIA203-B_250627A			06/27/25	13:58
Nitrogen, Nitrate+Nitrite as N		1.05	mg/L	0.010	105	90	110	4.4	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1 Analytical Run: FIA204-B_250620A										
Lab ID: ICV	Initial Calibration Verification Standard 06/20/25 17:18									
Phosphorus, Orthophosphate as P		0.252	mg/L	0.0050	101	90	110			
Method: E365.1 Batch: R444570										
Lab ID: ICB	Method Blank Run: FIA204-B_250620A 06/20/25 17:20									
Phosphorus, Orthophosphate as P		ND	mg/L	0.001						
Lab ID: LFB	Laboratory Fortified Blank Run: FIA204-B_250620A 06/20/25 17:21									
Phosphorus, Orthophosphate as P		0.253	mg/L	0.0050	101	90	110			
Lab ID: B25061875-001AMS	Sample Matrix Spike Run: FIA204-B_250620A 06/20/25 17:25									
Phosphorus, Orthophosphate as P		0.257	mg/L	0.0020	98	90	110			
Lab ID: B25061875-001AMSD	Sample Matrix Spike Duplicate Run: FIA204-B_250620A 06/20/25 17:26									
Phosphorus, Orthophosphate as P		0.246	mg/L	0.0020	94	90	110	4.4	10	
Method: E365.1 Analytical Run: SEAL201-B_250625A										
Lab ID: ICV-198785	Initial Calibration Verification Standard 06/25/25 10:04									
Phosphorus, Total as P		0.504	mg/L	0.0050	101	90	110			
Lab ID: CCV-198785	Continuing Calibration Verification Standard 06/25/25 12:39									
Phosphorus, Total as P		0.536	mg/L	0.0050	107	90	110			
Method: E365.1 Batch: 200872										
Lab ID: MB-200872	Method Blank Run: SEAL201-B_250625A 06/25/25 12:25									
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-200872	Laboratory Control Sample Run: SEAL201-B_250625A 06/25/25 12:26									
Phosphorus, Total as P		0.190	mg/L	0.0050	95	90	110			
Lab ID: B25061894-003EMS	Sample Matrix Spike Run: SEAL201-B_250625A 06/25/25 12:52									
Phosphorus, Total as P		0.200	mg/L	0.0020	98	90	110			
Lab ID: B25061894-003EMSD	Sample Matrix Spike Duplicate Run: SEAL201-B_250625A 06/25/25 12:53									
Phosphorus, Total as P		0.201	mg/L	0.0020	99	90	110	0.6	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: Kelada-01								Analytical Run: SFA-202-B_250623A		
Lab ID: ICV	Initial Calibration Verification Standard								06/23/25 11:18	
Cyanide, Weak Acid Dissociable		0.0942	mg/L	0.0050	94	90	110			
Method: Kelada-01								Batch: R444647		
Lab ID: ICB	Method Blank					Run: SFA-202-B_250623A			06/23/25 11:20	
Cyanide, Weak Acid Dissociable		ND	mg/L	0.002						
Lab ID: LFB	Laboratory Fortified Blank					Run: SFA-202-B_250623A			06/23/25 11:22	
Cyanide, Weak Acid Dissociable		0.0978	mg/L	0.0050	98	90	110			
Lab ID: LCS1-ZnCN2	Laboratory Control Sample					Run: SFA-202-B_250623A			06/23/25 11:24	
Cyanide, Weak Acid Dissociable		0.0939	mg/L	0.0050	94	90	110			
Lab ID: B25061749-001GMS	Sample Matrix Spike					Run: SFA-202-B_250623A			06/23/25 11:41	
Cyanide, Weak Acid Dissociable		0.0993	mg/L	0.0050	99	80	120			
Lab ID: B25061749-001GMSD	Sample Matrix Spike Duplicate					Run: SFA-202-B_250623A			06/23/25 11:45	
Cyanide, Weak Acid Dissociable		0.0965	mg/L	0.0050	96	80	120	2.9	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7								Analytical Run: ICP205-B_250623A		
Lab ID: ICV	6	Continuing Calibration Verification Standard						06/23/25 14:52		
Boron		2.59	mg/L	0.10	104	95	105			
Calcium		25.2	mg/L	1.0	101	95	105			
Magnesium		25.3	mg/L	1.0	101	95	105			
Potassium		25.0	mg/L	1.0	100	95	105			
Sodium		25.1	mg/L	1.0	101	95	105			
Uranium		2.50	mg/L	0.10	100	95	105			
Lab ID: CCV	6	Continuing Calibration Verification Standard						06/23/25 17:07		
Boron		2.57	mg/L	0.10	103	90	110			
Calcium		25.0	mg/L	1.0	100	90	110			
Magnesium		25.2	mg/L	1.0	101	90	110			
Potassium		24.8	mg/L	1.0	99	90	110			
Sodium		25.0	mg/L	1.0	100	90	110			
Uranium		2.48	mg/L	0.10	99	90	110			
Method: E200.7								Batch: R444669		
Lab ID: MB-5900DIS250623A	6	Method Blank			Run: ICP205-B_250623A				06/23/25 15:06	
Boron		ND	mg/L	0.006						
Calcium		ND	mg/L	0.06						
Magnesium		ND	mg/L	0.05						
Potassium		ND	mg/L	0.1						
Sodium		ND	mg/L	0.05						
Uranium		ND	mg/L	0.04						
Lab ID: LFB-5900DIS250623A	6	Laboratory Fortified Blank			Run: ICP205-B_250623A				06/23/25 15:08	
Boron		1.03	mg/L	0.10	103	85	115			
Calcium		49.7	mg/L	1.0	99	85	115			
Magnesium		50.3	mg/L	1.0	101	85	115			
Potassium		49.9	mg/L	1.0	100	85	115			
Sodium		50.1	mg/L	1.0	100	85	115			
Uranium		1.04	mg/L	0.10	104	85	115			
Lab ID: B25061874-001CMS2	6	Sample Matrix Spike			Run: ICP205-B_250623A				06/23/25 17:06	
Boron		1.06	mg/L	0.050	106	70	130			
Calcium		53.7	mg/L	1.0	103	70	130			
Magnesium		53.9	mg/L	1.0	105	70	130			
Potassium		53.7	mg/L	1.0	104	70	130			
Sodium		54.8	mg/L	1.0	104	70	130			
Uranium		0.999	mg/L	0.10	100	70	130			
Lab ID: B25061874-001CMSD2	6	Sample Matrix Spike Duplicate			Run: ICP205-B_250623A				06/23/25 17:10	
Boron		1.12	mg/L	0.050	112	70	130	5.3	20	
Calcium		56.6	mg/L	1.0	109	70	130	5.3	20	
Magnesium		56.9	mg/L	1.0	111	70	130	5.3	20	
Potassium		56.7	mg/L	1.0	110	70	130	5.4	20	
Sodium		57.4	mg/L	1.0	109	70	130	4.6	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: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: R444669
Lab ID: B25061874-001CMSD2	6	Sample Matrix Spike Duplicate				Run: ICP205-B_250623A				06/23/25 17:10
Uranium		1.05	mg/L	0.10	105	70	130	5.4	20	
Method: E200.7										Analytical Run: ICP205-B_250625B
Lab ID: ICV		Continuing Calibration Verification Standard								06/25/25 13:49
Boron		2.55	mg/L	0.10	102	95	105			
Lab ID: CCV		Continuing Calibration Verification Standard								06/25/25 18:14
Boron		2.59	mg/L	0.10	103	90	110			
Method: E200.7										Batch: 200879
Lab ID: MB-200879		Method Blank				Run: ICP205-B_250625B				06/25/25 18:07
Boron		ND	mg/L	0.008						
Lab ID: LCS3-200879		Laboratory Control Sample				Run: ICP205-B_250625B				06/25/25 18:08
Boron		1.07	mg/L	0.10	107	85	115			
Lab ID: B25061874-001DMS3		Sample Matrix Spike				Run: ICP205-B_250625B				06/25/25 18:18
Boron		1.07	mg/L	0.050	107	70	130			
Lab ID: B25061874-001DMSD3		Sample Matrix Spike Duplicate				Run: ICP205-B_250625B				06/25/25 18:19
Boron		1.07	mg/L	0.050	107	70	130	0.1	20	

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8							Analytical Run: ICPMS208-B_250625B			
Lab ID: QCS	10 Initial Calibration Verification Standard							06/25/25 17:31		
Aluminum		0.201	mg/L	0.020	101	90	110			
Antimony		0.0415	mg/L	0.0050	104	90	110			
Arsenic		0.0386	mg/L	0.0050	96	90	110			
Copper		0.0382	mg/L	0.010	96	90	110			
Iron		0.208	mg/L	0.020	104	90	110			
Lead		0.0399	mg/L	0.0010	100	90	110			
Manganese		0.192	mg/L	0.0050	96	90	110			
Molybdenum		0.0420	mg/L	0.0050	105	90	110			
Silver		0.0209	mg/L	0.0050	105	90	110			
Zinc		0.0384	mg/L	0.0050	96	90	110			
Lab ID: CCV	10 Continuing Calibration Verification Standard							06/25/25 17:37		
Aluminum		0.0482	mg/L	0.020	96	90	110			
Antimony		0.0503	mg/L	0.0050	101	90	110			
Arsenic		0.0474	mg/L	0.0050	95	90	110			
Copper		0.0464	mg/L	0.010	93	90	110			
Iron		1.26	mg/L	0.020	97	90	110			
Lead		0.0499	mg/L	0.0010	100	90	110			
Manganese		0.0475	mg/L	0.0050	95	90	110			
Molybdenum		0.0507	mg/L	0.0050	101	90	110			
Silver		0.0201	mg/L	0.0050	100	90	110			
Zinc		0.0476	mg/L	0.0050	95	90	110			
Lab ID: QCS	10 Initial Calibration Verification Standard							06/26/25 18:52		
Aluminum		0.202	mg/L	0.020	101	90	110			
Antimony		0.0414	mg/L	0.0050	104	90	110			
Arsenic		0.0377	mg/L	0.0050	94	90	110			
Copper		0.0375	mg/L	0.010	94	90	110			
Iron		0.199	mg/L	0.020	100	90	110			
Lead		0.0392	mg/L	0.0010	98	90	110			
Manganese		0.188	mg/L	0.0050	94	90	110			
Molybdenum		0.0415	mg/L	0.0050	104	90	110			
Silver		0.0201	mg/L	0.0050	100	90	110			
Zinc		0.0376	mg/L	0.0050	94	90	110			
Lab ID: CCV	10 Continuing Calibration Verification Standard							06/26/25 23:02		
Aluminum		0.0498	mg/L	0.020	100	90	110			
Antimony		0.0500	mg/L	0.0050	100	90	110			
Arsenic		0.0462	mg/L	0.0050	92	90	110			
Copper		0.0454	mg/L	0.010	91	90	110			
Iron		1.18	mg/L	0.020	90	90	110			
Lead		0.0482	mg/L	0.0010	96	90	110			
Manganese		0.0462	mg/L	0.0050	92	90	110			
Molybdenum		0.0503	mg/L	0.0050	101	90	110			
Silver		0.0191	mg/L	0.0050	96	90	110			
Zinc		0.0453	mg/L	0.0050	91	90	110			

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										
Analytical Run: ICPMS208-B_250625B										
Lab ID:	CCV	10 Continuing Calibration Verification Standard							06/26/25 23:02	
Method: E200.8										
Batch: 200879										
Lab ID:	MB-200879	12 Method Blank				Run: ICPMS208-B_250625B			06/26/25 19:28	
Aluminum		ND	mg/L	0.002						
Antimony		ND	mg/L	0.0004						
Arsenic		ND	mg/L	0.0002						
Chromium		ND	mg/L	0.0005						
Copper		ND	mg/L	0.00009						
Iron		ND	mg/L	0.006						
Lead		ND	mg/L	0.00004						
Manganese		ND	mg/L	0.00009						
Molybdenum		ND	mg/L	0.0001						
Silver		ND	mg/L	5E-6						
Thallium		ND	mg/L	0.0003						
Zinc		ND	mg/L	0.001						
Lab ID:	LCS4-200879	12 Laboratory Control Sample				Run: ICPMS208-B_250625B			06/26/25 19:46	
Aluminum		0.496	mg/L	0.010	99	85	115			
Antimony		0.101	mg/L	0.0050	101	85	115			
Arsenic		0.0923	mg/L	0.0010	92	85	115			
Chromium		0.0900	mg/L	0.0010	90	85	115			
Copper		0.0906	mg/L	0.0010	91	85	115			
Iron		0.494	mg/L	0.010	99	85	115			
Lead		0.0976	mg/L	0.0010	98	85	115			
Manganese		0.457	mg/L	0.0010	91	85	115			
Molybdenum		0.100	mg/L	0.0050	100	85	115			
Silver		0.00970	mg/L	0.0050	97	85	115			
Thallium		0.109	mg/L	0.0010	109	85	115			
Zinc		0.0933	mg/L	0.0020	93	85	115			
Lab ID:	B25061784-001BMS4	12 Sample Matrix Spike				Run: ICPMS208-B_250625B			06/26/25 22:20	
Aluminum		0.672	mg/L	0.030	107	70	130			
Antimony		0.102	mg/L	0.0010	102	70	130			
Arsenic		0.100	mg/L	0.0010	97	70	130			
Chromium		0.0944	mg/L	0.0050	93	70	130			
Copper		0.0913	mg/L	0.0050	91	70	130			
Iron		8.78	mg/L	0.020		70	130			A
Lead		0.103	mg/L	0.0010	103	70	130			
Manganese		2.19	mg/L	0.0010	85	70	130			
Molybdenum		0.102	mg/L	0.0010	101	70	130			
Silver		0.0100	mg/L	0.0010	100	70	130			
Thallium		0.120	mg/L	0.00050	120	70	130			
Zinc		0.0962	mg/L	0.010	95	70	130			
Lab ID:	B25061784-001BMSD4	12 Sample Matrix Spike Duplicate				Run: ICPMS208-B_250625B			06/26/25 22:26	
Aluminum		0.654	mg/L	0.030	103	70	130	2.7	20	

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 200879
Lab ID: B25061784-001BMSD4	12	Sample Matrix Spike Duplicate			Run: ICPMS208-B_250625B				06/26/25 22:26	
Antimony		0.103	mg/L	0.0010	103	70	130	0.9	20	
Arsenic		0.0958	mg/L	0.0010	92	70	130	4.5	20	
Chromium		0.0912	mg/L	0.0050	90	70	130	3.4	20	
Copper		0.0880	mg/L	0.0050	87	70	130	3.6	20	
Iron		8.43	mg/L	0.020		70	130	4.1	20	A
Lead		0.101	mg/L	0.0010	101	70	130	2.1	20	
Manganese		2.14	mg/L	0.0010	75	70	130	2.4	20	
Molybdenum		0.102	mg/L	0.0010	102	70	130	0.7	20	
Silver		0.00971	mg/L	0.0010	97	70	130	3.1	20	
Thallium		0.116	mg/L	0.00050	116	70	130	3.1	20	
Zinc		0.0944	mg/L	0.010	93	70	130	1.9	20	
Lab ID: B25061875-001EMS4	12	Sample Matrix Spike			Run: ICPMS208-B_250625B				06/26/25 23:43	
Aluminum		0.505	mg/L	0.030	100	70	130			
Antimony		0.102	mg/L	0.0010	102	70	130			
Arsenic		0.127	mg/L	0.0010	98	70	130			
Chromium		0.0931	mg/L	0.0050	93	70	130			
Copper		0.0896	mg/L	0.0050	88	70	130			
Iron		10.9	mg/L	0.020		70	130			A
Lead		0.100	mg/L	0.0010	100	70	130			
Manganese		1.04	mg/L	0.0010	95	70	130			
Molybdenum		1.38	mg/L	0.0010		70	130			A
Silver		0.00968	mg/L	0.0010	97	70	130			
Thallium		0.105	mg/L	0.0010	105	70	130			
Zinc		0.0929	mg/L	0.010	90	70	130			
Lab ID: B25061875-001EMSD4	12	Sample Matrix Spike Duplicate			Run: ICPMS208-B_250625B				06/26/25 23:49	
Aluminum		0.486	mg/L	0.030	96	70	130	3.8	20	
Antimony		0.0996	mg/L	0.0010	100	70	130	2.4	20	
Arsenic		0.122	mg/L	0.0010	93	70	130	4.2	20	
Chromium		0.0890	mg/L	0.0050	89	70	130	4.6	20	
Copper		0.0864	mg/L	0.0050	85	70	130	3.7	20	
Iron		10.9	mg/L	0.020		70	130	0.1	20	A
Lead		0.0948	mg/L	0.0010	95	70	130	5.7	20	
Manganese		1.02	mg/L	0.0010	91	70	130	2.1	20	
Molybdenum		1.35	mg/L	0.0010		70	130	2.2	20	A
Silver		0.00917	mg/L	0.0010	92	70	130	5.4	20	
Thallium		0.103	mg/L	0.0010	103	70	130	2.2	20	
Zinc		0.0879	mg/L	0.010	85	70	130	5.5	20	
Method: E200.8										Batch: R444816
Lab ID: LRB		Method Blank			Run: ICPMS208-B_250625B				06/25/25 13:14	
Silver		ND	mg/L	5E-6						
Lab ID: LFB		Laboratory Fortified Blank			Run: ICPMS208-B_250625B				06/25/25 18:01	
Silver		0.0186	mg/L	0.0050	93	85	115			

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R444816
Lab ID: B25061894-001CMS		Sample Matrix Spike					Run: ICPMS208-B_250625B			06/25/25 19:42
Silver		0.0192	mg/L	0.0010	96	70	130			
Lab ID: B25061894-001CMSD		Sample Matrix Spike Duplicate					Run: ICPMS208-B_250625B			06/25/25 19:48
Silver		0.0200	mg/L	0.0010	100	70	130	3.8	20	
Lab ID: B25062003-004AMS		Sample Matrix Spike					Run: ICPMS208-B_250625B			06/26/25 17:09
Silver		0.0176	mg/L	0.0010	88	70	130			
Lab ID: B25062003-004AMSD		Sample Matrix Spike Duplicate					Run: ICPMS208-B_250625B			06/26/25 17:15
Silver		0.0182	mg/L	0.0010	91	70	130	3.3	20	

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8		Analytical Run: ICPMS209-B_250623A								
Lab ID: QCS	10	Initial Calibration Verification Standard							06/23/25 20:02	
Aluminum		0.216	mg/L	0.020	108	90	110			
Arsenic		0.0390	mg/L	0.0050	98	90	110			
Chromium		0.0389	mg/L	0.010	97	90	110			
Copper		0.0385	mg/L	0.010	96	90	110			
Iron		0.200	mg/L	0.020	100	90	110			
Lead		0.0409	mg/L	0.0010	102	90	110			
Manganese		0.195	mg/L	0.0050	97	90	110			
Molybdenum		0.0412	mg/L	0.0050	103	90	110			
Thallium		0.0415	mg/L	0.0050	104	90	110			
Zinc		0.0389	mg/L	0.0050	97	90	110			
Lab ID: CCV	10	Continuing Calibration Verification Standard							06/24/25 01:01	
Aluminum		0.0508	mg/L	0.020	102	90	110			
Arsenic		0.0481	mg/L	0.0050	96	90	110			
Chromium		0.0474	mg/L	0.010	95	90	110			
Copper		0.0471	mg/L	0.010	94	90	110			
Iron		1.26	mg/L	0.020	97	90	110			
Lead		0.0486	mg/L	0.0010	97	90	110			
Manganese		0.0480	mg/L	0.0050	96	90	110			
Molybdenum		0.0499	mg/L	0.0050	100	90	110			
Thallium		0.0470	mg/L	0.0050	94	90	110			
Zinc		0.0477	mg/L	0.0050	95	90	110			
Method: E200.8		Batch: R444636								
Lab ID: LRB	10	Method Blank							Run: ICPMS209-B_250623A 06/23/25 11:40	
Aluminum		ND	mg/L	0.0005						
Arsenic		ND	mg/L	0.00002						
Chromium		ND	mg/L	0.00008						
Copper		ND	mg/L	0.00005						
Iron		ND	mg/L	0.001						
Lead		ND	mg/L	0.00001						
Manganese		ND	mg/L	0.00007						
Molybdenum		ND	mg/L	0.0002						
Thallium		ND	mg/L	0.00007						
Zinc		ND	mg/L	0.001						
Lab ID: LFB	10	Laboratory Fortified Blank							Run: ICPMS209-B_250623A 06/23/25 20:29	
Aluminum		0.0478	mg/L	0.020	96	85	115			
Arsenic		0.0453	mg/L	0.0050	91	85	115			
Chromium		0.0448	mg/L	0.010	90	85	115			
Copper		0.0439	mg/L	0.010	88	85	115			
Iron		4.76	mg/L	0.020	95	85	115			
Lead		0.0477	mg/L	0.0010	95	85	115			
Manganese		0.0452	mg/L	0.0050	90	85	115			
Molybdenum		0.0479	mg/L	0.0050	96	85	115			
Thallium		0.0462	mg/L	0.0050	92	85	115			

