

Date: July 2, 2025
To: Peter Hays
From: Christopher Prosper
Project: SWTP 2025
Subject: June Monthly Reporting
Doc. No.: 25US0221-2- 0

INTRODUCTION

This memorandum contains the requirements for monthly report submittal for the month of May 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

3578267 gallons

C. CHEMICALS/FILTERS CONSUMED

Filters:

- 24 cartridge filters (for RO #2 Cartridge Filter install. RO#1 cartridge filters installed 5/30)
- 0 RO membranes

Chemicals:

- Caustic (50%): 249 gal
- Antiscalant: 90 gal
- Barium Chloride: 100 lbs

D. VOLUME OF BRINE RETURNED TO THE MINE POOL

2890249 gallons

E. MAINTENANCE PERFORMED

- Completed installation of sample port between RO and IX system (Item B31)
- Completed addition of drain valve in the IX system discharge PVC line for winterization (Item B29.2)
- Completed installation and upgrade to antiscalant pump and plumbing (Item B27)
- Completed installation of ORP sensor at influent piping (Item B36)

- Installed drain between ROs and IX vessels
- Installed and calibrated new pH probe in Finished Water Tank
- Installed new transducer and 600' cable into the mine pool (Item B38)
- Fixed RO#2 antiscalant pump discharge side fitting leak. Replaced O-ring gasket in discharge fitting. Primed RO#2 antiscalant pump

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
Found minor leak on pressure transmitter in between RO and IX	During next cartridge filter change out, fix leak
Found leak on discharge side of RO#2 antiscalant pump	Replaced o-ring gasket in discharge fitting
The Ethernet cable run to the PLC at the headframe approached the 100-meter maximum distance limit for standard Ethernet communication.	A POE extender needs to be installed to boost the Ethernet signal beyond the 100-meter limit to ensure stronger bandwidth and more reliable communication with the PLC.

H. Recommendations

There are no additional recommendations at this time.

Enclosures:

Attachment 1 May DMR and SW submittal

Attachment 2 Daily Reports

END



ATTACHMENT 1

MAY DMR AND SW SUBMITTAL



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

6/28/2025
25US0221

**Re: Discharge Monitoring Report for May 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 May 2025, there was no discharge as the system was shutdown for the winter season in late October 2024. Operations and discharge from the treatment plant began in early June 2025.

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 over a light blue horizontal line.

Enclosures:

None

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
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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:

Permittee Address:

Facility:

Facility Location:

Permitted Feature:

001
External Outfall

Discharge:

001-A
WWTF Discharge to Ralston Creek

Report Dates & Status

Monitoring Period:

From 05/01/25 to 05/31/25

DMR Due Date:

06/28/25

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: --

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			
00340	Oxygen demand, chem. [high level] [COD]	1 - Effluent Gross	0	--	Sample														01/07 - Weekly	CP - Composite
					Permit Req.								<=	100.0 30DA AVG	<=	200.0 DAILY MX	19 - mg/L			
					Value NODI									C - No Discharge		C - No Discharge				
00400	pH	1 - Effluent Gross	0	--	Sample														05/WK - Five Per Week	GR - Grab
					Permit Req.						>=	6.5 MINIMUM			<=	9.0 MAXIMUM	12 - SU			
					Value NODI							C - No Discharge				C - No Discharge				
00530	Solids, total suspended	1 - Effluent Gross	0	--	Sample														03/07 - Three Per Week	CP - Composite
					Permit Req.								<=	20.0 30DA AVG	<=	30.0 DAILY MX	19 - mg/L			
					Value NODI									C - No Discharge		C - No Discharge				
00718	Cyanide, weak acid, dissociable	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	CP - Composite
					Permit Req.										<=	5.0 DAILY MX	28 - ug/L			
					Value NODI											C - No Discharge				
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									C - No Discharge						
00940	Chloride [as Cl]	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	CP - Composite
					Permit Req.								<=	250.0 30DA AVG			19 - mg/L			
					Value NODI									C - No Discharge						
00940	Chloride [as Cl]	P - See Comments	0	--	Sample														02/30 - Twice Per Month	CP - Composite
					Permit Req.								<=	54.0 ROLL AVG			19 - mg/L			
					Value NODI									C - No Discharge						
00945	Sulfate, total [as SO4]	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	CP - Composite
					Permit Req.								<=	250.0 30DA AVG			19 - mg/L			
					Value NODI									C - No Discharge						
00945	Sulfate, total [as SO4]	P - See Comments	0	--	Sample														02/30 - Twice Per Month	CP - Composite
					Permit Req.								<=	131.0 ROLL AVG			19 - mg/L			
					Value NODI									C - No Discharge						
00949	Fluoride	1 - Effluent Gross	0	--	Sample														02/30 - Twice Per Month	CP - Composite
					Permit Req.										<=	2.0 DAILY MX	19 - mg/L			