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R444636
Lab ID: LFB	10	Laboratory Fortified Blank			Run: ICPMS209-B_250623A					06/23/25 20:29
Zinc		0.0437	mg/L	0.0050	87	85	115			
Lab ID: B25061815-001AMS	10	Sample Matrix Spike			Run: ICPMS209-B_250623A					06/24/25 01:28
Aluminum		0.0606	mg/L	0.030	97	70	130			
Arsenic		0.0485	mg/L	0.0010	96	70	130			
Chromium		0.0462	mg/L	0.0050	92	70	130			
Copper		0.0446	mg/L	0.0050	89	70	130			
Iron		4.97	mg/L	0.020	99	70	130			
Lead		0.0476	mg/L	0.0010	95	70	130			
Manganese		0.0505	mg/L	0.0010	92	70	130			
Molybdenum		0.0643	mg/L	0.0010	98	70	130			
Thallium		0.0464	mg/L	0.00050	93	70	130			
Zinc		0.0445	mg/L	0.010	89	70	130			
Lab ID: B25061815-001AMSD	10	Sample Matrix Spike Duplicate			Run: ICPMS209-B_250623A					06/24/25 01:33
Aluminum		0.0586	mg/L	0.030	93	70	130	3.3	20	
Arsenic		0.0461	mg/L	0.0010	91	70	130	5.1	20	
Chromium		0.0443	mg/L	0.0050	89	70	130	4.2	20	
Copper		0.0427	mg/L	0.0050	85	70	130	4.5	20	
Iron		4.90	mg/L	0.020	98	70	130	1.4	20	
Lead		0.0448	mg/L	0.0010	90	70	130	6.1	20	
Manganese		0.0487	mg/L	0.0010	88	70	130	3.6	20	
Molybdenum		0.0622	mg/L	0.0010	94	70	130	3.2	20	
Thallium		0.0439	mg/L	0.00050	88	70	130	5.5	20	
Zinc		0.0429	mg/L	0.010	86	70	130	3.7	20	

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8 Analytical Run: ICPMS209-B_250625B										
Lab ID: QCS	Initial Calibration Verification Standard 06/26/25 23:47									
Antimony		0.0403	mg/L	0.0050	101	90	110			
Lab ID: CCV Continuing Calibration Verification Standard 06/26/25 23:52										
Antimony		0.0476	mg/L	0.0050	95	90	110			
Method: E200.8 Batch: 200879										
Lab ID: MB-200879	Method Blank Run: ICPMS209-B_250625B 06/27/25 03:33									
Antimony		ND	mg/L	0.00002						
Method: E200.8 Batch: R444817										
Lab ID: LRB	Method Blank Run: ICPMS209-B_250625B 06/25/25 14:02									
Antimony		0.00009	mg/L	0.00002						
Lab ID: LFB	Laboratory Fortified Blank Run: ICPMS209-B_250625B 06/25/25 14:19									
Antimony		0.0484	mg/L	0.0050	97	85	115			
Lab ID: B25061875-001DMS	Sample Matrix Spike Run: ICPMS209-B_250625B 06/27/25 00:31									
Antimony		0.0906	mg/L	0.0010	91	70	130			
Lab ID: B25061875-001DMSD	Sample Matrix Spike Duplicate Run: ICPMS209-B_250625B 06/27/25 00:36									
Antimony		0.0960	mg/L	0.0010	96	70	130	5.8	20	
Method: E200.8 Analytical Run: ICPMS209-B_250627A										
Lab ID: QCS	2	Initial Calibration Verification Standard 06/27/25 13:39								
Chromium		0.0400	mg/L	0.010	100	90	110			
Thallium		0.0419	mg/L	0.0050	105	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard 06/27/25 17:22								
Chromium		0.0491	mg/L	0.010	98	90	110			
Thallium		0.0488	mg/L	0.0050	97	90	110			
Method: E200.8 Batch: 200879										
Lab ID: MB-200879	2	Method Blank Run: ICPMS209-B_250627A 06/27/25 16:50								
Chromium		ND	mg/L	0.0003						
Thallium		ND	mg/L	0.00008						

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061875

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E245.1 Analytical Run: HGCV203-B_250624A										
Lab ID: ICV-200839		Initial Calibration Verification Standard								
Mercury		0.00201	mg/L	0.00010	101	90	110			06/24/25 12:51
Lab ID: CCV1		Continuing Calibration Verification Standard								
Mercury		0.00250	mg/L	0.00010	100	95	105			06/24/25 12:54
Lab ID: CCV		Continuing Calibration Verification Standard								
Mercury		0.00244	mg/L	0.00010	98	90	110			06/24/25 15:10
Method: E245.1 Batch: 200859										
Lab ID: MB-200859		Method Blank								
Mercury		ND	mg/L	0.00006						Run: HGCV203-B_250624A 06/24/25 14:57
Lab ID: LCS-200859		Laboratory Control Sample								
Mercury		0.00208	mg/L	0.00010	104	85	115			Run: HGCV203-B_250624A 06/24/25 14:58
Lab ID: B25061796-001BMS		Sample Matrix Spike								
Mercury		0.00207	mg/L	0.00010	103	70	130			Run: HGCV203-B_250624A 06/24/25 15:01
Lab ID: B25061796-001BMSD		Sample Matrix Spike Duplicate								
Mercury		0.00218	mg/L	0.00010	109	70	130	5.6	30	Run: HGCV203-B_250624A 06/24/25 15:02
Lab ID: B25061918-001BMS		Sample Matrix Spike								
Mercury		0.00198	mg/L	0.00010	99	70	130			Run: HGCV203-B_250624A 06/24/25 15:34
Lab ID: B25061918-001BMSD		Sample Matrix Spike Duplicate								
Mercury		0.00216	mg/L	0.00010	108	70	130	8.7	30	Run: HGCV203-B_250624A 06/24/25 15:35

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061875

Report Date: 07/14/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0										Batch: GrAB-3441
Lab ID: Th230-GrAB-3441	3	Laboratory Control Sample				Run: TENNELEC-4_250707D				07/11/25 01:46
Gross Alpha		86	pCi/L		86	70	130			
Gross Alpha precision (±)		19	pCi/L							
Gross Alpha MDC		1.4	pCi/L							
Lab ID: Sr90-GrAB-3441	3	Laboratory Control Sample				Run: TENNELEC-4_250707D				07/11/25 01:46
Gross Beta		180	pCi/L		98	70	130			
Gross Beta precision (±)		12	pCi/L							
Gross Beta MDC		2.1	pCi/L							
Lab ID: MB-GrAB-3441	6	Method Blank				Run: TENNELEC-4_250707D				07/11/25 01:46
Gross Alpha		-0.6	pCi/L							U
Gross Alpha precision (±)		0.6	pCi/L							
Gross Alpha MDC		1	pCi/L							
Gross Beta		-0.1	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		2	pCi/L							
Lab ID: C25060196-010DDUP	6	Sample Duplicate				Run: TENNELEC-4_250707D				07/11/25 01:46
Gross Alpha		22	pCi/L					0.1	30	
Gross Alpha precision (±)		5.2	pCi/L							
Gross Alpha MDC		1.6	pCi/L							
Gross Beta		8.5	pCi/L					22	30	
Gross Beta precision (±)		1.4	pCi/L							
Gross Beta MDC		2.6	pCi/L							
- The RER result for Alpha is 0.00 and Beta is 1.07.										
Lab ID: C25060691-006DMS	3	Sample Matrix Spike				Run: TENNELEC-4_250707D				07/12/25 02:18
Gross Alpha		92	pCi/L		92	70	130			
Gross Alpha precision (±)		20	pCi/L							
Gross Alpha MDC		1.5	pCi/L							
Lab ID: C25060691-006DMSD	3	Sample Matrix Spike Duplicate				Run: TENNELEC-4_250707D				07/12/25 02:18
Gross Alpha		95	pCi/L		95	70	130	3.2	30	
Gross Alpha precision (±)		21	pCi/L							
Gross Alpha MDC		1.6	pCi/L							
- The RER result is 0.10.										
Lab ID: C25060779-003DMS1	3	Sample Matrix Spike				Run: TENNELEC-4_250707D				07/12/25 02:18
Gross Beta		230	pCi/L		98	70	130			
Gross Beta precision (±)		15	pCi/L							
Gross Beta MDC		2.3	pCi/L							
Lab ID: C25060779-003DMSD1	3	Sample Matrix Spike Duplicate				Run: TENNELEC-4_250707D				07/12/25 02:18
Gross Beta		230	pCi/L		97	70	130	1.0	30	
Gross Beta precision (±)		15	pCi/L							
Gross Beta MDC		2.4	pCi/L							
- The RER result is 0.11.										

Qualifiers:

RL - Analyte Reporting Limit
U - Not detected

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061875

Report Date: 07/14/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: RA226-11718
Lab ID: LCS-RA226-11718	3	Laboratory Control Sample				Run: TENNELEC-4_250624A				06/30/25 14:01
Radium 226		12	pCi/L	118		70	130			
Radium 226 precision (±)		1.9	pCi/L							
Radium 226 MDC		0.24	pCi/L							
Lab ID: MB-RA226-11718	3	Method Blank				Run: TENNELEC-4_250624A				06/30/25 14:01
Radium 226		0.03	pCi/L							U
Radium 226 precision (±)		0.2	pCi/L							
Radium 226 MDC		0.3	pCi/L							
Lab ID: C25060318-005DDUP	3	Sample Duplicate				Run: TENNELEC-4_250624A				06/30/25 14:01
Radium 226		90	pCi/L					3.3	30	
Radium 226 precision (±)		14	pCi/L							
Radium 226 MDC		0.26	pCi/L							
- The RER result is 0.15.										
Method: E903.0										Batch: RA226-11723
Lab ID: LCS-RA226-11723	3	Laboratory Control Sample				Run: TENNELEC-4_250630C				07/08/25 10:04
Radium 226		9.3	pCi/L	93		70	130			
Radium 226 precision (±)		1.5	pCi/L							
Radium 226 MDC		0.17	pCi/L							
Lab ID: MB-RA226-11723	3	Method Blank				Run: TENNELEC-4_250630C				07/08/25 10:04
Radium 226		0.1	pCi/L							U
Radium 226 precision (±)		0.1	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Lab ID: C25060799-001HDUP	3	Sample Duplicate				Run: TENNELEC-4_250630C				07/08/25 14:55
Radium 226		0.012	pCi/L					170	30	UR
Radium 226 precision (±)		0.11	pCi/L							
Radium 226 MDC		0.19	pCi/L							
- Duplicate RPD is outside of the acceptance range for this analysis. However, the RER is less than or equal to the limit of 3. The RER result is 0.70.										

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

U - Not detected



QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061875

Report Date: 07/14/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: RA228-7691
Lab ID: LCS-228-RA226-11723	3	Laboratory Control Sample				Run: TENNELEC-4_250630A				07/03/25 12:32
Radium 228		10	pCi/L	112		70	130			
Radium 228 precision (±)		2.7	pCi/L							
Radium 228 MDC		1.1	pCi/L							
Lab ID: MB-RA226-11723	3	Method Blank				Run: TENNELEC-4_250630A				07/03/25 12:32
Radium 228		0.4	pCi/L							U
Radium 228 precision (±)		0.6	pCi/L							
Radium 228 MDC		1	pCi/L							
Lab ID: C25060799-001HDUP	3	Sample Duplicate				Run: TENNELEC-4_250630A				07/03/25 12:32
Radium 228		0.31	pCi/L					81	30	UR
Radium 228 precision (±)		0.64	pCi/L							
Radium 228 MDC		1.0	pCi/L							

- Duplicate RPD is outside of the acceptance range for this analysis. However, the RER is less than or equal to the limit of 3. The RER result is 0.43.

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

U - Not detected



Work Order Receipt Checklist

Linkan Engineering

B25061875

Login completed by: Danielle N. Harris

Date Received: 6/20/2025

Reviewed by: cjones

Received by: EAH

Reviewed Date: 6/30/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	5.0°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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 time for the dissolved radium, orthophosphate and dissolved metals containers is not provided and on the chain of custody it is 09:40. Proceeded with the collection time as indicated on the chain of custody. DNH 06/20/25

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 Linkan	
Contact	Chris Prosper
Phone	775-777-8003
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	AP@linkan.com
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote
25-0152	H17287

Report Information (if different than Account Information)

Company/Name Linkan	
Contact	Alex Schwiebert
Phone	775-397-6779
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	see comments
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 checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other	

Comments

Quarterly Sampling - Mine Pool

Please email Report and EDD results to:
chris.prosper@linkan.com
adam.bilin@linkan.com
alex.schwiebert@linkan.com
peter.hays@state.co.us

Project Information

Project Name, PWSID, Permit, etc. Schwartzwalder Mine	
Sampler Name	Bryant Acaredo
Sampler Phone	720-230-6669
Sample Origin	State Colorado
EPAS/State Compliance	<input checked="" type="checkbox"/> Yes <input 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

Low Level Phosphorus	Anions (E300.0)	Total Suspended Solids	Metals, Dissolved	Metals Total	Nitrogen, Nitrate + Nitrite	Cyanide, WAD	Gross Alpha, Gross Beta, Total	Radium Radium 226 +	See Attached
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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)	Low Level Phosphorus	Anions (E300.0)	Total Suspended Solids	Metals, Dissolved	Metals Total	Nitrogen, Nitrate + Nitrite	Cyanide, WAD	Gross Alpha, Gross Beta, Total	Radium Radium 226 +	See Attached	RUSH TAT	ELI LAB ID Laboratory Use Only
1 Mine Pool	6/19/25	0940	10	W												3250.1875
2																
3																
4																
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) Bryant Acaredo	Date/Time 6/19/25/1536	Signature [Signature]	Received by (print) Elizabeth Foltson	Date/Time 6/23/25 1025	Signature [Signature]			
	Relinquished by (print)	Date/Time	Signature	Received by (print)	Date/Time	Signature			
Shipped By	Cooler ID(s)	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)

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.

250 mL Plastic	1	E353.2 E365.1 E365.1	Nitrogen, Nitrate + Nitrite E365.1 Digestion, Total P Low level Phosphorus, Total		 H2SO4	1
500 mL Amber Plastic	1	Kelada-01	Cyanide, Weak Acid Dissociable		 NaOH	1
500 mL Plastic	1	E900.0	Gross Alpha, Gross Beta, Total		 HNO3	1
1 Gallon Plastic	1	E903.0	Radium 226, Dissolved		 HNO3	1
1 Gallon Plastic	1	A7500-RA E903.0 RA-05	Radium 226 + Radium 228 Radium 226, Total Radium 228, Total		 HNO3	1

Comments

 HNO3 - Nitric Acid  ZnAc - Zinc Acetate	 H2SO4 - Sulfuric Acid  HCl - Hydrochloric Acid	 NaOH - Sodium Hydroxide <input type="checkbox"/> H3PO4 - Phosphoric Acid	<p>We strongly suggest that the samples are shipped the same day as they are collected.</p> <p>Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets</p> <p>Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.</p> <p>Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.</p>
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BO#: 193747

2 of 2

Permits and Enforcement Section
 Water Quality Control Division
 CPDHE
 4300 Cherry Creek Dr. South
 Denver, CO 80246-1530







07/25/2025
 25US0221

**Re: Monthly Surface Water Report for June 2025
 Schwartzwalder Mine CO0001244**

TO WHOM IT MAY CONCERN:

On February 10th, 2025 the operations contract for the Schwartzwalder Mine was awarded and the contract started on April 1st, 2025.

During the month of June 2025, both the SW-AWD and SW-BPL locations were sampled. The sampling date was June 17th. See the pictures from that sampling event below. The field parameters taken are showcased below as well. Attached are the laboratory analytical results.

6/17	Upstream	Sample Location	Downstream
SW-AWD			
SW-BPL			

Field Parameters

Sample Location	SW-AWD	SW-BPL
Temperature (°C)	13.9	14.9
pH (s.u.)	8.10	7.85
Conductivity (uS/cm)	280.1	309.3
ORP (mV)	99	132



Best regards,
Linkan

Patrick M. Delaney
Operator Responsible in Charge (ORC)
Black Fox Mining, LLC

A handwritten signature in black ink, appearing to read "Patrick Delaney", is written below the printed name.

Enclosures:

June 2025 Surface Water Sampling Results

CC List:

Electronic Copy sent to the following:

Peter Hays, CDNR, peter.hays@state.co.us
Quinn Westmoreland, Linkan, quinn.westmoreland@linkan.com
Adam Billin, Linkan, adam.billin@linkan.com
Chris Prosper, Linkan, chris.prosper@linkan.com
Sam Billin, Linkan, sam.billin@linkan.com
Jared Buck, Linkan, jared.buck@linkan.com
Brandy Wadford, Linkan, brandy.wadford@linkan.com
Alex Schwiebert, Linkan, alex.schwiebert@linkan.com



ANALYTICAL SUMMARY REPORT

July 15, 2025

Linkan Engineering
2720 Ruby Vista Dr Ste 101
Elko, NV 89801-4943

Work Order: B25061579 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 2 samples for Linkan Engineering on 6/18/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25061579-001	SW-AWD	06/17/25 9:24	06/18/25	Aqueous	Metals by ICP/ICPMS, Dissolved Metals by ICP/ICPMS, Total Cyanide, Weak Acid Dissociable Anions by Ion Chromatography Nitrogen, Nitrate + Nitrite Metals Digestion by E200.2 E365.1 Digestion, Total P Low Level Phosphorus, Orthophosphate as P Low level Phosphorus, Total Gross Alpha, Gross Beta, Total Radium 226 + Radium 228 Radium 226, Total Radium 228, Total Solids, Total Dissolved Solids, Total Suspended
B25061579-002	SW-BPL	06/17/25 9:40	06/18/25	Aqueous	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: Linkan Engineering
Project: Schwartzwalder Mine
Work Order: B25061579

Report Date: 07/15/25

CASE NARRATIVE

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, PO Box 247, Casper, WY, EPA Number WY00002.

LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061579-001
Client Sample ID: SW-AWD

Report Date: 07/15/25
Collection Date: 06/17/25 09:24
Date Received: 06/18/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	2	mg/L	J	2		A2540 D	06/18/25 14:03 / pjw
Solids, Total Dissolved TDS @ 180 C	195	mg/L		20		A2540 C	06/18/25 13:33 / etv
INORGANICS							
Sulfate	10	mg/L		1		E300.0	06/18/25 19:16 / caa
Fluoride	0.31	mg/L		0.01		E300.0	06/18/25 19:16 / caa
Cyanide, Weak Acid Dissociable	ND	mg/L		0.001		Kelada-01	06/20/25 12:14 / fap
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.01		E353.2	06/27/25 10:55 / rs4
Phosphorus, Orthophosphate as P	0.009	mg/L		0.002		E365.1	06/18/25 17:34 / taz
Phosphorus, Total as P	0.008	mg/L		0.002		E365.1	06/30/25 12:27 / taz
METALS, DISSOLVED							
Copper	0.0007	mg/L		0.0005		E200.8	06/21/25 06:03 / aem
Molybdenum	0.0005	mg/L		0.0001		E200.8	06/21/25 06:03 / aem
Silver	ND	mg/L	L	0.00004		E200.8	06/21/25 06:03 / aem
Uranium	0.00110	mg/L		0.00002		E200.8	06/27/25 13:27 / jks
Zinc	0.003	mg/L		0.002		E200.8	06/21/25 06:03 / aem
METALS, TOTAL RECOVERABLE							
Antimony	ND	mg/L	L	0.0001		E200.8	06/26/25 08:28 / aem
Chromium	ND	mg/L		0.0005		E200.8	06/24/25 20:56 / aem
Thallium	ND	mg/L	L	0.0002		E200.8	06/26/25 08:28 / aem
METALS, TOTAL							
Arsenic	0.0001	mg/L		0.0001		E200.8	06/26/25 08:28 / aem
Boron	0.02	mg/L		0.01		E200.7	06/24/25 14:55 / enb
Molybdenum	0.0006	mg/L		0.0001		E200.8	06/24/25 20:56 / aem
Uranium	0.00095	mg/L		0.00002		E200.8	06/27/25 13:33 / jks
RADIONUCLIDES - TOTAL							
Gross Alpha	-1	pCi/L	U			E900.0	07/04/25 01:15 / eli-ca
Gross Alpha precision (±)	1.4	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Gross Alpha MDC	2.4	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Gross Beta	2.2	pCi/L	U			E900.0	07/04/25 01:15 / eli-ca
Gross Beta precision (±)	1.7	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Gross Beta MDC	2.6	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Radium 226	0.07	pCi/L	U			E903.0	07/14/25 12:11 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	07/14/25 12:11 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	07/14/25 12:11 / eli-ca
Radium 228	0.1	pCi/L	U			RA-05	07/07/25 15:56 / eli-ca
Radium 228 precision (±)	0.7	pCi/L				RA-05	07/07/25 15:56 / eli-ca
Radium 228 MDC	1.2	pCi/L				RA-05	07/07/25 15:56 / eli-ca
Radium 226 + Radium 228	0.7	pCi/L	U			A7500-RA	07/15/25 10:19 / eli-ca

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control Limit
J - Estimated value - analyte was present but less than the Reporting Limit (RL)
U - Not detected

MCL - Maximum Contaminant Level
ND - Not detected at the Reporting Limit (RL)
L - Lowest available reporting limit for the analytical method used and/or volume submitted



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061579-001
Client Sample ID: SW-AWD

Report Date: 07/15/25
Collection Date: 06/17/25 09:24
Date Received: 06/18/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Radium 226 + Radium 228 precision (\pm)	0.7	pCi/L				A7500-RA	07/15/25 10:19 / eli-ca
Radium 226 + Radium 228 MDC	1.2	pCi/L				A7500-RA	07/15/25 10:19 / eli-ca

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 Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061579-002
Client Sample ID: SW-BPL

Report Date: 07/15/25
Collection Date: 06/17/25 09:40
Date Received: 06/18/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	2	mg/L	J	2		A2540 D	06/18/25 14:03 / pjw
Solids, Total Dissolved TDS @ 180 C	205	mg/L		20		A2540 C	06/18/25 13:33 / etv
INORGANICS							
Sulfate	20	mg/L		1		E300.0	06/18/25 19:33 / caa
Fluoride	0.29	mg/L		0.01		E300.0	06/18/25 19:33 / caa
Cyanide, Weak Acid Dissociable	ND	mg/L		0.001		Kelada-01	06/20/25 12:26 / fap
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	0.02	mg/L		0.01		E353.2	06/27/25 10:59 / rs4
Phosphorus, Orthophosphate as P	0.006	mg/L		0.002		E365.1	06/18/25 17:40 / taz
Phosphorus, Total as P	0.005	mg/L		0.002		E365.1	06/25/25 12:13 / taz
METALS, DISSOLVED							
Copper	0.0008	mg/L		0.0005		E200.8	06/21/25 06:08 / aem
Molybdenum	0.0040	mg/L		0.0001		E200.8	06/21/25 06:08 / aem
Silver	5E-6	mg/L	JL	0.00004		E200.8	06/21/25 06:08 / aem
Uranium	0.0527	mg/L		0.00002		E200.8	06/21/25 06:08 / aem
Zinc	0.002	mg/L	JL	0.002		E200.8	06/21/25 06:08 / aem
METALS, TOTAL RECOVERABLE							
Antimony	0.00002	mg/L	JL	0.0001		E200.8	06/26/25 08:34 / aem
Chromium	ND	mg/L		0.0005		E200.8	06/24/25 21:02 / aem
Thallium	ND	mg/L	L	0.0002		E200.8	06/26/25 08:34 / aem
METALS, TOTAL							
Arsenic	0.0009	mg/L		0.0001		E200.8	06/26/25 08:34 / aem
Boron	0.03	mg/L		0.01		E200.7	06/24/25 14:56 / enb
Molybdenum	0.0042	mg/L		0.0001		E200.8	06/24/25 21:02 / aem
Uranium	0.0509	mg/L		0.00002		E200.8	06/24/25 21:02 / aem
RADIONUCLIDES - TOTAL							
Gross Alpha	30.8	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Gross Alpha precision (±)	7.2	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Gross Alpha MDC	2.0	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Gross Beta	9.7	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Gross Beta precision (±)	1.5	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Gross Beta MDC	2.6	pCi/L				E900.0	07/04/25 01:15 / eli-ca
Radium 226	0.2	pCi/L				E903.0	07/14/25 12:11 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	07/14/25 12:11 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	07/14/25 12:11 / eli-ca
Radium 228	3.2	pCi/L				RA-05	07/07/25 15:56 / eli-ca
Radium 228 precision (±)	1.3	pCi/L				RA-05	07/07/25 15:56 / eli-ca
Radium 228 MDC	1.3	pCi/L				RA-05	07/07/25 15:56 / eli-ca
Radium 226 + Radium 228	3.4	pCi/L				A7500-RA	07/15/25 10:19 / eli-ca

Report Definitions:
RL - Analyte Reporting Limit
QCL - Quality Control 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)
L - Lowest available reporting limit for the analytical method used and/or volume submitted



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Linkan Engineering
Project: Schwartzwalder Mine
Lab ID: B25061579-002
Client Sample ID: SW-BPL

Report Date: 07/15/25
Collection Date: 06/17/25 09:40
Date Received: 06/18/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Radium 226 + Radium 228 precision (\pm)	1.3	pCi/L				A7500-RA	07/15/25 10:19 / eli-ca
Radium 226 + Radium 228 MDC	1.3	pCi/L				A7500-RA	07/15/25 10:19 / eli-ca

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

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

QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061579

Report Date: 07/15/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0										Batch: GrAB-3433
Lab ID: Th230-GrAB-3433	3	Laboratory Control Sample				Run: TENNELEC-4_250627D				07/04/25 01:14
Gross Alpha		86	pCi/L		86	70	130			
Gross Alpha precision (±)		19	pCi/L							
Gross Alpha MDC		1.5	pCi/L							
Lab ID: Sr90-GrAB-3433	3	Laboratory Control Sample				Run: TENNELEC-4_250627D				07/04/25 01:14
Gross Beta		170	pCi/L		95	70	130			
Gross Beta precision (±)		12	pCi/L							
Gross Beta MDC		2.2	pCi/L							
Lab ID: MB-GrAB-3433	6	Method Blank				Run: TENNELEC-4_250627D				07/04/25 01:14
Gross Alpha		0.2	pCi/L							U
Gross Alpha precision (±)		1	pCi/L							
Gross Alpha MDC		2	pCi/L							
Gross Beta		0.5	pCi/L							U
Gross Beta precision (±)		2	pCi/L							
Gross Beta MDC		3	pCi/L							
Lab ID: C25060500-002DMS	3	Sample Matrix Spike				Run: TENNELEC-4_250627D				07/04/25 01:14
Gross Alpha		220	pCi/L		94	70	130			
Gross Alpha precision (±)		48	pCi/L							
Gross Alpha MDC		3.5	pCi/L							
Lab ID: C25060500-002DMSD	3	Sample Matrix Spike Duplicate				Run: TENNELEC-4_250627D				07/04/25 01:14
Gross Alpha		200	pCi/L		73	70	130	9.9	30	
Gross Alpha precision (±)		44	pCi/L							
Gross Alpha MDC		2.8	pCi/L							
- The RER result is 0.32.										
Lab ID: C25060500-004DMS1	3	Sample Matrix Spike				Run: TENNELEC-4_250627D				07/04/25 01:14
Gross Beta		190	pCi/L		101	70	130			
Gross Beta precision (±)		13	pCi/L							
Gross Beta MDC		2.8	pCi/L							
Lab ID: C25060500-004DMSD1	3	Sample Matrix Spike Duplicate				Run: TENNELEC-4_250627D				07/04/25 01:14
Gross Beta		190	pCi/L		100	70	130	0.4	30	
Gross Beta precision (±)		13	pCi/L							
Gross Beta MDC		2.6	pCi/L							
- The RER result is 0.04.										

Qualifiers:

RL - Analyte Reporting Limit
U - Not detected

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061579

Report Date: 07/15/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: RA226-11722
Lab ID: LCS-RA226-11722	3	Laboratory Control Sample				Run: TENNELEC-4_250630G				07/14/25 10:03
Radium 226		9.9	pCi/L	99		70	130			
Radium 226 precision (±)		1.6	pCi/L							
Radium 226 MDC		0.14	pCi/L							
Lab ID: MB-RA226-11722	3	Method Blank				Run: TENNELEC-4_250630G				07/14/25 10:03
Radium 226		-0.01	pCi/L							U
Radium 226 precision (±)		0.08	pCi/L							
Radium 226 MDC		0.1	pCi/L							
Lab ID: C25060659-001HDUP	3	Sample Duplicate				Run: TENNELEC-4_250630G				07/14/25 10:03
Radium 226		0.38	pCi/L					27	30	
Radium 226 precision (±)		0.16	pCi/L							
Radium 226 MDC		0.19	pCi/L							
- The RER result is 0.53.										

Qualifiers:

RL - Analyte Reporting Limit
U - Not detected

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061579

Report Date: 07/15/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: RA228-7689
Lab ID: LCS-228-RA226-11722	3	Laboratory Control Sample				Run: TENNELEC-4_250630D				07/07/25 15:06
Radium 228		10	pCi/L	110		70	130			
Radium 228 precision (±)		2.7	pCi/L							
Radium 228 MDC		1.1	pCi/L							
Lab ID: MB-RA226-11722	3	Method Blank				Run: TENNELEC-4_250630D				07/07/25 15:07
Radium 228		0.2	pCi/L							U
Radium 228 precision (±)		0.7	pCi/L							
Radium 228 MDC		1	pCi/L							
Lab ID: C25060659-001HDUP	3	Sample Duplicate				Run: TENNELEC-4_250630D				07/07/25 15:07
Radium 228		-0.23	pCi/L					1100	30	UR
Radium 228 precision (±)		0.79	pCi/L							
Radium 228 MDC		1.4	pCi/L							

- Duplicate RPD is outside of the acceptance range for this analysis. However, the RER is less than or equal to the limit of 3. The RER result is 0.50.

Qualifiers:

RL - Analyte Reporting Limit

R - Relative Percent Difference (RPD) exceeds advisory limit

ND - Not detected at the Reporting Limit (RL)

U - Not detected



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 06/27/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS20250618A
Lab ID: MBLK_20250618-3		Method Blank					Run: Bal #30_250618C			06/18/25 10:54
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	20						
Lab ID: LCS_20250618-1										06/18/25 10:55
Solids, Total Dissolved TDS @ 180 C		941	mg/L	25	94	90	110			
Lab ID: B25061295-029ADUP										06/18/25 10:55
Solids, Total Dissolved TDS @ 180 C		158	mg/L	25				0.5	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 06/27/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D										Batch: TSS20250618B
Lab ID: MBLK_20250618-9		Method Blank					Run: BAL #30_250618B			06/18/25 14:02
Solids, Total Suspended TSS @ 105 C		ND	mg/L	0.6						
Lab ID: LCS_20250618-3										Run: BAL #30_250618B
Solids, Total Suspended TSS @ 105 C		105	mg/L	25	105	80	120			06/18/25 14:02
Lab ID: B25061584-002BDUP										Run: BAL #30_250618B
Solids, Total Suspended TSS @ 105 C		11.6	mg/L	10				9.8	10	06/18/25 14:03

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 06/27/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0						Analytical Run: IC METROHM 2_250616A				
Lab ID: ICV	2	Initial Calibration Verification Standard								06/16/25 12:35
Sulfate		104	mg/L	1.0	104	90	110			
Fluoride		1.32	mg/L	0.10	105	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								06/18/25 16:44
Sulfate		106	mg/L	1.0	106	90	110			
Fluoride		1.31	mg/L	0.10	105	90	110			
Method: E300.0						Batch: R444239				
Lab ID: ICB	2	Method Blank								Run: IC METROHM 2_250616A 06/16/25 12:52
Sulfate		ND	mg/L	0.7						
Fluoride		ND	mg/L	0.009						
Lab ID: LFB	2	Laboratory Fortified Blank								Run: IC METROHM 2_250616A 06/16/25 13:09
Sulfate		104	mg/L	1.1	104	90	110			
Fluoride		1.35	mg/L	0.10	108	90	110			
Lab ID: B25061529-003AMS	2	Sample Matrix Spike								Run: IC METROHM 2_250616A 06/18/25 17:18
Sulfate		937	mg/L	5.3	104	90	110			
Fluoride		5.71	mg/L	0.10	91	90	110			
Lab ID: B25061529-003AMSD	2	Sample Matrix Spike Duplicate								Run: IC METROHM 2_250616A 06/18/25 17:34
Sulfate		929	mg/L	5.3	102	90	110	0.8	20	
Fluoride		5.69	mg/L	0.10	91	90	110	0.4	20	
Lab ID: B25061580-003AMS	2	Sample Matrix Spike								Run: IC METROHM 2_250616A 06/18/25 21:14
Sulfate		575	mg/L	5.3	106	90	110			
Fluoride		6.45	mg/L	0.10	101	90	110			
Lab ID: B25061580-003AMSD	2	Sample Matrix Spike Duplicate								Run: IC METROHM 2_250616A 06/18/25 21:31
Sulfate		575	mg/L	5.3	106	90	110	0.1	20	
Fluoride		6.40	mg/L	0.10	101	90	110	0.7	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: B25061579

Report Date: 06/27/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: Kelada-01								Analytical Run: SFA-202-B_250620A		
Lab ID: ICV	Initial Calibration Verification Standard								06/20/25	11:54
Cyanide, Weak Acid Dissociable		0.00966	mg/L	0.0010	97	90	110			
Method: Kelada-01								Batch: R444536		
Lab ID: ICB	Method Blank					Run: SFA-202-B_250620A			06/20/25 11:56	
Cyanide, Weak Acid Dissociable		ND	mg/L	0.0007						
Lab ID: LCS1-ZnCN	Laboratory Control Sample					Run: SFA-202-B_250620A			06/20/25 12:00	
Cyanide, Weak Acid Dissociable		0.0107	mg/L	0.0010	107	90	110			
Lab ID: B25061579-001GMS	Sample Matrix Spike					Run: SFA-202-B_250620A			06/20/25 12:18	
Cyanide, Weak Acid Dissociable		0.0104	mg/L	0.0010	104	80	120			
Lab ID: B25061579-001GMSD	Sample Matrix Spike Duplicate					Run: SFA-202-B_250620A			06/20/25 12:22	
Cyanide, Weak Acid Dissociable		0.0109	mg/L	0.0010	109	80	120	4.2	10	
Lab ID: LFB	Laboratory Fortified Blank					Run: SFA-202-B_250620A			06/20/25 12:44	
Cyanide, Weak Acid Dissociable		0.0110	mg/L	0.0010	110	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: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E353.2 Analytical Run: FIA203-B_250627A										
Lab ID: ICV	Initial Calibration Verification Standard 06/27/25 10:50									
Nitrogen, Nitrate+Nitrite as N		0.550	mg/L	0.010	97	90	110			
Method: E353.2 Batch: R444974										
Lab ID: FilterMBLK	Method Blank Run: FIA203-B_250627A 06/27/25 10:51									
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.009						
Lab ID: MBLK_20250627-3	Method Blank Run: FIA203-B_250627A 06/27/25 10:52									
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.009						
Lab ID: FilterLFB	Laboratory Fortified Blank Run: FIA203-B_250627A 06/27/25 10:53									
Nitrogen, Nitrate+Nitrite as N		0.969	mg/L	0.010	97	90	110			
Lab ID: LFB_20250627-1	Laboratory Fortified Blank Run: FIA203-B_250627A 06/27/25 10:54									
Nitrogen, Nitrate+Nitrite as N		0.999	mg/L	0.010	100	90	110			
Lab ID: B25061579-001FMS	Sample Matrix Spike Run: FIA203-B_250627A 06/27/25 10:56									
Nitrogen, Nitrate+Nitrite as N		0.972	mg/L	0.010	97	90	110			
Lab ID: B25061579-001FMSD	Sample Matrix Spike Duplicate Run: FIA203-B_250627A 06/27/25 10:57									
Nitrogen, Nitrate+Nitrite as N		1.02	mg/L	0.010	102	90	110	4.9	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1		Analytical Run: FIA204-B_250618B								
Lab ID: ICV		Initial Calibration Verification Standard								06/18/25 17:27
Phosphorus, Orthophosphate as P		0.246	mg/L	0.0050	98	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								06/18/25 17:48
Phosphorus, Orthophosphate as P		0.488	mg/L	0.0050	98	90	110			
Method: E365.1		Batch: R444396								
Lab ID: ICB		Method Blank				Run: FIA204-B_250618B			06/18/25 17:30	
Phosphorus, Orthophosphate as P		ND	mg/L	0.001						
Lab ID: LFB		Laboratory Fortified Blank				Run: FIA204-B_250618B			06/18/25 17:31	
Phosphorus, Orthophosphate as P		0.252	mg/L	0.0050	101	90	110			
Lab ID: B25061579-002AMS		Sample Matrix Spike				Run: FIA204-B_250618B			06/18/25 17:36	
Phosphorus, Orthophosphate as P		0.241	mg/L	0.0020	94	90	110			
Lab ID: B25061579-002AMSD		Sample Matrix Spike Duplicate				Run: FIA204-B_250618B			06/18/25 17:37	
Phosphorus, Orthophosphate as P		0.249	mg/L	0.0020	97	90	110	3.3	10	
Method: E365.1		Analytical Run: SEAL201-B_250625A								
Lab ID: ICV-198785		Initial Calibration Verification Standard								06/25/25 10:04
Phosphorus, Total as P		0.504	mg/L	0.0050	101	90	110			
Lab ID: CCV-198785		Continuing Calibration Verification Standard								06/25/25 12:03
Phosphorus, Total as P		0.536	mg/L	0.0050	107	90	110			
Method: E365.1		Batch: 200836								
Lab ID: MB-200836		Method Blank				Run: SEAL201-B_250625A			06/25/25 11:49	
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-200836		Laboratory Control Sample				Run: SEAL201-B_250625A			06/25/25 11:50	
Phosphorus, Total as P		0.188	mg/L	0.0050	94	90	110			
Lab ID: B25061568-002CMS		Sample Matrix Spike				Run: SEAL201-B_250625A			06/25/25 12:10	
Phosphorus, Total as P		0.208	mg/L	0.0020	99	90	110			
Lab ID: B25061568-002CMSD		Sample Matrix Spike Duplicate				Run: SEAL201-B_250625A			06/25/25 12:11	
Phosphorus, Total as P		0.212	mg/L	0.0020	101	90	110	1.9	10	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1										
Analytical Run: SEAL201-B_250630A										
Lab ID: ICV-198785		Initial Calibration Verification Standard								
Phosphorus, Total as P		0.506	mg/L	0.0050	101	90	110			06/30/25 10:34
Lab ID: CCV-198785										
Continuing Calibration Verification Standard										
Phosphorus, Total as P		0.511	mg/L	0.0050	102	90	110			06/30/25 12:22
Method: E365.1										
Batch: 200963										
Lab ID: MB-200963		Method Blank								
Phosphorus, Total as P		ND	mg/L	0.002				Run: SEAL201-B_250630A		06/30/25 12:25
Lab ID: LCS-200963										
Laboratory Control Sample										
Phosphorus, Total as P		0.187	mg/L	0.0020	94	90	110	Run: SEAL201-B_250630A		06/30/25 12:26
Lab ID: B25062151-009DMS										
Sample Matrix Spike										
Phosphorus, Total as P		0.190	mg/L	0.0020	95	90	110	Run: SEAL201-B_250630A		06/30/25 12:31
Lab ID: B25062151-009DMSD										
Sample Matrix Spike Duplicate										
Phosphorus, Total as P		0.190	mg/L	0.0020	95	90	110	0.1	10	06/30/25 12:32

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	E200.7							Analytical Run: ICP205-B_250624A		
Lab ID:	ICV	Continuing Calibration Verification Standard							06/24/25 12:05	
Boron		2.59	mg/L	0.10	104	95	105			
Lab ID:	CCV	Continuing Calibration Verification Standard							06/24/25 14:49	
Boron		2.62	mg/L	0.10	105	90	110			
Method:	E200.7							Batch: 200821		
Lab ID:	MB-200821	Method Blank			Run: ICP205-B_250624A			06/24/25 14:41		
Boron		ND	mg/L	0.008						
Lab ID:	LCS3-200821	Laboratory Control Sample			Run: ICP205-B_250624A			06/24/25 14:43		
Boron		1.12	mg/L	0.10	112	85	115			
Lab ID:	B25061344-010BMS3	Sample Matrix Spike			Run: ICP205-B_250624A			06/24/25 14:47		
Boron		1.22	mg/L	0.10	113	70	130			
Lab ID:	B25061344-010BMSD3	Sample Matrix Spike Duplicate			Run: ICP205-B_250624A			06/24/25 14:51		
Boron		1.19	mg/L	0.10	110	70	130	3.2	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: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS207-B_250620A				
Lab ID: QCS	5	Initial Calibration Verification Standard							06/21/25 03:31	
Copper		0.0390	mg/L	0.010	98	90	110			
Molybdenum		0.0416	mg/L	0.0050	104	90	110			
Silver		0.0202	mg/L	0.0050	101	90	110			
Uranium		0.0416	mg/L	0.00030	104	90	110			
Zinc		0.0398	mg/L	0.0050	100	90	110			
Lab ID: CCV	5	Continuing Calibration Verification Standard							06/21/25 04:53	
Copper		0.0482	mg/L	0.010	96	90	110			
Molybdenum		0.0513	mg/L	0.0050	103	90	110			
Silver		0.0194	mg/L	0.0050	97	90	110			
Uranium		0.0521	mg/L	0.00030	104	90	110			
Zinc		0.0494	mg/L	0.0050	99	90	110			
Method: E200.8						Batch: R444547				
Lab ID: LFB	5	Laboratory Fortified Blank				Run: ICPMS207-B_250620A		06/20/25 12:42		
Copper		0.0467	mg/L	0.010	93	85	115			
Molybdenum		0.0522	mg/L	0.0050	104	85	115			
Silver		0.0190	mg/L	0.0050	95	85	115			
Uranium		0.0508	mg/L	0.00030	102	85	115			
Zinc		0.0480	mg/L	0.0050	96	85	115			
Lab ID: LRB	5	Method Blank				Run: ICPMS207-B_250620A		06/20/25 19:32		
Copper		ND	mg/L	0.00005						
Molybdenum		ND	mg/L	0.00002						
Silver		ND	mg/L	3E-6						
Uranium		ND	mg/L	7E-6						
Zinc		ND	mg/L	0.001						
Lab ID: B25061549-001GMS	5	Sample Matrix Spike				Run: ICPMS207-B_250620A		06/21/25 04:29		
Copper		0.0688	mg/L	0.0050	90	70	130			
Molybdenum		0.0506	mg/L	0.0010	100	70	130			
Silver		0.0188	mg/L	0.0010	94	70	130			
Uranium		0.0525	mg/L	0.00030	103	70	130			
Zinc		0.0496	mg/L	0.010	79	70	130			
Lab ID: B25061549-001GMSD	5	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250620A		06/21/25 04:35		
Copper		0.0675	mg/L	0.0050	87	70	130	2.0	20	
Molybdenum		0.0487	mg/L	0.0010	96	70	130	3.8	20	
Silver		0.0185	mg/L	0.0010	92	70	130	1.7	20	
Uranium		0.0519	mg/L	0.00030	102	70	130	1.2	20	
Zinc		0.0486	mg/L	0.010	77	70	130	2.0	20	
Lab ID: MB-200787	5	Method Blank				Run: ICPMS207-B_250620A		06/21/25 05:16		
Copper		0.0005	mg/L	0.00005						
Molybdenum		ND	mg/L	0.00002						
Silver		ND	mg/L	3E-6						
Uranium		ND	mg/L	7E-6						

Qualifiers:

RL - Analyte Reporting Limit

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R444547
Lab ID: MB-200787	5	Method Blank				Run: ICPMS207-B_250620A				06/21/25 05:16
Zinc		ND	mg/L	0.001						
Lab ID: B25061702-001CMS	5	Sample Matrix Spike				Run: ICPMS207-B_250620A				06/21/25 05:45
Copper		0.0479	mg/L	0.0050	92	70	130			
Molybdenum		0.0507	mg/L	0.0010	101	70	130			
Silver		0.0160	mg/L	0.0010	80	70	130			
Uranium		0.0451	mg/L	0.00030	90	70	130			
Zinc		0.0473	mg/L	0.010	95	70	130			
Lab ID: B25061702-001CMSD	5	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250620A				06/21/25 05:51
Copper		0.0472	mg/L	0.0050	91	70	130	1.5	20	
Molybdenum		0.0511	mg/L	0.0010	102	70	130	0.8	20	
Silver		0.0159	mg/L	0.0010	80	70	130	0.7	20	
Uranium		0.0445	mg/L	0.00030	89	70	130	1.3	20	
Zinc		0.0469	mg/L	0.010	94	70	130	1.0	20	
Lab ID: B25061655-004BMS	5	Sample Matrix Spike				Run: ICPMS207-B_250620A				06/21/25 07:48
Copper		0.0464	mg/L	0.0050	89	70	130			
Molybdenum		0.0512	mg/L	0.0010	100	70	130			
Silver		0.0180	mg/L	0.0010	90	70	130			
Uranium		0.313	mg/L	0.00030		70	130			A
Zinc		0.0515	mg/L	0.010	89	70	130			
Lab ID: B25061655-004BMSD	5	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250620A				06/21/25 07:53
Copper		0.0468	mg/L	0.0050	90	70	130	0.8	20	
Molybdenum		0.0513	mg/L	0.0010	101	70	130	0.1	20	
Silver		0.0185	mg/L	0.0010	92	70	130	2.5	20	
Uranium		0.323	mg/L	0.00030		70	130	3.1	20	A
Zinc		0.0519	mg/L	0.010	90	70	130	0.7	20	

Qualifiers:

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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

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS207-B_250623A				
Lab ID: QCS	3	Initial Calibration Verification Standard							06/24/25 19:29	
Chromium		0.0395	mg/L	0.010	99	90	110			
Molybdenum		0.0416	mg/L	0.0050	104	90	110			
Uranium		0.0415	mg/L	0.00030	104	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard							06/24/25 19:35	
Chromium		0.0478	mg/L	0.010	96	90	110			
Molybdenum		0.0509	mg/L	0.0050	102	90	110			
Uranium		0.0517	mg/L	0.00030	103	90	110			
Method: E200.8						Batch: 200821				
Lab ID: MB-200821	6	Method Blank				Run: ICPMS207-B_250623A			06/24/25 12:41	
Antimony		ND	mg/L	0.00008						
Arsenic		ND	mg/L	0.0002						
Chromium		ND	mg/L	0.0005						
Molybdenum		ND	mg/L	0.00009						
Thallium		ND	mg/L	0.0002						
Uranium		ND	mg/L	0.00002						
Lab ID: LCS4-200821	6	Laboratory Control Sample				Run: ICPMS207-B_250623A			06/24/25 12:47	
Antimony		0.0964	mg/L	0.0050	96	85	115			
Arsenic		0.0962	mg/L	0.0010	96	85	115			
Chromium		0.0952	mg/L	0.0010	95	85	115			
Molybdenum		0.0966	mg/L	0.0050	97	85	115			
Thallium		0.108	mg/L	0.0010	108	85	115			
Uranium		0.105	mg/L	0.00030	105	85	115			
Lab ID: B25061568-002BMS4	6	Sample Matrix Spike				Run: ICPMS207-B_250623A			06/24/25 13:51	
Antimony		0.0992	mg/L	0.0010	99	70	130			
Arsenic		0.0988	mg/L	0.0010	98	70	130			
Chromium		0.0966	mg/L	0.0050	97	70	130			
Molybdenum		0.103	mg/L	0.0010	97	70	130			
Thallium		0.113	mg/L	0.00050	113	70	130			
Uranium		0.108	mg/L	0.00030	107	70	130			
Lab ID: B25061568-002BMSD4	6	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250623A			06/24/25 13:57	
Antimony		0.0943	mg/L	0.0010	94	70	130	5.1	20	
Arsenic		0.0966	mg/L	0.0010	95	70	130	2.3	20	
Chromium		0.0947	mg/L	0.0050	95	70	130	2.0	20	
Molybdenum		0.0984	mg/L	0.0010	92	70	130	4.9	20	
Thallium		0.112	mg/L	0.00050	112	70	130	0.9	20	
Uranium		0.105	mg/L	0.00030	105	70	130	2.3	20	
Lab ID: MB-200821	6	Method Blank				Run: ICPMS207-B_250623A			06/24/25 20:33	
Antimony		0.0001	mg/L	0.00008						
Arsenic		ND	mg/L	0.0002						
Chromium		ND	mg/L	0.0005						
Molybdenum		ND	mg/L	0.00009						

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 200821
Lab ID: MB-200821	6	Method Blank						Run: ICPMS207-B_250623A		06/24/25 20:33
Thallium		ND	mg/L	0.0002						
Uranium		0.00003	mg/L	0.00002						
Lab ID: B25061580-004BMS4	6	Sample Matrix Spike						Run: ICPMS207-B_250623A		06/24/25 22:18
Antimony		0.191	mg/L	0.0010	94	70	130			
Arsenic		0.201	mg/L	0.0050	100	70	130			
Chromium		0.199	mg/L	0.0050	99	70	130			
Molybdenum		0.195	mg/L	0.0010	97	70	130			
Thallium		0.193	mg/L	0.0025	97	70	130			
Uranium		0.230	mg/L	0.00030	111	70	130			
Lab ID: B25061580-004BMSD4	6	Sample Matrix Spike Duplicate						Run: ICPMS207-B_250623A		06/24/25 22:24
Antimony		0.189	mg/L	0.0010	93	70	130	1.4	20	
Arsenic		0.202	mg/L	0.0050	100	70	130	0.6	20	
Chromium		0.202	mg/L	0.0050	101	70	130	1.5	20	
Molybdenum		0.192	mg/L	0.0010	95	70	130	1.6	20	
Thallium		0.196	mg/L	0.0025	98	70	130	1.1	20	
Uranium		0.232	mg/L	0.00030	112	70	130	0.9	20	
Method: E200.8										Analytical Run: ICPMS207-B_250627A
Lab ID: QCS		Initial Calibration Verification Standard								06/27/25 10:55
Uranium		0.0422	mg/L	0.00030	105	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								06/27/25 12:23
Uranium		0.0525	mg/L	0.00030	105	90	110			
Method: E200.8										Batch: 200821
Lab ID: MB-200821		Method Blank						Run: ICPMS207-B_250627A		06/27/25 13:04
Uranium		0.00003	mg/L	0.00002						
Method: E200.8										Batch: R444978
Lab ID: LRB		Method Blank						Run: ICPMS207-B_250627A		06/27/25 11:19
Uranium		ND	mg/L	7E-6						
Lab ID: LFB		Laboratory Fortified Blank						Run: ICPMS207-B_250627A		06/27/25 11:36
Uranium		0.0523	mg/L	0.00030	105	85	115			
Lab ID: B25061407-001CMS		Sample Matrix Spike						Run: ICPMS207-B_250627A		06/27/25 13:56
Uranium		0.0530	mg/L	0.00030	104	70	130			
Lab ID: B25061407-001CMSD		Sample Matrix Spike Duplicate						Run: ICPMS207-B_250627A		06/27/25 14:02
Uranium		0.0563	mg/L	0.00030	111	70	130	6.0	20	

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061579

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8								Analytical Run: ICPMS209-B_250625B		
Lab ID: QCS	3	Initial Calibration Verification Standard							06/26/25 02:57	
Antimony		0.0394	mg/L	0.0050	98	90	110			
Arsenic		0.0388	mg/L	0.0050	97	90	110			
Thallium		0.0393	mg/L	0.0050	98	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard							06/26/25 08:01	
Antimony		0.0483	mg/L	0.0050	97	90	110			
Arsenic		0.0463	mg/L	0.0050	93	90	110			
Thallium		0.0466	mg/L	0.0050	93	90	110			
Method: E200.8										
Lab ID: MB-200821	3	Method Blank				Run: ICPMS209-B_250625B			Batch: 200821	
Antimony		ND	mg/L	0.00002						
Arsenic		ND	mg/L	0.00003						
Thallium		ND	mg/L	0.00008						

Qualifiers:

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Work Order Receipt Checklist

Linkan Engineering

B25061579

Login completed by: Crystal M. Jones

Date Received: 6/18/2025

Reviewed by: gmccartney

Received by: LDS

Reviewed Date: 6/26/2025

Carrier name: Return-FedEx NDA

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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Present <input 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:	4.1°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 checked="" type="checkbox"/>	No <input type="checkbox"/>	Not Applicable <input 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

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Page 1 of 1

Account Information (Billing Information)

Company/Name Linkan	
Contact	Chris Prosper
Phone	775-777-8003
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	AP@linkan.com
Receive Invoice	<input type="checkbox"/> Hard Copy <input checked="" type="checkbox"/> Email
Purchase Order	Quote H17287
25-0152	Bottle Order 193746

Report Information (if different than Account Information)

Company/Name Linkan	
Contact	Alex Schwiebert
Phone	775-397-6779
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	see comments
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 checked="" type="checkbox"/> EDD/EDT (contact laboratory) <input type="checkbox"/> Other

Comments

Monthly Consent Order Sampling

Please email Report and EDD results to:
 chris.prosper@linkan.com
 adam.billin@linkan.com
 alex.schwiebert@linkan.com
 peter.hays@state.co.us

Project Information

Project Name, PWSID, Permit, etc. Schwartzwalder Mine	
Sampler Name	Baymont Acacado
Sampler Phone	760-238-6691
Sample Origin State	Colorado
EPA/State Compliance	<input checked="" type="checkbox"/> Yes <input 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

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Time	Number of Containers	Matrix (See Codes Above)	Low Level Phosphorus	Anions (E300.0)	Total Suspended Solids	Metals, Dissolved	Metals Total	Nitrogen, Nitrate + Nitrite	Cyanide, WAD	Gross Alpha, Gross Beta, Total	Radium 226 + 228	See Attached
1 SW-AWD	6/17/25	0924	9	W										
2 SW-BPL	6/17/25	0940	9	W										
3														
4														
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

RUSH	ELI LAB ID
TAT	Laboratory Use Only
	B25061579

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)	Signature	Date/Time
	Baymont Acacado	[Signature]	6/17/25/15:30
Shipped By	Relinquished by (print)	Signature	Date/Time
	Baymont Acacado	[Signature]	6/17/25/15:30
Cooler ID(s)	Custody Seals	Intact	Receipt Temp °C
	Y N C B	Y N	
LABORATORY USE ONLY		Received by Laboratory (print)	Date/Time
		Lab Manager	06-18-25 10:40
		Signature	[Signature]
Amount	Payment Type	Receipt Number (cash/check only)	
\$	Cash Check		

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.



Trust our People. Trust our Data.
www.energylab.com

Billings, MT 406.252.6325 • Casper, WY 307.235.0515 • Gillette, WY 307.686.7175 • Helena, MT 406.442.0711

BOTTLE ORDER 193746



SHIPPED Linkan Engineering

TO:



To report an issue with this order, view Safety Data Sheets, or let us know how we are doing, scan here or go to energylab.com/contact-us

Contact: Chris Prosper

400 Corporate Circle, Suite H

Golden CO 80401

Phone: (719) 247-0564

Project: Schwartzwalder Mine - Table 1.1

Order Created by: Yvonna E. Smith

Shipped From: Billings, MT






Ship Date: 4/17/2025

VIA: Ground

Quote Used: 17287

Bottle Size/Type	Bottles Per Samp	Method	Tests	Critical Hold Time	Preservative	Notes	Num of Samp
------------------	------------------	--------	-------	--------------------	--------------	-------	-------------

Table 1.1 (4 Sets)

120 mL Plastic	1	E365.1	Low Level Phosphorus, Orthophosphate as P	48.00 hrs		Filter Sample	1
1 Liter Plastic	1	E300.0 A2540 C	Anions by Ion Chromatography Solids, Total Dissolved				1
1 Liter Plastic Wide Mouth	1	A2540 D	Solids, Total Suspended			Fill to the neck of the container.	1
250 mL Plastic	1	E200.7_8	Metals by ICP/ICPMS, Dissolved		 HNO3	Filter before preservation	1
250 mL Plastic	1	E200.7_8 E200.2	Metals by ICP/ICPMS, Total Metals Digestion by E200.2		 HNO3		1
250 mL Plastic	1	E353.2 E365.1 E365.1	Nitrogen, Nitrate + Nitrite E365.1 Digestion, Total P Low level Phosphorus, Total		 H2SO4		1
500 mL Amber Plastic	1	Kelada-01	Cyanide, Weak Acid Dissociable		 NaOH		1
500 mL Plastic	1	E900.0	Gross Alpha, Gross Beta, Total		 HNO3		1

BO#: 193746

1 of 2

1 Gallon Plastic	1	A7500-RA E903.0 RA-05	Radium 226 + Radium 228 Radium 226, Total Radium 228, Total	 HNO3	This now only requires one (1) 15mL nitric acid vial for preservation.	1
------------------	---	-----------------------------	---	--	---	---

Comments



HNO3 - Nitric Acid



H2SO4 - Sulfuric Acid



ZnAc - Zinc Acetate



NaOH - Sodium Hydroxide

☐

HCl - Hydrochloric Acid

☐

H3PO4 - Phosphoric Acid

We strongly suggest that the samples are shipped the same day as they are collected.

Material Safety Data Sheets(MSDS) Available @ EnergyLab.com ->Services -> MSDS Sheets

Corrosive Chemicals: Nitric, Sulfuric, Phosphoric, Hydrochloric Acids and Sodium Hydroxide. Zinc Acetate is a skin irritant.

Subcontracting of sample analyses to an outside laboratory may be required. If so, Energy Laboratories will utilize its branch laboratories or qualified contract laboratories for this service. Any such laboratories will be indicated within the Laboratory Analytical Report.