					Value NODI											C - No Discharge			
00978	Arsenic, total recoverable	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI								<=	0.02 30DA AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
00980	Iron, total recoverable	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI									Req Mon 30DA AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
00980	Iron, total recoverable	P - See Comments	0	--	Sample Permit Req. Value NODI									Req Mon ROLL AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01022	Boron, total [as B]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI								<=	0.46 30DA AVG			19 - mg/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01046	Iron, dissolved [as Fe]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI								<=	300.0 30DA AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01046	Iron, dissolved [as Fe]	P - See Comments	0	--	Sample Permit Req. Value NODI								<=	45.0 ROLL AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01056	Manganese, dissolved [as Mn]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI								<=	50.0 30DA AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01056	Manganese, dissolved [as Mn]	P - See Comments	0	--	Sample Permit Req. Value NODI								<=	7.5 ROLL AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01059	Thallium, total [as Tl]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI								<=	0.24 30DA AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01097	Antimony, total [as Sb]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI								<=	5.6 30DA AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01220	Chromium, hexavalent dissolved [as Cr]	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge		C - No Discharge			
01303	Zinc, potentially dissolved	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge		C - No Discharge			
01303	Zinc, potentially dissolved	P - See Comments	0	--	Sample Permit Req. Value NODI									Req Mon ROLL AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01304	Silver, potentially dissolved	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI								<=	0.13 30DA AVG	<=	3.5 DAILY MX	28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge		C - No Discharge			
01304	Silver, potentially dissolved	P - See Comments	0	--	Sample Permit Req. Value NODI								<=	0.02 ROLL AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01306	Copper, potentially dissolved	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI								<=	12.0 30DA AVG	<=	18.0 DAILY MX	28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge		C - No Discharge			
01306	Copper, potentially dissolved	P - See Comments	0	--	Sample Permit Req. Value NODI								<=	1.8 ROLL AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge					
01313	Cadmium, potentially dissolvd	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge		C - No Discharge			
01322	Nickel, potentially dissolvd	1 - Effluent Gross	0	--	Sample Permit Req. Value NODI									Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L		02/30 - Twice Per Month CP - Composite
														C - No Discharge		C - No Discharge			
					Sample Permit Req.									Req Mon ROLL AVG			28 - ug/L		02/30 - Twice Per Month CP - Composite

01322	Nickel, potentially dissolvd	P - See Comments	0	--	Value NODI										C - No Discharge				
01323	Selenium, potentially dissolvd	1 - Effluent Gross	0	--	Sample										Req Mon 30DA AVG		Req Mon DAILY MX	28 - ug/L	02/30 - Twice Per Month CP - Composite
					Permit Req.										C - No Discharge		C - No Discharge		
					Value NODI										C - No Discharge		C - No Discharge		
01323	Selenium, potentially dissolvd	P - See Comments	0	--	Sample										Req Mon ROLL AVG			28 - ug/L	02/30 - Twice Per Month CP - Composite
					Permit Req.										C - No Discharge				
					Value NODI										C - No Discharge				
03582	Oil and grease	1 - Effluent Gross	0	--	Sample											<=	10.0 INST MAX	19 - mg/L	77/77 - Contingent GR - Grab
					Permit Req.														
					Value NODI												C - No Discharge		
04262	Chromium, trivalent total recoverable	1 - Effluent Gross	0	--	Sample											<=	50.0 DAILY MX	28 - ug/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI												C - No Discharge		
04262	Chromium, trivalent total recoverable	P - See Comments	0	--	Sample									<=	7.5 ROLL AVG			28 - ug/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge				
09501	Radium 226, total	1 - Effluent Gross	0	--	Sample									<=	10.0 30DA AVG	<=	30.0 DAILY MX	17 - pCi/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge		C - No Discharge		
09503	Radium 226, dissolved	1 - Effluent Gross	0	--	Sample									<=	3.0 30DA AVG	<=	10.0 DAILY MX	17 - pCi/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge		C - No Discharge		
11503	Radium 226 + radium 228, total	1 - Effluent Gross	0	--	Sample									<=	5.0 30DA AVG			17 - pCi/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge				
22708	Uranium, total	1 - Effluent Gross	0	--	Sample									<=	30.0 30DA AVG			28 - ug/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge				
22708	Uranium, total	P - See Comments	0	--	Sample									<=	22.0 ROLL AVG			28 - ug/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge				
50050	Flow, in conduit or thru treatment plant	1 - Effluent Gross	0	--	Sample														99/99 - Continuous RC - Recorder (auto)
					Permit Req.	<=	0.288 30DA AVG		Req Mon DAILY MX	03 - MGD									
					Value NODI		C - No Discharge		C - No Discharge										
51202	Sulfide-hydrogen sulfide [undissociated]	1 - Effluent Gross	0	--	Sample										Req Mon 30DA AVG			19 - mg/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge				
51202	Sulfide-hydrogen sulfide [undissociated]	P - See Comments	0	--	Sample										Req Mon ROLL AVG			19 - mg/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge				
71900	Mercury, total [as Hg]	1 - Effluent Gross	0	--	Sample										Req Mon 30DA AVG			28 - ug/L	02/30 - Twice Per Month CP - Composite
					Permit Req.														
					Value NODI										C - No Discharge				
84066	Oil and grease visual	1 - Effluent Gross	0	--	Sample														05/WK - Five Per Week VI - Visual
					Permit Req.					Req Mon INST MAX	9P - N=0;Y=1								
					Value NODI					C - No Discharge									

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_05_Schwartzwalder_Outfall_001A_Cover_Letter.pdf	pdf	196125.0

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:	2025-06-29 20:37 (Time Zone: -06:00)
Report Last Signed By	
User:	pdelaney@alexcoresource.com
Name:	Patrick Delaney
E-Mail:	pdelaney@blackfoxmining.com
Date/Time:	2025-06-29 20:39 (Time Zone: -06:00)



ANALYTICAL SUMMARY REPORT

June 11, 2025

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

Work Order: B25051252 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 2 samples for Linkan Engineering on 5/15/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25051252-001	SW-AWD	05/14/25 11:21	05/15/25	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
B25051252-002	SW-BPL	05/14/25 11:38	05/15/25	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: B25051252

Report Date: 06/11/25

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: B25051252-001
Client Sample ID: SW-AWD

Report Date: 06/11/25
Collection Date: 05/14/25 11:21
Date Received: 05/15/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	4	mg/L		2		A2540 D	05/16/25 09:58 / pjw
Solids, Total Dissolved TDS @ 180 C	175	mg/L		20		A2540 C	05/16/25 16:07 / etv
INORGANICS							
Sulfate	11	mg/L		1		E300.0	05/17/25 15:39 / caa
Fluoride	0.32	mg/L		0.01		E300.0	05/17/25 15:39 / caa
Cyanide, Weak Acid Dissociable	ND	mg/L		0.001		Kelada-01	05/16/25 14:16 / fap
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	0.03	mg/L		0.01		E353.2	05/19/25 17:03 / krt
Phosphorus, Orthophosphate as P	ND	mg/L		0.002		E365.1	05/15/25 16:46 / taz
Phosphorus, Total as P	0.013	mg/L		0.002		E365.1	05/20/25 10:40 / taz
METALS, DISSOLVED							
Copper	0.0004	mg/L	JL	0.0005		E200.8	05/28/25 09:42 / jks
Molybdenum	0.0003	mg/L		0.0001		E200.8	05/19/25 23:37 / aem
Silver	ND	mg/L	L	0.00004		E200.8	05/17/25 15:44 / aem
Uranium	0.00060	mg/L		0.00002		E200.8	05/17/25 15:44 / aem
Zinc	ND	mg/L	L	0.002		E200.8	05/28/25 09:42 / jks
METALS, TOTAL RECOVERABLE							
Antimony	ND	mg/L	L	0.0001		E200.8	05/20/25 18:55 / aem
Chromium	ND	mg/L		0.0005		E200.8	05/20/25 18:55 / aem
Thallium	ND	mg/L	L	0.0002		E200.8	05/21/25 15:23 / aem
METALS, TOTAL							
Arsenic	0.0002	mg/L		0.0001		E200.8	05/23/25 04:52 / aem
Boron	0.02	mg/L		0.01		E200.7	05/20/25 16:57 / enb
Molybdenum	0.0005	mg/L		0.0001		E200.8	05/20/25 18:55 / aem
Uranium	0.00116	mg/L		0.00002		E200.8	05/21/25 15:23 / aem
RADIONUCLIDES - TOTAL							
Gross Alpha	0.8	pCi/L	U			E900.0	06/07/25 23:26 / eli-ca
Gross Alpha precision (±)	1.2	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Gross Alpha MDC	1.9	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Gross Beta	2.0	pCi/L	U			E900.0	06/07/25 23:26 / eli-ca
Gross Beta precision (±)	1.4	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Gross Beta MDC	2.3	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Radium 226	0.3	pCi/L				E903.0	06/03/25 10:56 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	06/03/25 10:56 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	06/03/25 10:56 / eli-ca
Radium 228	0.3	pCi/L	U			RA-05	05/29/25 13:22 / eli-ca
Radium 228 precision (±)	0.6	pCi/L				RA-05	05/29/25 13:22 / eli-ca
Radium 228 MDC	1	pCi/L				RA-05	05/29/25 13:22 / eli-ca
Radium 226 + Radium 228	0.8	pCi/L	U			A7500-RA	06/04/25 10:12 / 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: B25051252-001
Client Sample ID: SW-AWD

Report Date: 06/11/25
Collection Date: 05/14/25 11:21
DateReceived: 05/15/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Radium 226 + Radium 228 precision ($\pm$)	0.6	pCi/L				A7500-RA	06/04/25 10:12 / eli-ca
Radium 226 + Radium 228 MDC	1	pCi/L				A7500-RA	06/04/25 10:12 / 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: B25051252-002
Client Sample ID: SW-BPL