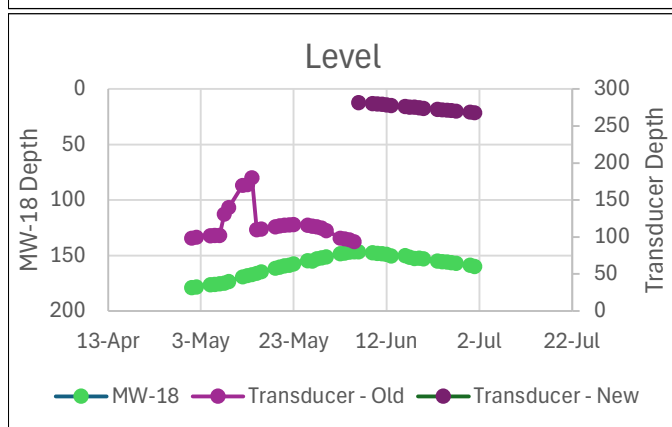
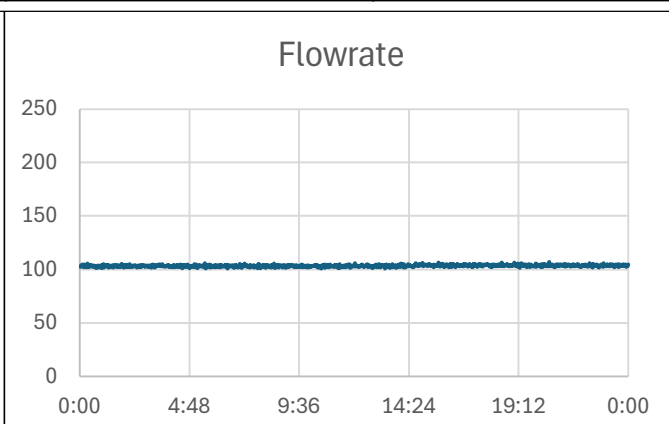
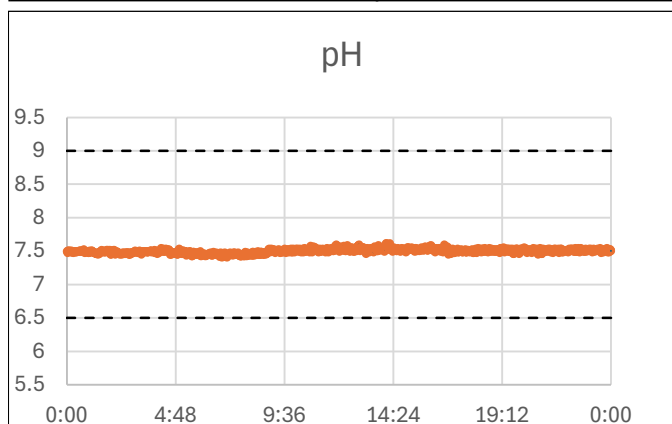
ATTACHMENT 2

DAILY REPORTS

Schwartzwalder Daily Summary Report



Report Date:	7/1/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	
Effluent Discharged:	0.142 Mgal	MW-18 Level:	159.6 ft
Average Flowrate:	103.4 gpm	Transducer Level:	267.9 ft
Effluent to Date:	3.721 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	8.18	149 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	6 Gal	2 Gal
Vol. Remaining	405 Gal	238 Gal	37 Gal
Vol. Staged	0 Gal	140 Gal	200 Gal
Days Available	135 Days	64 Days	119 Days

Safety Issues/Concerns:

- N/A

Notes:

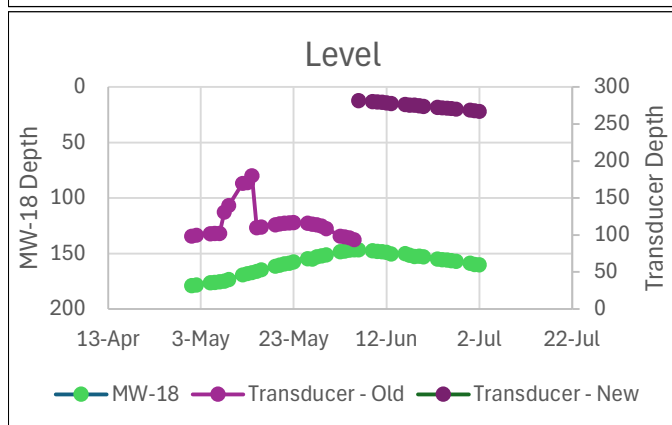
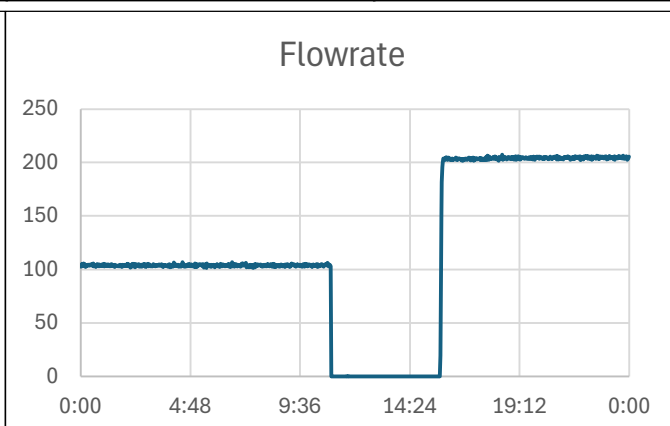
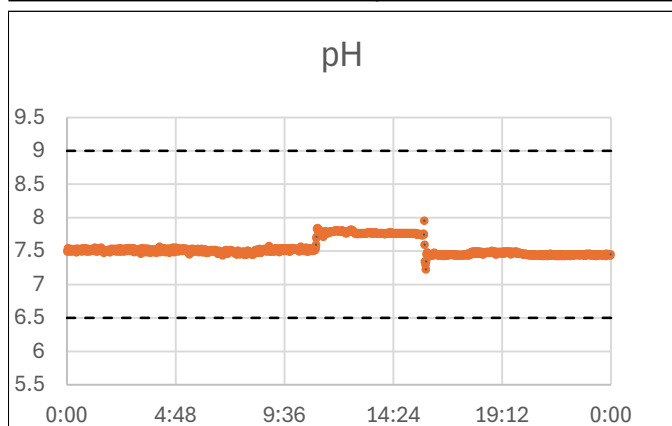
- Collected Outfall 001A TSS and COD Weekly Samples.
- Raised Plant Feed Pump from 44.6Hz to 44.8Hz.
- Prepped Plant for shutdown and inspection of RO#2, Vessel#6 and cartridge filter changeout

Note: There is an increase in the total value listed in the "Effluent to date" box of this report. This is because all of the values presented in previous reports were not reported to sufficient decimal places leading to a difference of 0.31 Mgal that was being under reported. The value shown above is the correct total representing the total volume of effluent discharged to date.

Schwartzwalder Daily Summary Report



Report Date:	7/2/2025	Lead Operator:	Adam B
		Assistant Operator(s):	Patrick D. Bryant A
Effluent Discharged:	0.312 Mgal	MW-18 Level:	160.1 ft
Average Flowrate:	147.8 gpm	Transducer Level:	267.2 ft
Effluent to Date:	4.033 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.2	149 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	1 Gal	15 Gal	2 Gal
Vol. Remaining	402 Gal	232 Gal	35 Gal
Vol. Staged	0 Gal	140 Gal	200 Gal
Days Available	402 Days	24 Days	118 Days

Safety Issues/Concerns:

- N/A

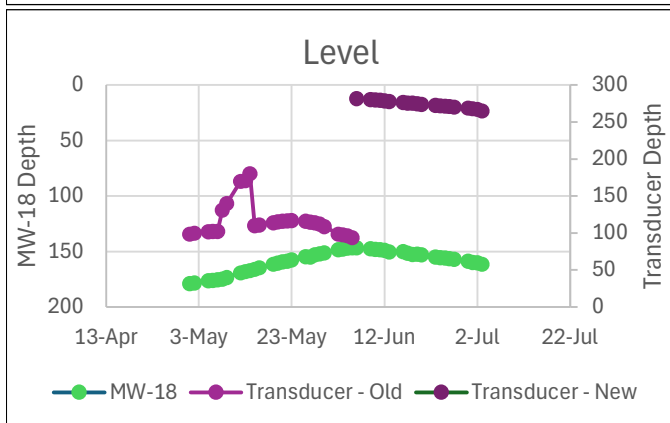
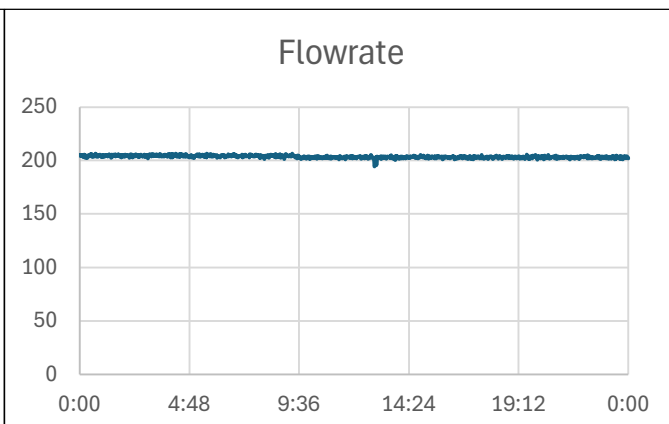
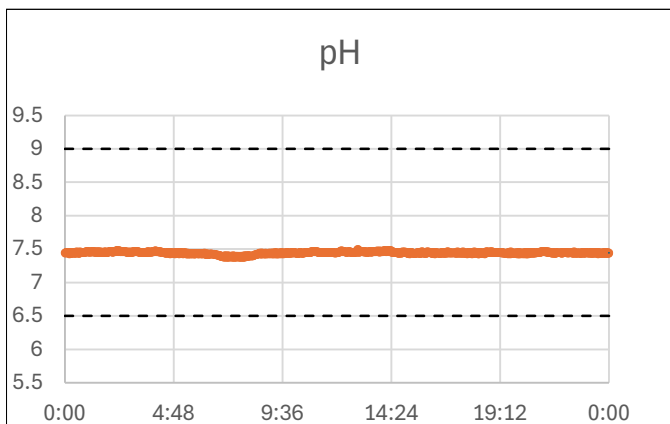
Notes:

- Peter Hays onsite for Operations meeting.
- Plant Shut-down at 11:05.
- RO#2, Vessel #6. Inspected. Shim rings have been replaced with better fitting ones.
- Plant Start-up at 15:45. Both RO's running.

Schwartzwalder Daily Summary Report



Report Date:	7/3/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A
Effluent Discharged:	0.281 Mgal	MW-18 Level:	161.3 ft
Average Flowrate:	203.5 gpm	Transducer Level:	265.0 ft
Effluent to Date:	4.314 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	8.04	187 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	14 Gal	2 Gal
Vol. Remaining	381 Gal	171 Gal	50 Gal
Vol. Staged	0 Gal	140 Gal	150 Gal
Days Available	191 Days	22 Days	100 Days

Safety Issues/Concerns:

- N/A

Notes:

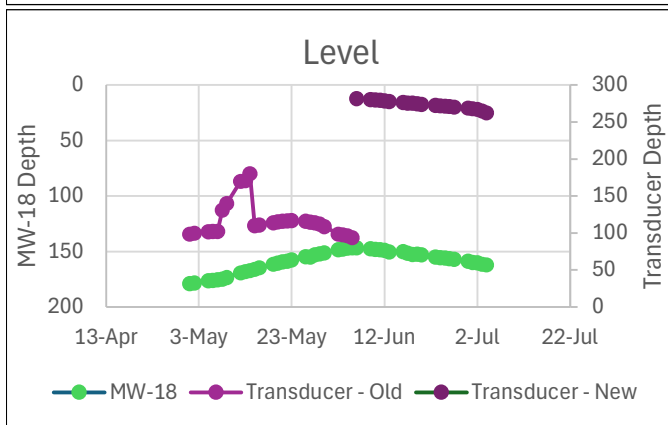
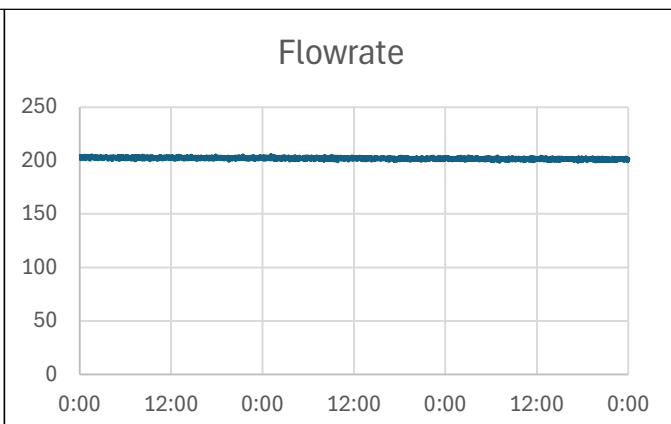
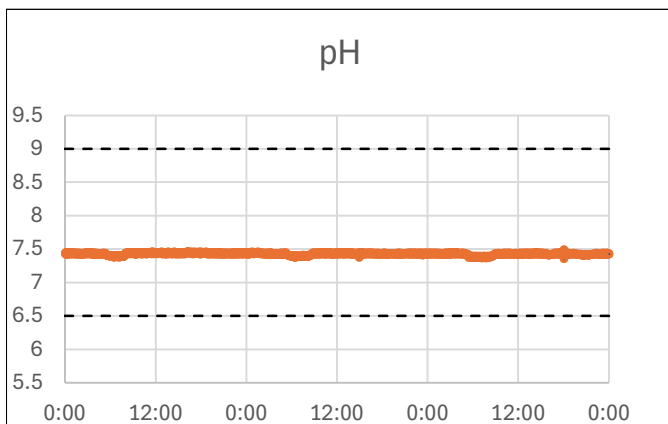
- Item B29 Completed. Repaired PVC Leak on IX Vessel #3.

Schwartzwalder Daily Summary Report



Report Date:	7/4/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.842 Mgal	MW-18 Level:	162.1 ft
Average Flowrate:	201.9 gpm	Transducer Level:	262.6 ft
Effluent to Date:	5.156 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.63	186 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	27 Gal	85 Gal	12 Gal
Vol. Remaining	377 Gal	150 Gal	50 Gal
Vol. Staged	0 Gal	140 Gal	150 Gal
Days Available	14 Days	3 Days	17 Days

Safety Issues/Concerns:
- N/A

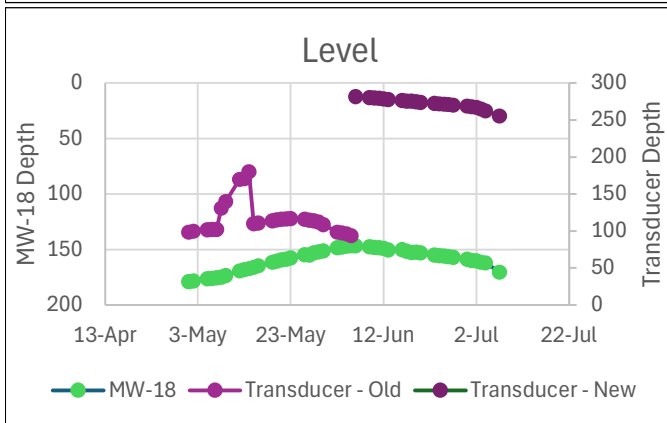
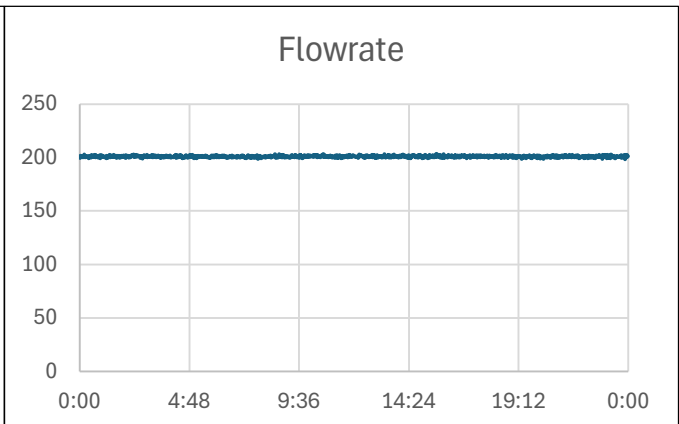
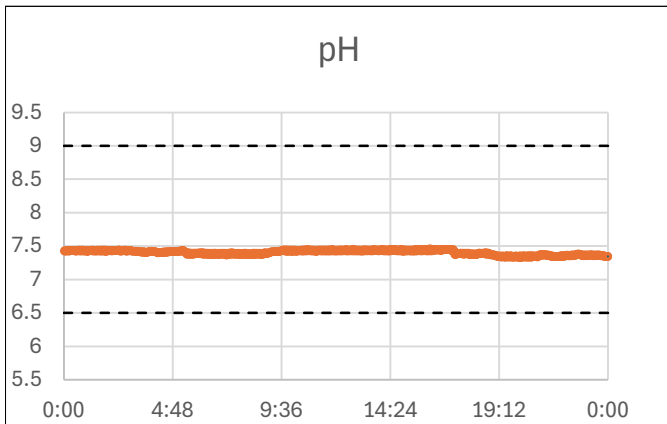
Notes:
- Collected Outfall 001A TSS Weekly Sample.

Schwartzwalder Daily Summary Report



Report Date:	7/7/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.279 Mgal	MW-18 Level:	170.3 ft
Average Flowrate:	200.9 gpm	Transducer Level:	255.7 ft
Effluent to Date:	5.435 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.44	186 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	5 Gal	15 Gal	6 Gal
Vol. Remaining	350 Gal	65 Gal	38 Gal
Vol. Staged	0 Gal	140 Gal	150 Gal
Days Available	70 Days	14 Days	31 Days

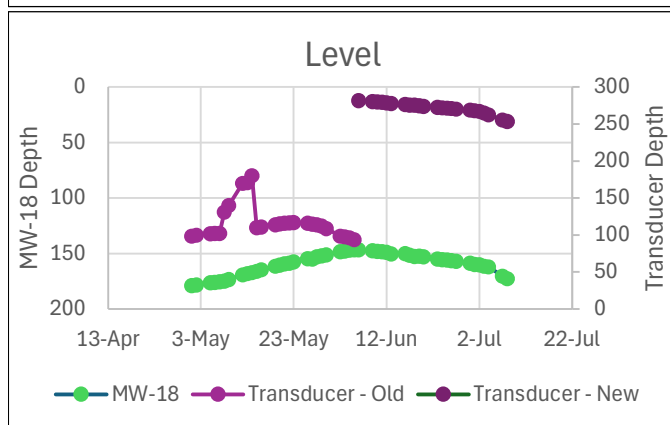
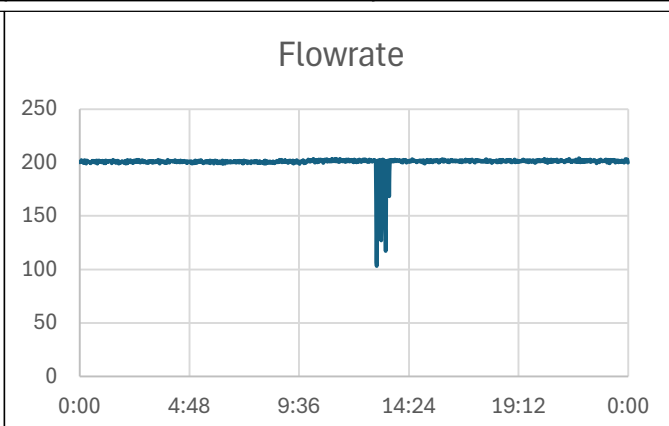
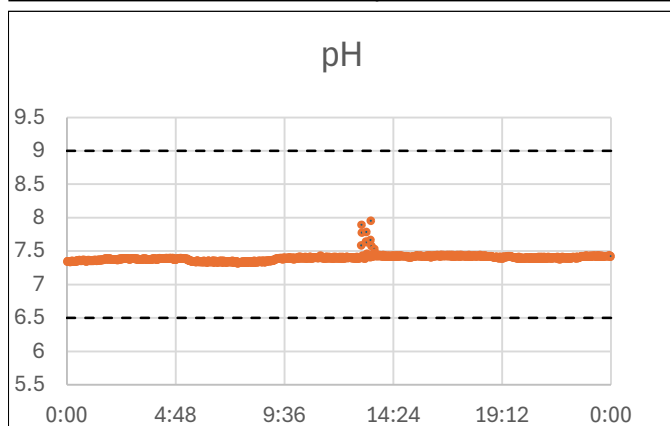
Safety Issues/Concerns:
- N/A

Notes:
- Collected Outfall 001A TSS Weekly Sample.

Schwartzwalder Daily Summary Report



Report Date:	7/8/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A
Effluent Discharged:	0.280 Mgal	MW-18 Level:	172.6 ft
Average Flowrate:	200.7 gpm	Transducer Level:	253.6 ft
Effluent to Date:	5.715 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.51	184 µS/cm
Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	4 Gal	13 Gal	0 Gal
Vol. Remaining	345 Gal	40 Gal	32 Gal
Vol. Staged	0 Gal	425 Gal	150 Gal
Days Available	86 Days	36 Days	#DIV/0!