Report Date: 06/11/25
Collection Date: 05/14/25 11:38
Date Received: 05/15/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
PHYSICAL PROPERTIES							
Solids, Total Suspended TSS @ 105 C	5	mg/L		2		A2540 D	05/16/25 09:58 / pjw
Solids, Total Dissolved TDS @ 180 C	188	mg/L		20		A2540 C	05/16/25 16:07 / etv
INORGANICS							
Sulfate	17	mg/L		1		E300.0	05/17/25 16:30 / caa
Fluoride	0.31	mg/L		0.01		E300.0	05/17/25 16:30 / caa
Cyanide, Weak Acid Dissociable	ND	mg/L		0.001		Kelada-01	05/16/25 14:26 / fap
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	0.06	mg/L		0.01		E353.2	05/19/25 17:04 / krt
Phosphorus, Orthophosphate as P	0.003	mg/L		0.002		E365.1	05/15/25 16:47 / taz
Phosphorus, Total as P	0.012	mg/L		0.002		E365.1	05/20/25 10:41 / taz
METALS, DISSOLVED							
Copper	0.0006	mg/L		0.0005		E200.8	05/17/25 15:49 / aem
Molybdenum	0.0010	mg/L		0.0001		E200.8	05/19/25 23:43 / aem
Silver	ND	mg/L	L	0.00004		E200.8	05/17/25 15:49 / aem
Uranium	0.0125	mg/L		0.00002		E200.8	05/17/25 15:49 / aem
Zinc	0.002	mg/L	JL	0.002		E200.8	05/17/25 15:49 / aem
METALS, TOTAL RECOVERABLE							
Antimony	ND	mg/L	L	0.0001		E200.8	05/20/25 19:01 / aem
Chromium	ND	mg/L		0.0005		E200.8	05/20/25 19:01 / aem
Thallium	ND	mg/L	L	0.0002		E200.8	05/21/25 15:28 / aem
METALS, TOTAL							
Arsenic	0.0002	mg/L		0.0001		E200.8	05/23/25 05:08 / aem
Boron	0.02	mg/L		0.01		E200.7	05/20/25 17:06 / enb
Molybdenum	0.0019	mg/L		0.0001		E200.8	05/20/25 19:01 / aem
Uranium	0.0234	mg/L		0.00002		E200.8	05/21/25 15:28 / aem
RADIONUCLIDES - TOTAL							
Gross Alpha	9.5	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Gross Alpha precision (±)	3.2	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Gross Alpha MDC	2.5	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Gross Beta	7.2	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Gross Beta precision (±)	1.6	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Gross Beta MDC	2.6	pCi/L				E900.0	06/07/25 23:26 / eli-ca
Radium 226	0.08	pCi/L	U			E903.0	06/03/25 10:56 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	06/03/25 10:56 / eli-ca
Radium 226 MDC	0.2	pCi/L				E903.0	06/03/25 10:56 / eli-ca
Radium 228	0.2	pCi/L	U			RA-05	05/29/25 13:22 / eli-ca
Radium 228 precision (±)	0.6	pCi/L				RA-05	05/29/25 13:22 / eli-ca
Radium 228 MDC	1.0	pCi/L				RA-05	05/29/25 13:22 / eli-ca
Radium 226 + Radium 228	0.6	pCi/L	U			A7500-RA	06/04/25 10:12 / 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: B25051252-002
Client Sample ID: SW-BPL

Report Date: 06/11/25
Collection Date: 05/14/25 11:38
DateReceived: 05/15/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
RADIONUCLIDES - TOTAL							
Radium 226 + Radium 228 precision ($\pm$)	0.6	pCi/L				A7500-RA	06/04/25 10:12 / eli-ca
Radium 226 + Radium 228 MDC	1.0	pCi/L				A7500-RA	06/04/25 10:12 / 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: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS20250516E
Lab ID: MBLK_20250516-12	Method Blank									
Run: Bal #30_250516G										05/16/25 16:06
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	20						
Lab ID: LCS_20250516-7	Laboratory Control Sample									
Run: Bal #30_250516G										05/16/25 16:06
Solids, Total Dissolved TDS @ 180 C		933	mg/L	25	93	90	110			
Lab ID: B25051376-007ADUP	Sample Duplicate									
Run: Bal #30_250516G										05/16/25 16:09
Solids, Total Dissolved TDS @ 180 C		109	mg/L	25				2.5	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: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 D								Batch: TSS20250516A		
Lab ID: MBLK_20250516-4	Method Blank					Run: BAL #30_250516A		05/16/25 09:57		
Solids, Total Suspended TSS @ 105 C	ND	mg/L		0.6						
Lab ID: LCS_20250516-2	Laboratory Control Sample					Run: BAL #30_250516A		05/16/25 09:57		
Solids, Total Suspended TSS @ 105 C	102	mg/L		25	102	80	120			
Lab ID: B25051259-001BDUP	Sample Duplicate					Run: BAL #30_250516A		05/16/25 09:58		
Solids, Total Suspended TSS @ 105 C	9.80	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: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E300.0						Analytical Run: IC METROHM 2_250516A				
Lab ID: ICV	2	Initial Calibration Verification Standard								05/16/25 10:54
Sulfate		104	mg/L	1.0	104	90	110			
Fluoride		1.30	mg/L	0.10	104	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								05/17/25 15:22
Sulfate		104	mg/L	1.0	104	90	110			
Fluoride		1.27	mg/L	0.10	101	90	110			
Method: E300.0						Batch: R441631				
Lab ID: ICB	2	Method Blank								Run: IC METROHM 2_250516A 05/16/25 11:11
Sulfate		ND	mg/L	0.7						
Fluoride		ND	mg/L	0.009						
Lab ID: LFB	2	Laboratory Fortified Blank								Run: IC METROHM 2_250516A 05/16/25 11:28
Sulfate		104	mg/L	1.1	104	90	110			
Fluoride		1.37	mg/L	0.10	110	90	110			
Lab ID: B25051252-001BMS	2	Sample Matrix Spike								Run: IC METROHM 2_250516A 05/17/25 15:56
Sulfate		119	mg/L	1.1	108	90	110			
Fluoride		1.64	mg/L	0.10	106	90	110			
Lab ID: B25051252-001BMSD	2	Sample Matrix Spike Duplicate								Run: IC METROHM 2_250516A 05/17/25 16:13
Sulfate		119	mg/L	1.1	109	90	110	0.1	20	
Fluoride		1.64	mg/L	0.10	106	90	110	0.1	20	