Safety Issues/Concerns:

- N/A

Notes:

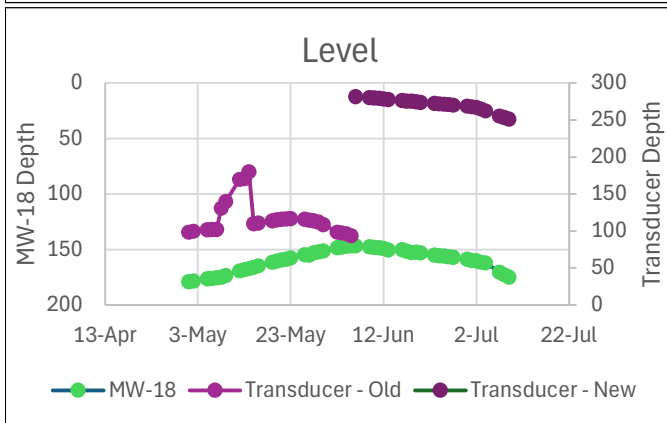
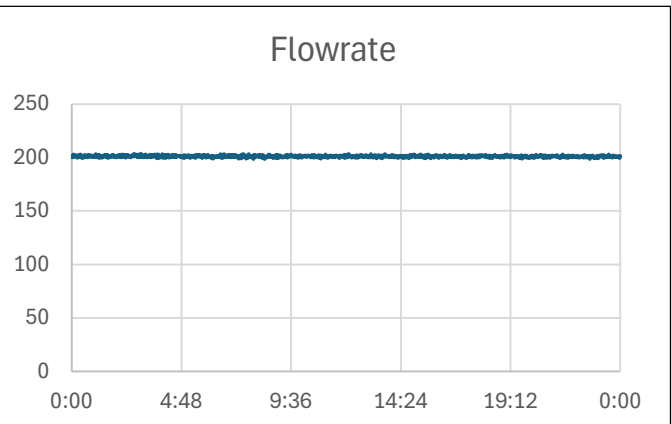
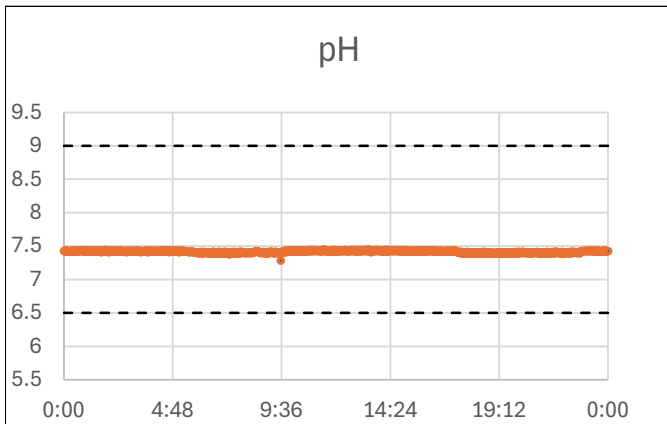
- Transferred 220 gallons of 50% NaOH.
- Received Chemical Delivery of 50% NaOH 520 gallons.
- Washed out old NaOH Tote , this caused the Plant Flow to drop and pH too rise but still within set Parameters.
- Removed 1 NaOH Tote offsite via Chemical Delivery Driver.

Schwartzwalder Daily Summary Report



Report Date:	7/9/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.355 Mgal	MW-18 Level:	174.9 ft
Average Flowrate:	178.7 gpm	Transducer Level:	251.5 ft
Effluent to Date:	6.070 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.35	183 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	4 Gal	23 Gal	5 Gal
Vol. Remaining	341 Gal	239 Gal	30 Gal
Vol. Staged	0 Gal	425 Gal	150 Gal
Days Available	85 Days	29 Days	36 Days

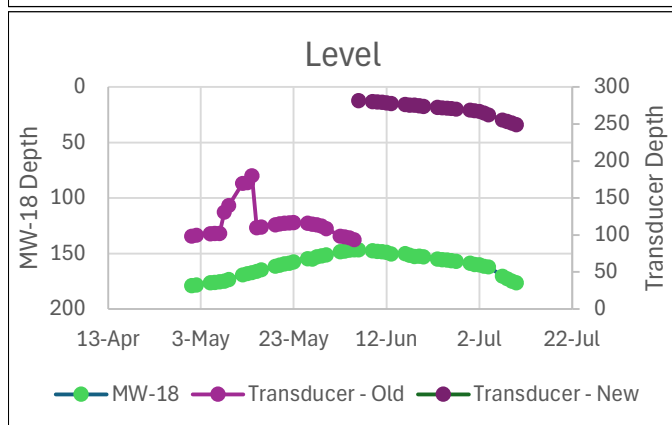
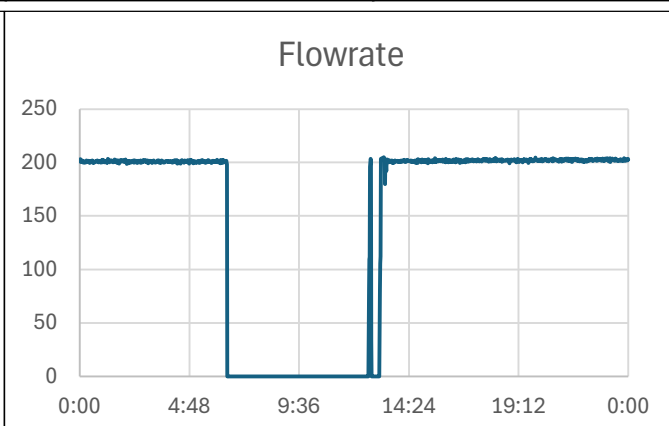
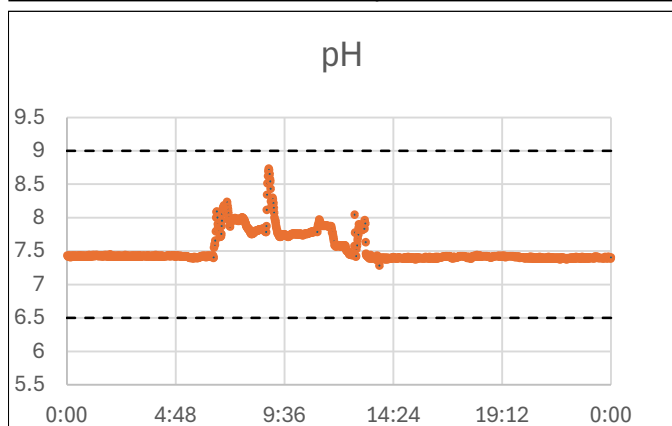
Safety Issues/Concerns:
- N/A

Notes:
- Collected and Shipped Outfall 001A Weekly TSS & COD Samples.

Schwartzwalder Daily Summary Report



Report Date:	7/10/2025	Lead Operator:	Chris P
		Assistant Operator(s):	Patrick D Bryant A
Effluent Discharged:	0.203 Mgal	MW-18 Level:	176.2 ft
Average Flowrate:	146.2 gpm	Transducer Level:	249.4 ft
Effluent to Date:	6.273 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.43	183 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	4 Gal	17 Gal	2 Gal
Vol. Remaining	337 Gal	216 Gal	25 Gal
Vol. Staged	0 Gal	425 Gal	100 Gal
Days Available	84 Days	37 Days	63 Days

Safety Issues/Concerns:

- N/A

Notes:

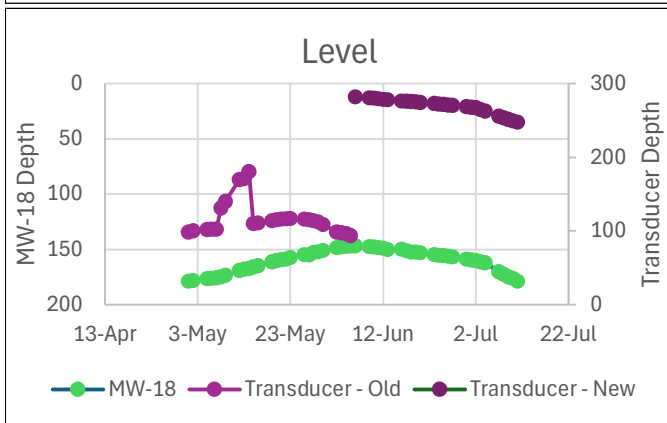
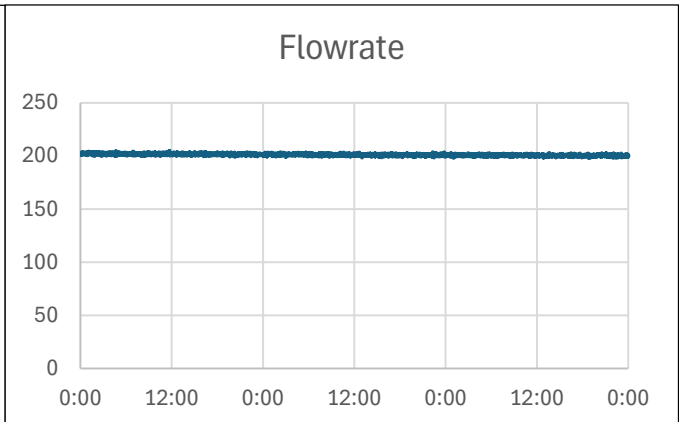
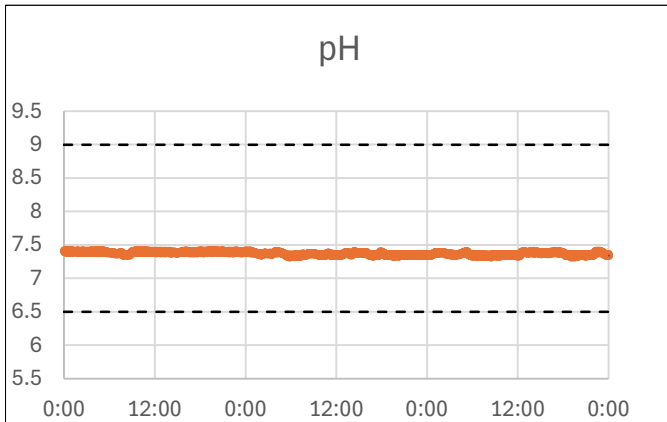
- Plant SHUT DOWN at 06:00.
- RSO Patrick Hendrickson onsite for cartridge filter samples.
- Removed one Cartridge filter from each Canister for sampling and replaced them with new filters.
- Inspected RO#2 Vessel's 4 & 5. Vessel 5 end cap gasket replaced. Shimmed both Vessel's 4 & 5.
- Plant START UP at 13:45.
- Batched 25gal of BaCl.

Schwartzwalder Daily Summary Report



Report Date:	7/11/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.838 Mgal	MW-18 Level:	178.9 ft
Average Flowrate:	201.2 gpm	Transducer Level:	247.8 ft
Effluent to Date:	7.111 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.25	183 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	34 Gal	66 Gal	10 Gal
Vol. Remaining	333 Gal	199 Gal	50 Gal
Vol. Staged	0 Gal	425 Gal	100 Gal
Days Available	10 Days	9 Days	15 Days

Safety Issues/Concerns:

- N/A

Notes:

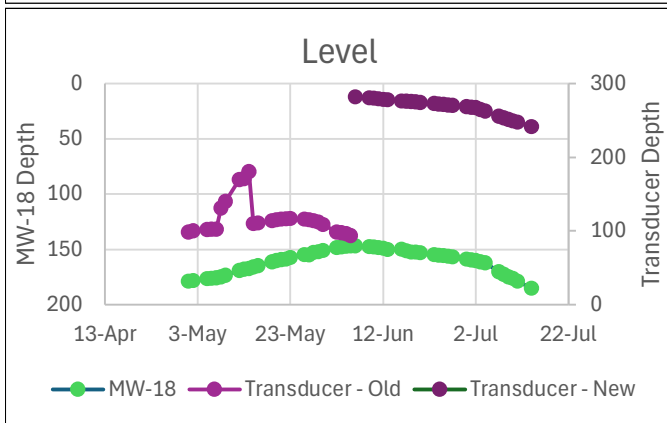
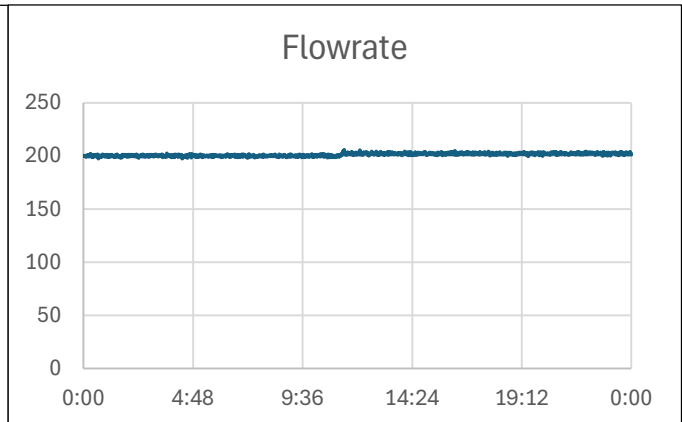
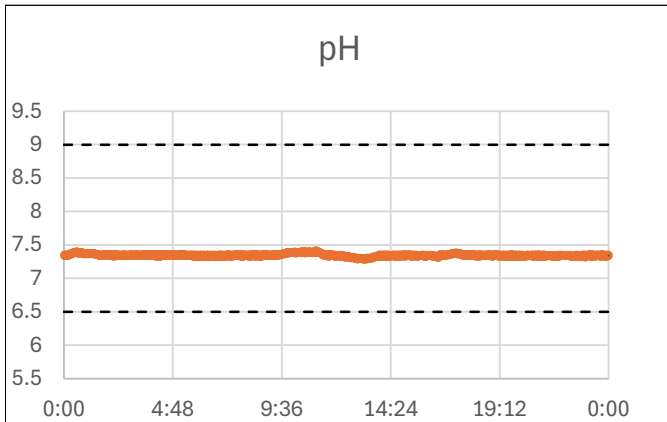
- Collected Outfall 001A Weekly TSS Sample.

Schwartzwalder Daily Summary Report



Report Date:	7/14/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.280 Mgal	MW-18 Level:	185.0 ft
Average Flowrate:	201.3 gpm	Transducer Level:	241.4 ft
Effluent to Date:	7.391 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.07	12 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	23 Gal	23 Gal	5 Gal
Vol. Remaining	299 Gal	133 Gal	40 Gal
Vol. Staged	0 Gal	425 Gal	150 Gal
Days Available	13 Days	24 Days	38 Days

Safety Issues/Concerns:

- N/A

Notes:

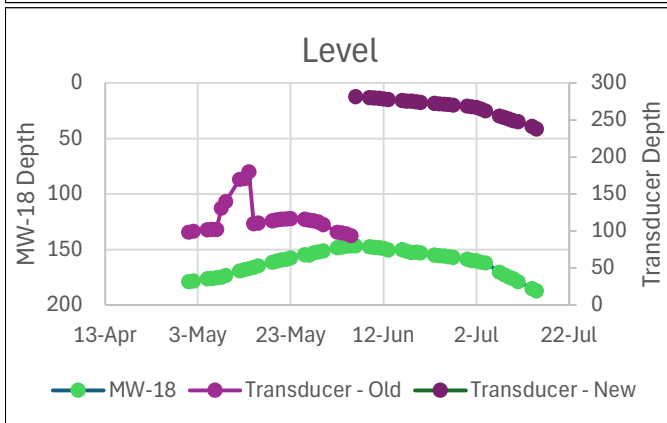
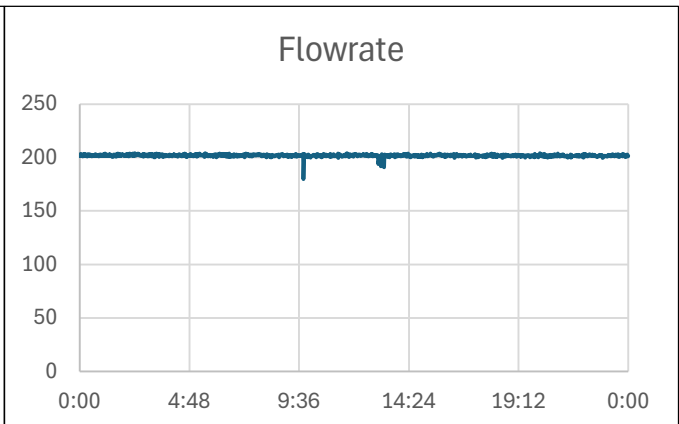
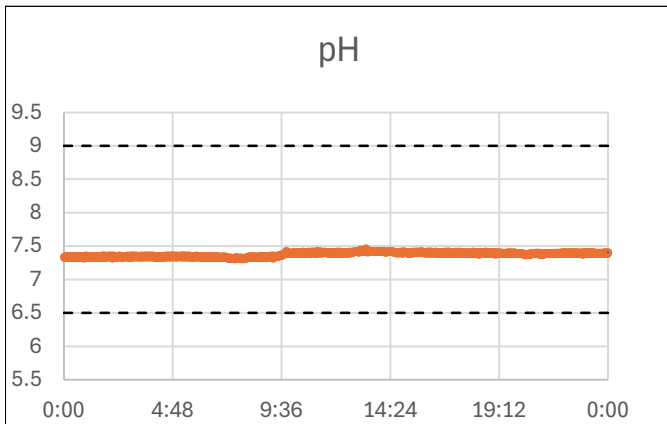
- Collected Outfall 001A Weekly TSS Sample.
- Raised Mine Pump Hertz from 56.7Hz to 57.3Hz.

Schwartzwalder Daily Summary Report



Report Date:	7/15/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.279 Mgal	MW-18 Level:	187.2 ft
Average Flowrate:	201.8 gpm	Transducer Level:	238.3 ft
Effluent to Date:	7.670 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	6.93	179 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	6 Gal	21 Gal	5 Gal
Vol. Remaining	287 Gal	110 Gal	35 Gal
Vol. Staged	0 Gal	255 Gal	125 Gal
Days Available	48 Days	18 Days	32 Days

Safety Issues/Concerns:

- N/A

Notes:

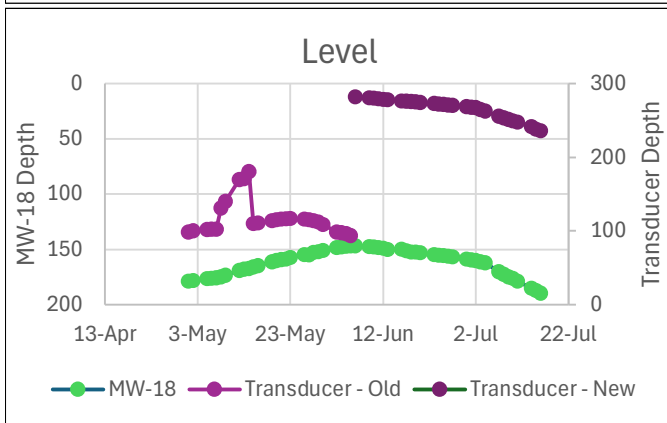
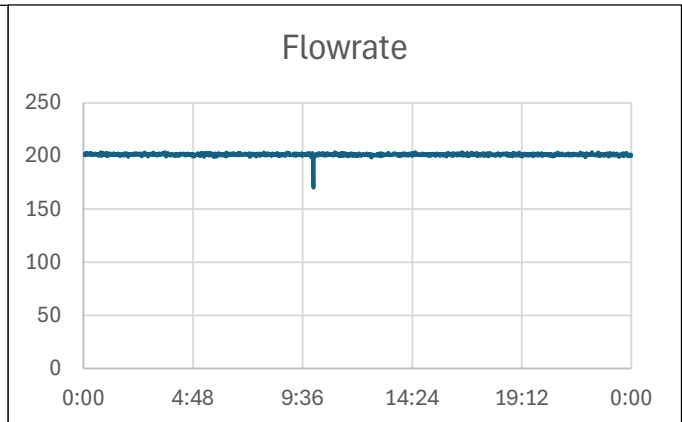
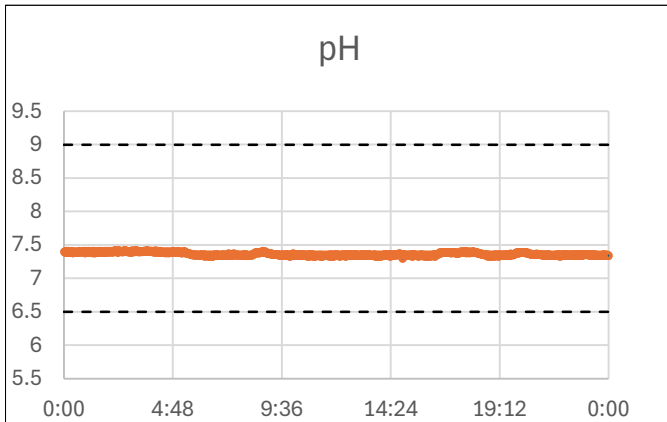
- Collected and Shipped Minepool and Table 1 Bi-Weekly Samples.
- Transferred 147 gallons of 50% NaOH.
- Batched 25 gallons of BaCl. Using the Permeate line to batch, This will cause flow to drop and pH too spike, still staying within Operating Permateres.

Schwartzwalder Daily Summary Report



Report Date:	7/16/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.279 Mgal	MW-18 Level:	189.6 ft
Average Flowrate:	201.3 gpm	Transducer Level:	235.9 ft
Effluent to Date:	7.949 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	6.94	176 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	5 Gal	22 Gal	3 Gal
Vol. Remaining	281 Gal	237 Gal	50 Gal
Vol. Staged	0 Gal	255 Gal	125 Gal
Days Available	56 Days	22 Days	58 Days

Safety Issues/Concerns:
- N/A

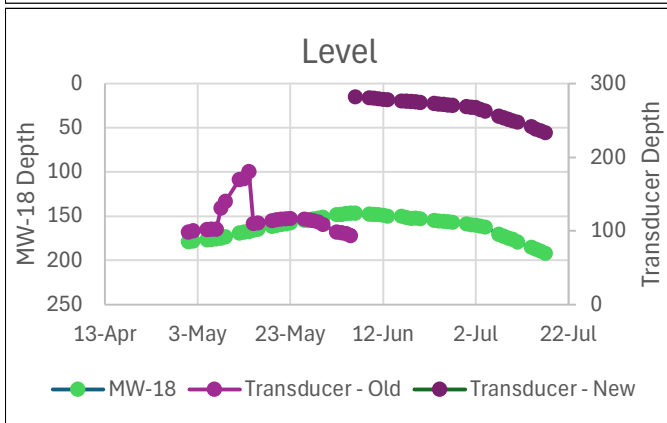
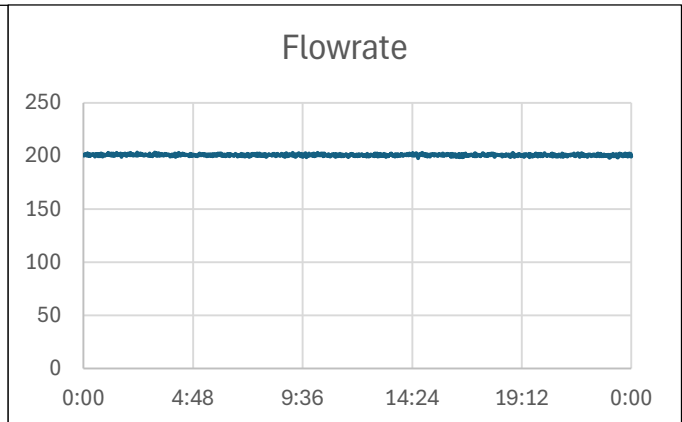
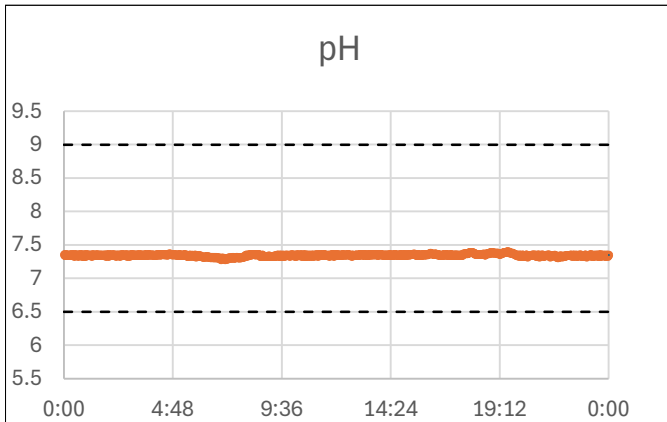
Notes:
- Collected and Shipped Weekly TSS and COD Samples.
- Took a Mine Pool sample and verified readings with YSI Handheld. Used Permeate line to rinse the YSI. This caused a slight dip in the flow. Still within Operating Parameters.

Schwartzwalder Daily Summary Report



Report Date:	7/17/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.280 Mgal	MW-18 Level:	191.9 ft
Average Flowrate:	200.9 gpm	Transducer Level:	233.4 ft
Effluent to Date:	8.229 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.02	177 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	8 Gal	23 Gal	3 Gal
Vol. Remaining	276 Gal	215 Gal	47 Gal
Vol. Staged	0 Gal	255 Gal	125 Gal
Days Available	35 Days	21 Days	57 Days

Safety Issues/Concerns:

- N/A

Notes:

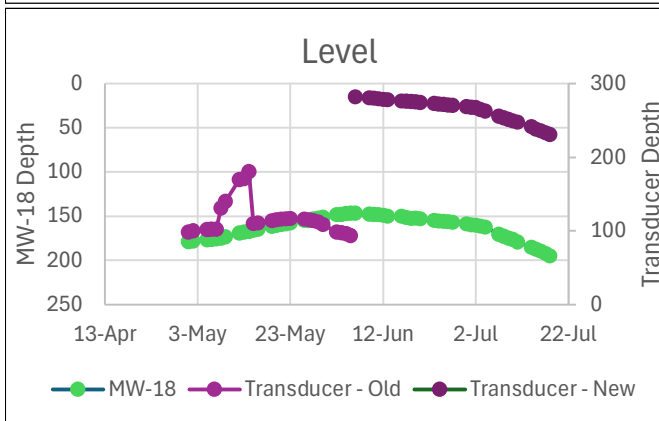
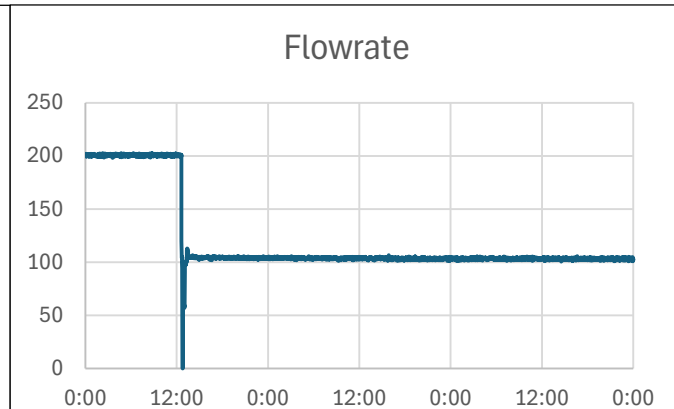
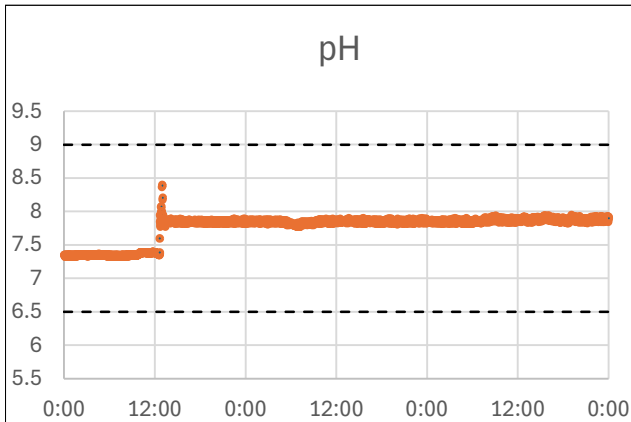
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Schwartzwalder Daily Summary Report



Report Date:	7/18/2025	Lead Operator:	Chris P
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.502 Mgal	MW-18 Level:	194.8 ft
Average Flowrate:	120.5 gpm	Transducer Level:	230.9 ft
Effluent to Date:	8.731 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.41	176 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	41 Gal	14 Gal
Vol. Remaining	268 Gal	192 Gal	44 Gal
Vol. Staged	0 Gal	255 Gal	125 Gal
Days Available	89 Days	11 Days	12 Days

Safety Issues/Concerns:

- N/A

Notes:

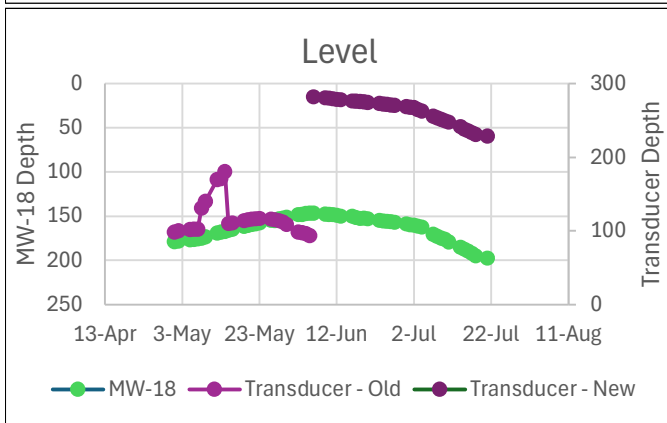
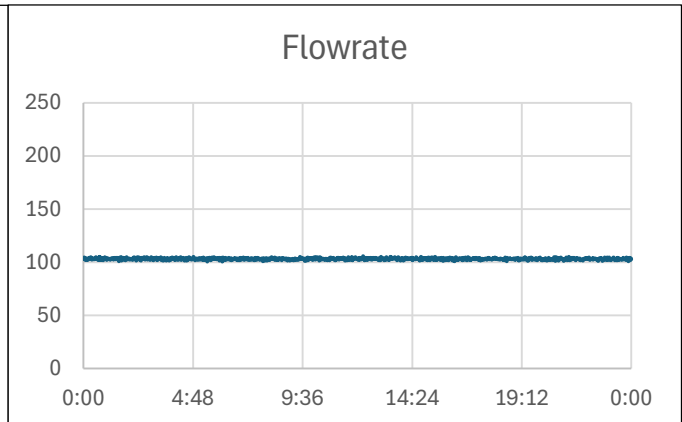
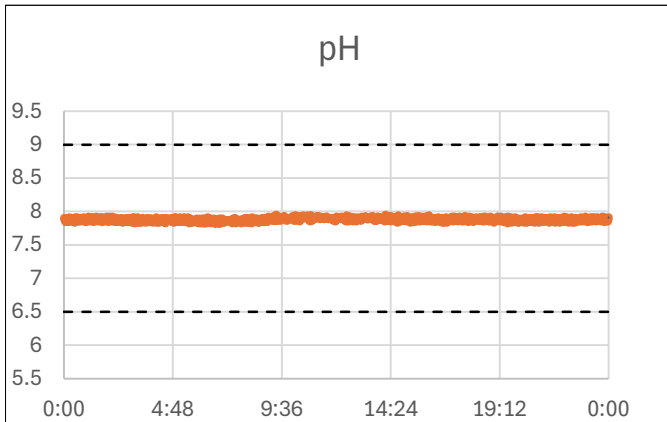
- Collected Outfall 001A Weekly TSS Sample.
- RO#1 has been temporarily Shut Off. RO#1 Feed Pump is leaking. Arvada Pump expected onsite 7/24/25 to fix this issue.
- Flushed RO#1 with Permeate from RO#2. RO#2 running online by itself.

Schwartzwalder Daily Summary Report



Report Date:	7/21/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.143 Mgal	MW-18 Level:	197.4 ft
Average Flowrate:	103.2 gpm	Transducer Level:	228.8 ft
Effluent to Date:	8.874 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.88	198 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	12 Gal	3 Gal
Vol. Remaining	266 Gal	150 Gal	30 Gal
Vol. Staged	0 Gal	255 Gal	125 Gal
Days Available	133 Days	34 Days	52 Days

Safety Issues/Concerns:

- N/A

Notes:

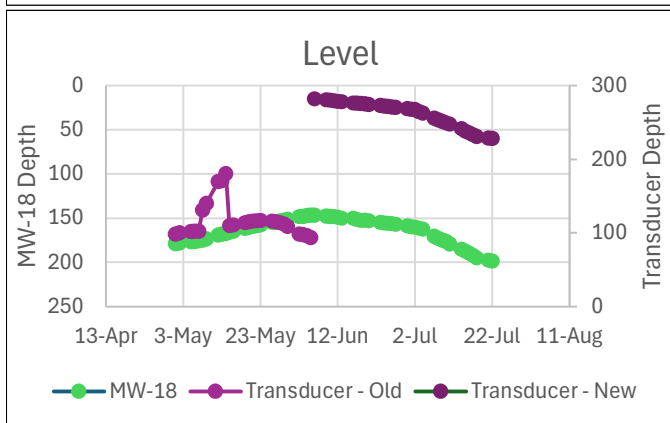
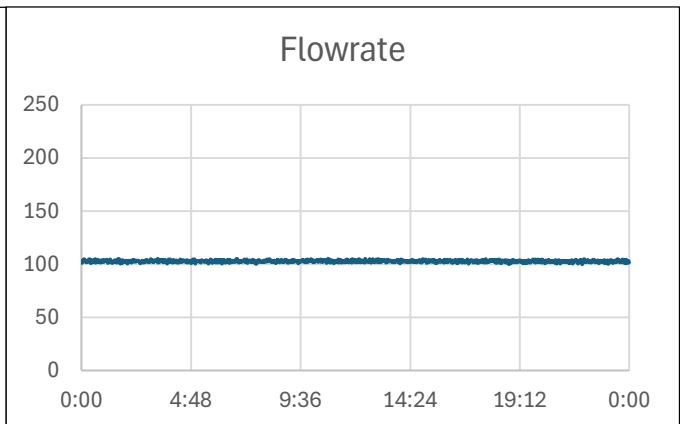
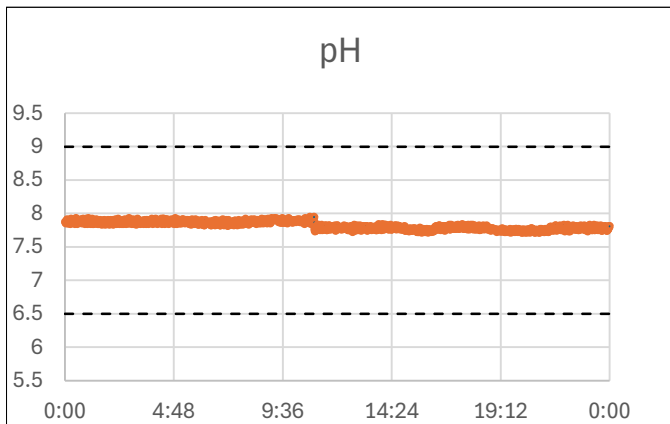
- Collected Outfall 001A Weekly TSS Sample.
- Peter Hays onsite inspection.

Schwartzwalder Daily Summary Report



Report Date:	7/22/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.142 Mgal	MW-18 Level:	198.4 ft
Average Flowrate:	102.9 gpm	Transducer Level:	228.1 ft
Effluent to Date:	9.016 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.56	198 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	11 Gal	4 Gal
Vol. Remaining	264 Gal	138 Gal	27 Gal
Vol. Staged	0 Gal	255 Gal	125 Gal
Days Available	132 Days	36 Days	38 Days

Safety Issues/Concerns:

- N/A

Notes:

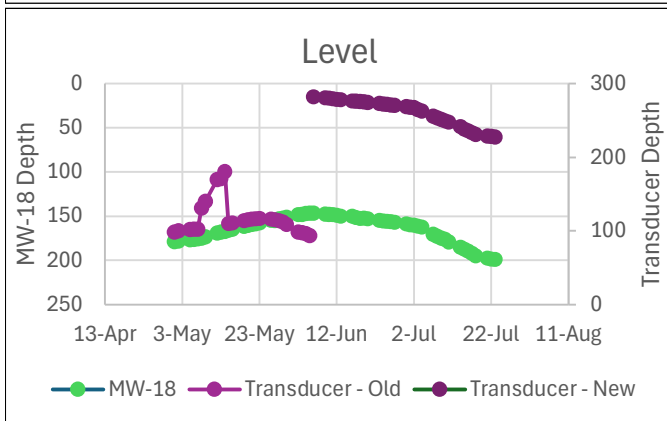
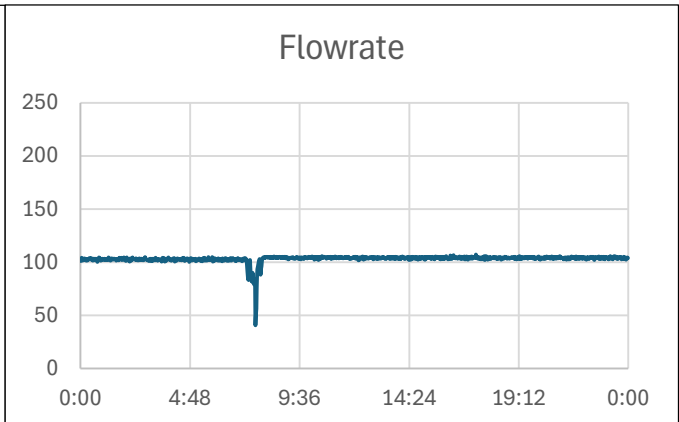
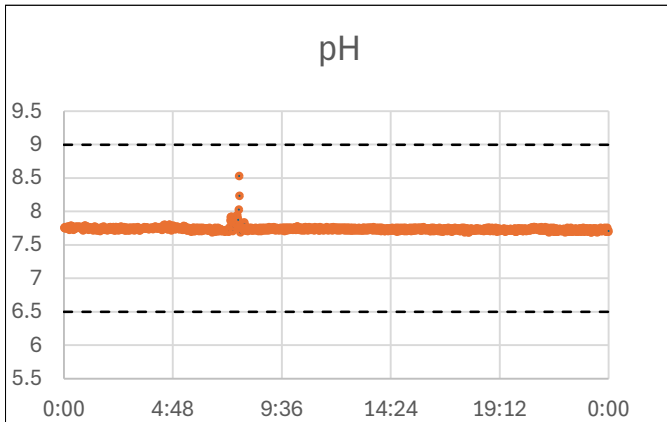
- Collected and Shipped Table 1 Bi-Weekly Samples.
- Lowered dosage of BaCl and NaOH.

Schwartzwalder Daily Summary Report



Report Date:	7/23/2025	Lead Operator:	Chris P
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.143 Mgal	MW-18 Level:	198.8 ft
Average Flowrate:	103.3 gpm	Transducer Level:	227.4 ft
Effluent to Date:	9.159 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.95	195 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	12 Gal	2 Gal
Vol. Remaining	262 Gal	127 Gal	50 Gal
Vol. Staged	0 Gal	255 Gal	100 Gal
Days Available	131 Days	32 Days	75 Days

Safety Issues/Concerns:

- N/A

Notes:

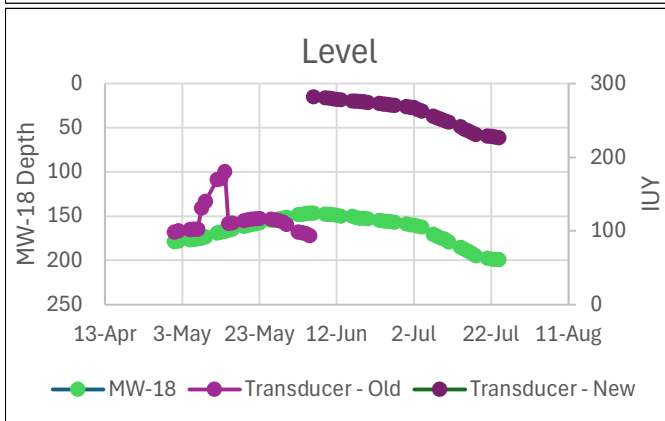
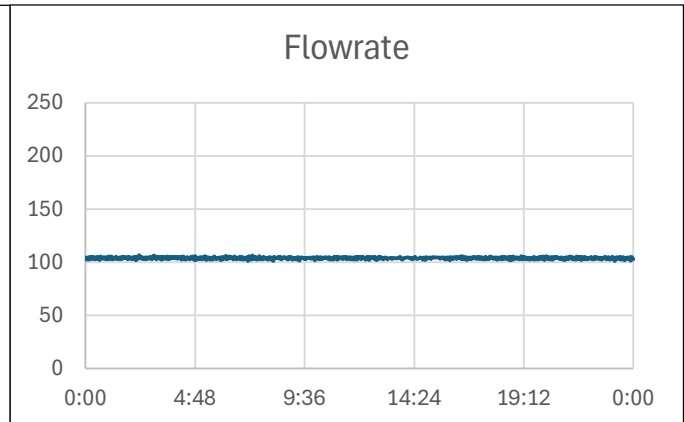
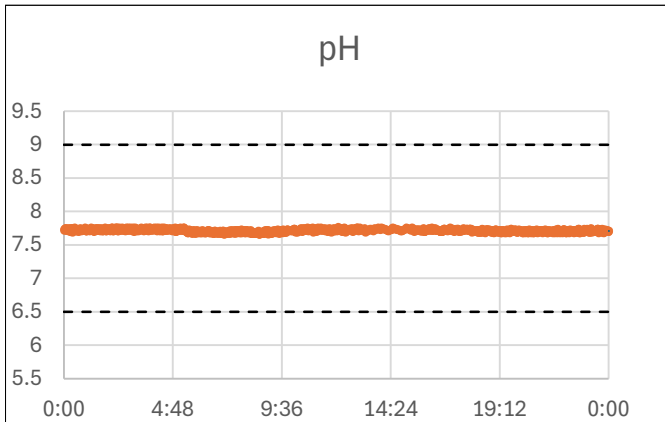
- Collected and Shipped TSS and COD Weekly Samples.
- Flushed and drained RO#1 with RO#2 Permeate. Prepped area for RO#1 Feed Pump Maintenance.
- Batched 25 gallons of BaCl using RO#2 Permeate. This caused flow to drop and pH too spike. Still within operating parameters.