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E353.2								Analytical Run: FIA203-B_250519A		
Lab ID: ICV	Initial Calibration Verification Standard						05/19/25 16:29			
Nitrogen, Nitrate+Nitrite as N		0.547	mg/L	0.010	97	90	110			
Lab ID: CCV_20250519-8	Continuing Calibration Verification Standard						05/19/25 16:53			
Nitrogen, Nitrate+Nitrite as N		0.996	mg/L	0.010	100	90	110			
Method: E353.2								Batch: R441691		
Lab ID: FilterMBLK	Method Blank			Run: FIA203-B_250519A			05/19/25 16:30			
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.009						
Lab ID: MBLK_20250519-3	Method Blank			Run: FIA203-B_250519A			05/19/25 16:32			
Nitrogen, Nitrate+Nitrite as N		ND	mg/L	0.009						
Lab ID: FilterLFB	Laboratory Fortified Blank			Run: FIA203-B_250519A			05/19/25 16:34			
Nitrogen, Nitrate+Nitrite as N		1.03	mg/L	0.010	103	90	110			
Lab ID: LFB_20250519-1	Laboratory Fortified Blank			Run: FIA203-B_250519A			05/19/25 16:35			
Nitrogen, Nitrate+Nitrite as N		1.02	mg/L	0.010	102	90	110			
Lab ID: B25051109-001AMS	Sample Matrix Spike			Run: FIA203-B_250519A			05/19/25 16:56			
Nitrogen, Nitrate+Nitrite as N		2.61	mg/L	0.020	103	90	110			
Lab ID: B25051109-001AMSD	Sample Matrix Spike Duplicate			Run: FIA203-B_250519A			05/19/25 16:57			
Nitrogen, Nitrate+Nitrite as N		2.64	mg/L	0.020	105	90	110	1.5	10	
Lab ID: B25051008-004AMS	Sample Matrix Spike			Run: FIA203-B_250519A			05/19/25 19:03			
Nitrogen, Nitrate+Nitrite as N		0.895	mg/L	0.010	87	90	110			S
Lab ID: B25051008-004AMSD	Sample Matrix Spike Duplicate			Run: FIA203-B_250519A			05/19/25 19:04			
Nitrogen, Nitrate+Nitrite as N		0.889	mg/L	0.010	87	90	110	0.7	10	S

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

S - Spike recovery outside of advisory limits

QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E365.1								Analytical Run: FIA204-B_250515B		
Lab ID: ICB	Initial Calibration Verification Standard			05/15/25 16:30						
Phosphorus, Orthophosphate as P	0.246	mg/L	0.0050	98	90	110				
Lab ID: CCV	Continuing Calibration Verification Standard			05/15/25 16:48						
Phosphorus, Orthophosphate as P	0.486	mg/L	0.0050	97	90	110				
Method: E365.1								Batch: R441505		
Lab ID: ICB	Method Blank			Run: FIA204-B_250515B				05/15/25 16:32		
Phosphorus, Orthophosphate as P	ND	mg/L	0.001							
Lab ID: LFB	Laboratory Fortified Blank			Run: FIA204-B_250515B				05/15/25 16:33		
Phosphorus, Orthophosphate as P	0.247	mg/L	0.0050	99	90	110				
Lab ID: B25051198-001BMS	Sample Matrix Spike			Run: FIA204-B_250515B				05/15/25 16:40		
Phosphorus, Orthophosphate as P	253	mg/L	1.0	94	90	110				
Lab ID: B25051198-001BMSD	Sample Matrix Spike Duplicate			Run: FIA204-B_250515B				05/15/25 16:41		
Phosphorus, Orthophosphate as P	259	mg/L	1.0	98	90	110	2.3	10		
Method: E365.1								Analytical Run: SEAL201-B_250520A		
Lab ID: ICB-198785	Initial Calibration Verification Standard			05/20/25 09:53						
Phosphorus, Total as P	0.501	mg/L	0.0050	100	90	110				
Lab ID: CCV-198785	Continuing Calibration Verification Standard			05/20/25 10:29						
Phosphorus, Total as P	0.525	mg/L	0.0050	105	90	110				
Method: E365.1								Batch: 199857		
Lab ID: MB-199857	Method Blank			Run: SEAL201-B_250520A				05/20/25 10:32		
Phosphorus, Total as P	ND	mg/L	0.002							
Lab ID: LCS-199857	Laboratory Control Sample			Run: SEAL201-B_250520A				05/20/25 10:33		
Phosphorus, Total as P	0.190	mg/L	0.0050	95	90	110				
Lab ID: B25051233-001EMS	Sample Matrix Spike			Run: SEAL201-B_250520A				05/20/25 10:35		
Phosphorus, Total as P	0.324	mg/L	0.0020	102	90	110				
Lab ID: B25051233-001EMSD	Sample Matrix Spike Duplicate			Run: SEAL201-B_250520A				05/20/25 10:36		
Phosphorus, Total as P	0.328	mg/L	0.0020	104	90	110	1.3	10		

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: Kelada-01								Analytical Run: SFA-202-B_250516A		
Lab ID: ICV	Initial Calibration Verification Standard			05/16/25 13:55						
Cyanide, Weak Acid Dissociable		0.0109	mg/L	0.0010	109	90	110			
Method: Kelada-01								Batch: R441572		
Lab ID: ICB	Method Blank			05/16/25 13:57						
Cyanide, Weak Acid Dissociable		ND	mg/L	0.0007			Run: SFA-202-B_250516A			
Lab ID: LFB	Laboratory Fortified Blank			05/16/25 14:00						
Cyanide, Weak Acid Dissociable		0.0107	mg/L	0.0010	107	90	110			
Lab ID: LCS1-ZnCN	Laboratory Control Sample			05/16/25 14:02						
Cyanide, Weak Acid Dissociable		0.0110	mg/L	0.0010	110	90	110			
Lab ID: B25051252-001GMS	Sample Matrix Spike			05/16/25 14:18						
Cyanide, Weak Acid Dissociable		0.0119	mg/L	0.0010	119	80	120			
Lab ID: B25051252-001GMSD	Sample Matrix Spike Duplicate			05/16/25 14:22						
Cyanide, Weak Acid Dissociable		0.0117	mg/L	0.0010	117	80	120	1.4	10	

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	E200.7							Analytical Run: ICP205-B_250520A		
Lab ID:	ICV	Continuing Calibration Verification Standard							05/20/25 12:46	
Boron		2.57	mg/L	0.10	103	95	105			
Lab ID:	CCV	Continuing Calibration Verification Standard							05/20/25 16:49	
Boron		2.56	mg/L	0.10	102	90	110			
Lab ID:	CCV	Continuing Calibration Verification Standard							05/20/25 17:03	
Boron		2.54	mg/L	0.10	102	90	110			
Method:	E200.7							Batch: 199922		
Lab ID:	MB-199922	Method Blank				Run: ICP205-B_250520A			05/20/25 16:45	
Boron		ND	mg/L	0.008						
Lab ID:	LCS3-199922	Laboratory Control Sample				Run: ICP205-B_250520A			05/20/25 16:46	
Boron		1.06	mg/L	0.10	106	85	115			
Lab ID:	B25051252-001EMS3	Sample Matrix Spike				Run: ICP205-B_250520A			05/20/25 17:01	
Boron		1.03	mg/L	0.050	102	70	130			
Lab ID:	B25051252-001EMSD3	Sample Matrix Spike Duplicate				Run: ICP205-B_250520A			05/20/25 17:02	
Boron		1.07	mg/L	0.050	105	70	130	3.3	20	
Lab ID:	B25051257-001CMS3	Sample Matrix Spike				Run: ICP205-B_250520A			05/20/25 17:11	
Boron		1.08	mg/L	0.050	105	70	130			
Lab ID:	B25051257-001CMSD3	Sample Matrix Spike Duplicate				Run: ICP205-B_250520A			05/20/25 17:12	
Boron		1.06	mg/L	0.050	103	70	130	2.5	20	

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS207-B_250516B				
Lab ID: QCS	4	Initial Calibration Verification Standard							05/17/25 14:45	
Copper		0.0373	mg/L	0.010	93	90	110			
Silver		0.0189	mg/L	0.0050	94	90	110			
Uranium		0.0379	mg/L	0.00030	95	90	110			
Zinc		0.0380	mg/L	0.0050	95	90	110			
Lab ID: CCV	4	Continuing Calibration Verification Standard							05/17/25 14:51	
Copper		0.0462	mg/L	0.010	92	90	110			
Silver		0.0185	mg/L	0.0050	93	90	110			
Uranium		0.0496	mg/L	0.00030	99	90	110			
Zinc		0.0470	mg/L	0.0050	94	90	110			
Method: E200.8						Batch: R441595				
Lab ID: LRB	4	Method Blank				Run: ICPMS207-B_250516B			05/16/25 12:38	
Copper		ND	mg/L	0.00005						
Silver		ND	mg/L	3E-6						
Uranium		0.00002	mg/L	7E-6						
Zinc		ND	mg/L	0.001						
Lab ID: LFB	4	Laboratory Fortified Blank				Run: ICPMS207-B_250516B			05/16/25 12:55	
Copper		0.0480	mg/L	0.010	96	85	115			
Silver		0.0202	mg/L	0.0050	101	85	115			
Uranium		0.0551	mg/L	0.00030	110	85	115			
Zinc		0.0509	mg/L	0.0050	102	85	115			
Lab ID: B25051265-001BMS	4	Sample Matrix Spike				Run: ICPMS207-B_250516B			05/17/25 16:24	
Copper		0.0474	mg/L	0.0050	95	70	130			
Silver		0.0204	mg/L	0.0010	102	70	130			
Uranium		0.0553	mg/L	0.00030	110	70	130			
Zinc		0.0489	mg/L	0.010	98	70	130			
Lab ID: B25051265-001BMSD	4	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250516B			05/17/25 16:30	
Copper		0.0459	mg/L	0.0050	91	70	130	3.4	20	
Silver		0.0198	mg/L	0.0010	99	70	130	2.8	20	
Uranium		0.0533	mg/L	0.00030	106	70	130	3.8	20	
Zinc		0.0475	mg/L	0.010	95	70	130	2.9	20	