Schwartzwalder Daily Summary Report



Report Date:	7/24/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.130 Mgal	MW-18 Level:	199.3 ft
Average Flowrate:	104.0 gpm	Transducer Level:	226.7 ft
Effluent to Date:	9.289 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.74	198 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	12 Gal	2 Gal
Vol. Remaining	260 Gal	115 Gal	48 Gal
Vol. Staged	0 Gal	255 Gal	100 Gal
Days Available	87 Days	30 Days	74 Days

Safety Issues/Concerns:

- N/A

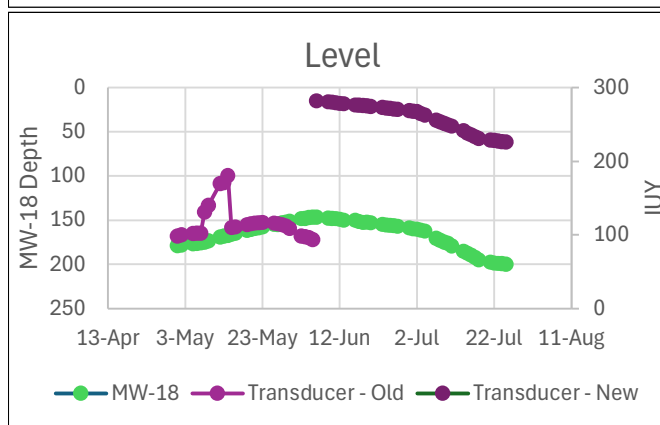
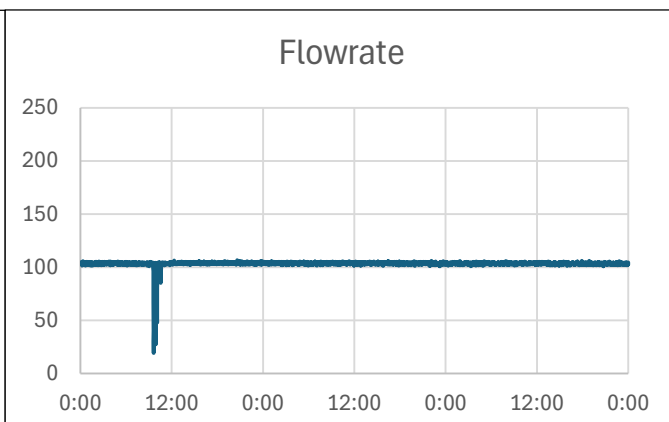
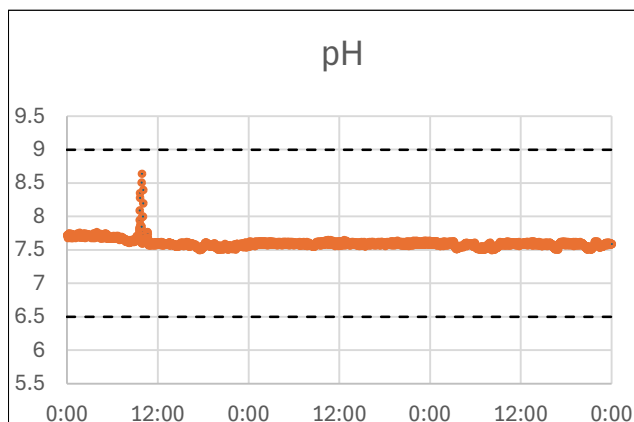
Notes:

- Arvada Pump Company onsite to inspect pump and determine work that will need to be done on RO#1 Feed Pump.
- Anti scalant delivery 2 Totes. Total of 460 gallons.
- Starlink was down from 13:03 to 15:25.

Schwartzwalder Daily Summary Report



Report Date:	7/25/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A
Effluent Discharged:	0.432 Mgal	MW-18 Level:	199.7 ft
Average Flowrate:	103.5 gpm	Transducer Level:	225.9 ft
Effluent to Date:	9.721 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.65	199 μ S/cm
Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	8 Gal	29 Gal	4 Gal
Vol. Remaining	257 Gal	103 Gal	47 Gal
Vol. Staged	460 Gal	135 Gal	100 Gal
Days Available	90 Days	8 Days	37 Days

Safety Issues/Concerns:

- N/A

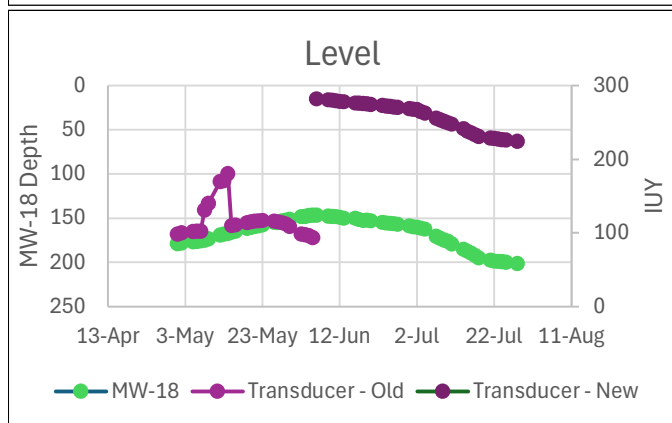
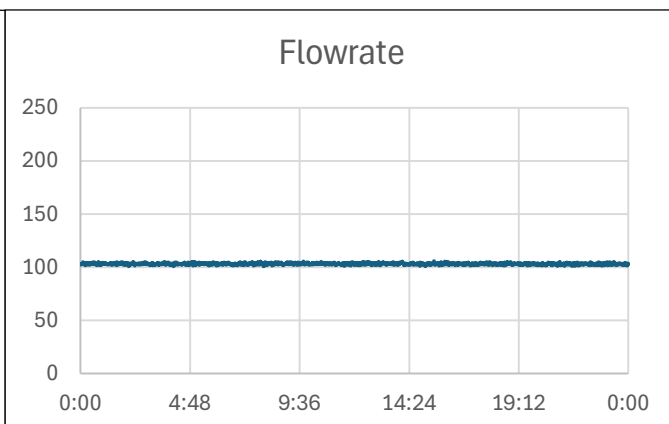
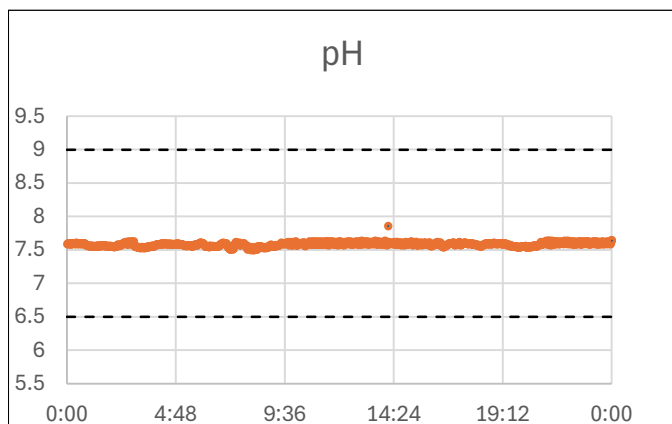
Notes:

- Trasferred 129 gallons of 50% NaOH.
- Washed NaOH Tote with RO#2 Permeate. This caused pH to spike and Flow to drop. Still within Operating Parameters.
- Collected Outfall 001A Weekly TSS Sample.
- Raised Plant Feed Pump Hertz from 46.8Hz to 46.9Hz.

Schwartzwalder Daily Summary Report



Report Date:	7/28/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	
Effluent Discharged:	0.143 Mgal	MW-18 Level:	201.1 ft
Average Flowrate:	103.3 gpm	Transducer Level:	224.5 ft
Effluent to Date:	9.864 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	7.48	200 µS/cm
Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	11 Gal	2 Gal
Vol. Remaining	249 Gal	221 Gal	42 Gal
Vol. Staged	460 Gal	135 Gal	100 Gal
Days Available	236 Days	31 Days	71 Days

Safety Issues/Concerns:

- N/A

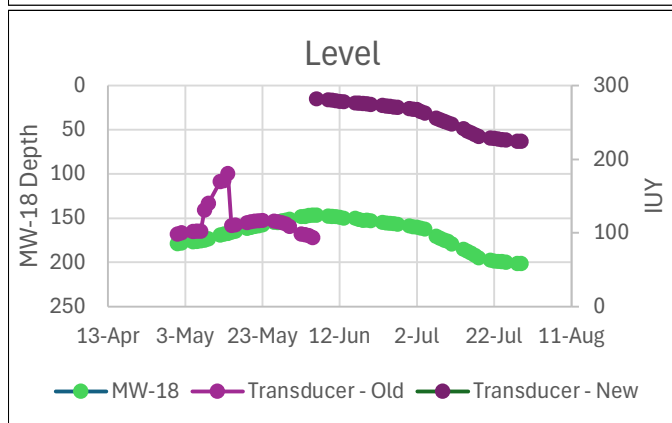
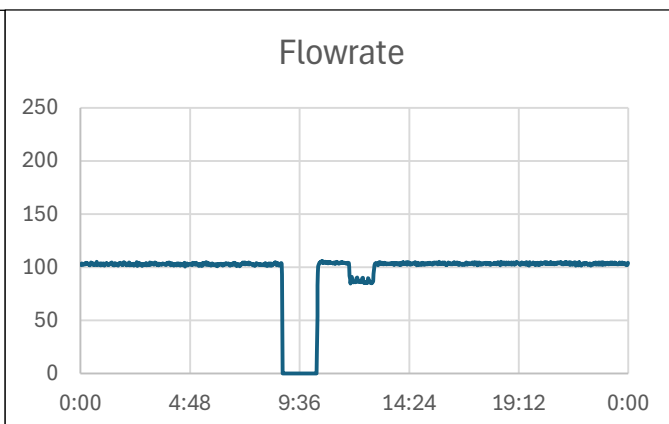
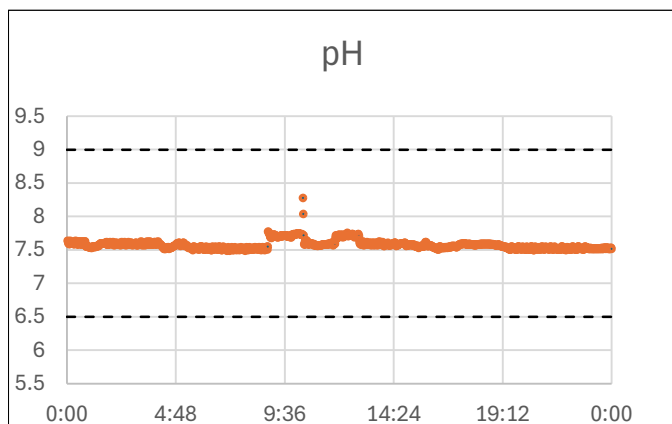
Notes:

-Collected Outfall 001A Weekly TSS Sample.

Schwartzwalder Daily Summary Report



Report Date:	7/29/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A
Effluent Discharged:	0.133 Mgal	MW-18 Level:	201.4 ft
Average Flowrate:	95.9 gpm	Transducer Level:	224.2 ft
Effluent to Date:	9.997 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	6.93	192 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	12 Gal	4 Gal
Vol. Remaining	246 Gal	210 Gal	40 Gal
Vol. Staged	460 Gal	135 Gal	100 Gal
Days Available	235 Days	29 Days	35 Days

Safety Issues/Concerns:

- N/A

Notes:

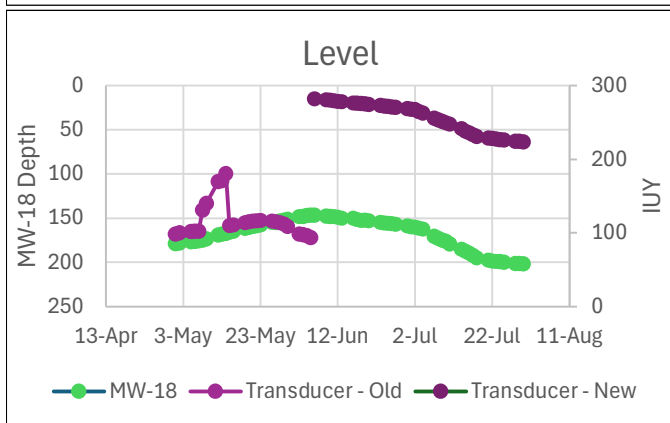
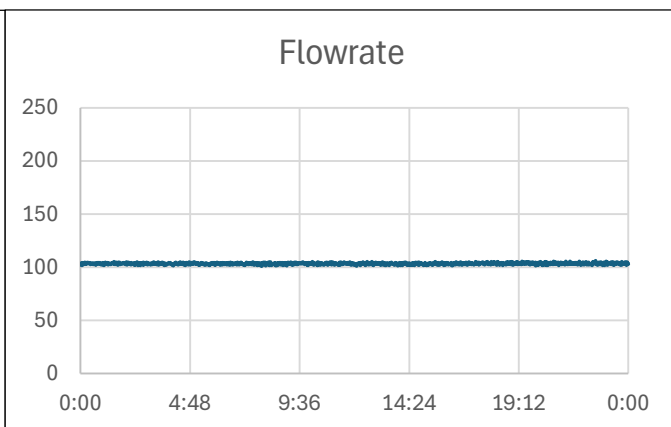
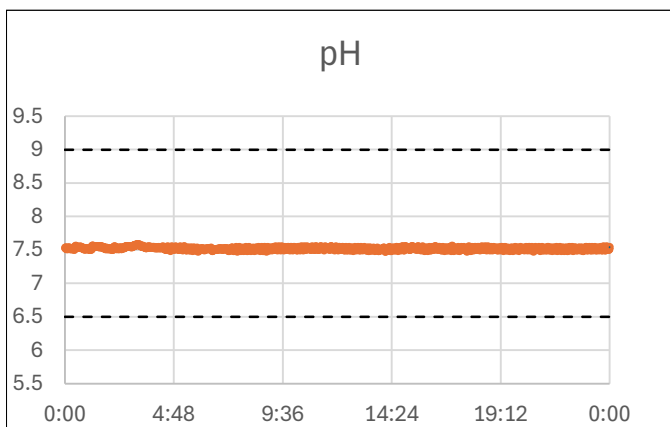
- Plant Shut-Down at 08:49.
- Replaced bleed off valves on 3 RO Canisters. Replaced 2 from RO#1 and 1 from RO#2.
- Replaced RO#2 Anti Scalant valve at injection point.
- Plant Start-Up at 10:20.
- Flushed and Drained RO#1 using RO#2 Permeate.

Schwartzwalder Daily Summary Report



Report Date:	7/30/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.143 Mgal	MW-18 Level:	201.7 ft
Average Flowrate:	103.5 gpm	Transducer Level:	223.7 ft
Effluent to Date:	10.140 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	21°C	8.04	188 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	11 Gal	6 Gal
Vol. Remaining	242 Gal	198 Gal	36 Gal
Vol. Staged	460 Gal	135 Gal	100 Gal
Days Available	234 Days	31 Days	23 Days

Safety Issues/Concerns:

- N/A

Notes:

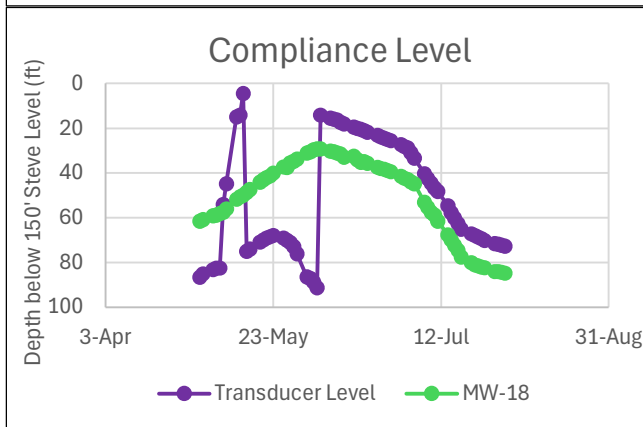
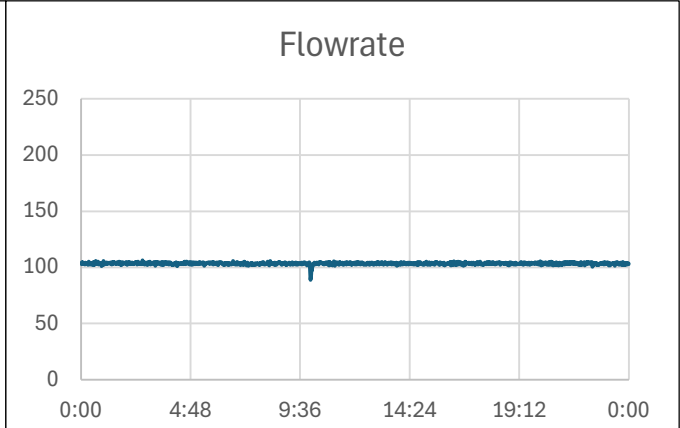
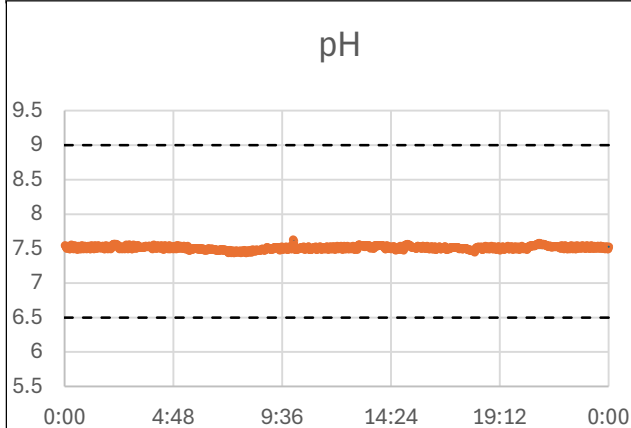
- Collected and Shipped Outfall 001A Weekly TSS, COD and Quarterly TDS Samples.

Schwartzwalder Daily Summary Report



Report Date:	7/31/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.144 Mgal	MW-18 Level:	202.0 ft	84.7 ft
Average Flowrate:	103.4 gpm	Transducer Level:	223.3 ft	72.7 ft
Effluent to Date:	10.284 Mgal	(Field Reading Value below 150')		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.61	187 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	12 Gal	5 Gal
Vol. Remaining	239 Gal	187 Gal	30 Gal
Vol. Staged	460 Gal	135 Gal	80 Gal
Days Available	233 Days	28 Days	22 Days

Safety Issues/Concerns:

- N/A

Notes:

- Peter Hays and Lucas West onsite.
- Joel Monroe from Denver Winpump onsite. Took apart RO#1 Feed pump, removed the mechanical seal. Waiting on getting a quote back.
- Installed POE+ switch for Ethernet Extender.
- Batched 20 gallons of BaCl. This caused a slight pH spike and Plant Flow drop. Still within Operating Parameters.

NOTE: The level graph has been adjusted to show field readings relative to the water level below the compliance elevation (150' below the Steve Adit - 6459' ASL). Data from 5/1/2025 to 6/5/2025 was recorded using an atmospheric transducer with a 500-ft cable, installed at the end of the 2024 season and remained in place over the winter. On 6/6/2025, it was replaced with an absolute transducer with a 600-ft cable at a lower depth. A 77.1-ft difference in readings was observed. While some of offset may be a result from the deeper installation and transducer type, the old data's accuracy is questionable due to damage to the atmospheric vent, which may have allowed moisture intrusion.