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS207-B_250519A				
Lab ID: QCS	3	Initial Calibration Verification Standard							05/19/25 15:56	
Antimony		0.0399	mg/L	0.0050	100	90	110			
Chromium		0.0375	mg/L	0.010	94	90	110			
Molybdenum		0.0395	mg/L	0.0050	99	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard							05/19/25 23:25	
Antimony		0.0505	mg/L	0.0050	101	90	110			
Chromium		0.0477	mg/L	0.010	95	90	110			
Molybdenum		0.0507	mg/L	0.0050	101	90	110			
Lab ID: QCS	3	Initial Calibration Verification Standard							05/20/25 16:41	
Antimony		0.0392	mg/L	0.0050	98	90	110			
Chromium		0.0367	mg/L	0.010	92	90	110			
Molybdenum		0.0389	mg/L	0.0050	97	90	110			
Lab ID: CCV	3	Continuing Calibration Verification Standard							05/20/25 18:08	
Antimony		0.0492	mg/L	0.0050	98	90	110			
Chromium		0.0468	mg/L	0.010	94	90	110			
Molybdenum		0.0497	mg/L	0.0050	99	90	110			
Method: E200.8						Batch: 199922				
Lab ID: MB-199922	6	Method Blank				Run: ICPMS207-B_250519A			05/20/25 17:10	
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: LCS4-199922	6	Laboratory Control Sample				Run: ICPMS207-B_250519A			05/20/25 17:16	
Antimony		0.113	mg/L	0.0050	113	85	115			
Arsenic		0.0934	mg/L	0.0010	93	85	115			
Chromium		0.0908	mg/L	0.0010	91	85	115			
Molybdenum		0.109	mg/L	0.0050	109	85	115			
Thallium		0.0953	mg/L	0.0010	95	85	115			
Uranium		0.0995	mg/L	0.00030	99	85	115			
Lab ID: B25050103-010BMS4	6	Sample Matrix Spike				Run: ICPMS207-B_250519A			05/20/25 17:39	
Antimony		0.106	mg/L	0.0010	106	70	130			
Arsenic		0.0952	mg/L	0.0010	95	70	130			
Chromium		0.0923	mg/L	0.0050	92	70	130			
Molybdenum		0.108	mg/L	0.0010	106	70	130			
Thallium		0.0836	mg/L	0.00050	84	70	130			
Uranium		0.111	mg/L	0.00030	99	70	130			
Lab ID: B25050103-010BMSD4	6	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250519A			05/20/25 17:45	
Antimony		0.108	mg/L	0.0010	108	70	130	2.4	20	
Arsenic		0.0943	mg/L	0.0010	94	70	130	1.0	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: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 199922
Lab ID: B25050103-010BMSD4	6	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250519A				05/20/25 17:45
Chromium		0.0922	mg/L	0.0050	92	70	130	0.1	20	
Molybdenum		0.110	mg/L	0.0010	108	70	130	2.3	20	
Thallium		0.0849	mg/L	0.00050	85	70	130	1.5	20	
Uranium		0.115	mg/L	0.00030	103	70	130	3.3	20	
Lab ID: B25051261-001CMS4	6	Sample Matrix Spike				Run: ICPMS207-B_250519A				05/20/25 19:30
Antimony		0.105	mg/L	0.0010	105	70	130			
Arsenic		0.0916	mg/L	0.0010	91	70	130			
Chromium		0.0941	mg/L	0.0050	88	70	130			
Molybdenum		0.103	mg/L	0.0010	103	70	130			
Thallium		0.0952	mg/L	0.00050	95	70	130			
Uranium		0.0996	mg/L	0.00030	99	70	130			
Lab ID: B25051261-001CMSD4	6	Sample Matrix Spike Duplicate				Run: ICPMS207-B_250519A				05/20/25 19:36
Antimony		0.113	mg/L	0.0010	113	70	130	7.7	20	
Arsenic		0.0944	mg/L	0.0010	94	70	130	2.9	20	
Chromium		0.0958	mg/L	0.0050	90	70	130	1.8	20	
Molybdenum		0.112	mg/L	0.0010	111	70	130	7.6	20	
Thallium		0.0972	mg/L	0.00050	97	70	130	2.1	20	
Uranium		0.105	mg/L	0.00030	105	70	130	5.5	20	
Method: E200.8										Batch: R441653
Lab ID: LRB		Method Blank				Run: ICPMS207-B_250519A				05/19/25 12:02
Molybdenum		ND	mg/L	0.00002						
Lab ID: LFB		Laboratory Fortified Blank				Run: ICPMS207-B_250519A				05/19/25 12:19
Molybdenum		0.0534	mg/L	0.0050	107	85	115			
Lab ID: B25051172-002BMS		Sample Matrix Spike				Run: ICPMS207-B_250519A				05/19/25 22:39
Molybdenum		0.280	mg/L	0.0010	110	70	130			
Lab ID: B25051172-002BMSD		Sample Matrix Spike Duplicate				Run: ICPMS207-B_250519A				05/19/25 22:44
Molybdenum		0.282	mg/L	0.0010	111	70	130	1.0	20	
Lab ID: B25051034-004AMS		Sample Matrix Spike				Run: ICPMS207-B_250519A				05/20/25 22:56
Molybdenum		0.0588	mg/L	0.0010	118	70	130			
Lab ID: B25051034-004AMSD		Sample Matrix Spike Duplicate				Run: ICPMS207-B_250519A				05/20/25 23:01
Molybdenum		0.0576	mg/L	0.0010	115	70	130	2.1	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: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8 Analytical Run: ICPMS209-B_250521A										
Lab ID: QCS	2	Initial Calibration Verification Standard 05/21/25 11:47								
Thallium		0.0374	mg/L	0.0050	93	90	110			
Uranium		0.0386	mg/L	0.00030	96	90	110			
Lab ID: CCV 2 Continuing Calibration Verification Standard 05/21/25 14:32										
Thallium		0.0481	mg/L	0.0050	96	90	110			
Uranium		0.0492	mg/L	0.00030	98	90	110			
Method: E200.8 Batch: 199922										
Lab ID: MB-199922	2	Method Blank Run: ICPMS209-B_250521A 05/21/25 13:52								
Thallium		ND	mg/L	0.00008						
Uranium		0.00001	mg/L	0.00001						
Method: E200.8 Analytical Run: ICPMS209-B_250522A										
Lab ID: QCS		Initial Calibration Verification Standard 05/23/25 01:12								
Arsenic		0.0364	mg/L	0.0050	91	90	110			
Lab ID: CCV Continuing Calibration Verification Standard 05/23/25 03:38										
Arsenic		0.0456	mg/L	0.0050	91	90	110			
Lab ID: CCV Continuing Calibration Verification Standard 05/23/25 04:57										
Arsenic		0.0451	mg/L	0.0050	90	90	110			
Method: E200.8 Batch: 199922										
Lab ID: MB-199922		Method Blank Run: ICPMS209-B_250522A 05/23/25 04:46								
Arsenic		ND	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: B25051252

Report Date: 05/28/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8						Analytical Run: ICPMS209-B_250527A				
Lab ID: QCS	2	Initial Calibration Verification Standard								05/28/25 01:20
Copper		0.0365	mg/L	0.010	91	90	110			
Zinc		0.0367	mg/L	0.0050	92	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								05/28/25 08:14
Copper		0.0459	mg/L	0.010	92	90	110			
Zinc		0.0460	mg/L	0.0050	92	90	110			
Lab ID: CCV	2	Continuing Calibration Verification Standard								05/28/25 08:52
Copper		0.0457	mg/L	0.010	91	90	110			
Zinc		0.0466	mg/L	0.0050	93	90	110			
Method: E200.8						Batch: R443085				
Lab ID: LRB	2	Method Blank				Run: ICPMS209-B_250527A			05/27/25 10:00	
Copper		ND	mg/L	0.00005						
Zinc		ND	mg/L	0.001						
Lab ID: LFB	2	Laboratory Fortified Blank				Run: ICPMS209-B_250527A			05/27/25 10:17	
Copper		0.0481	mg/L	0.010	96	85	115			
Zinc		0.0484	mg/L	0.0050	97	85	115			
Lab ID: B25051659-001BMS	2	Sample Matrix Spike				Run: ICPMS209-B_250527A			05/28/25 08:25	
Copper		0.226	mg/L	0.0050	87	70	130			
Zinc		0.327	mg/L	0.010	81	70	130			
Lab ID: B25051659-001BMSD	2	Sample Matrix Spike Duplicate				Run: ICPMS209-B_250527A			05/28/25 08:30	
Copper		0.230	mg/L	0.0050	88	70	130	1.7	20	
Zinc		0.340	mg/L	0.010	86	70	130	4.0	20	

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25051252

Report Date: 06/11/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0										Batch: GrAB-3418
Lab ID: Th230-GrAB-3418	3	Laboratory Control Sample				Run: TENNELEC-4_250604A				06/07/25 21:52
Gross Alpha		84	pCi/L		83	70	130			
Gross Alpha precision (±)		18	pCi/L							
Gross Alpha MDC		1.5	pCi/L							
Lab ID: Sr90-GrAB-3418	3	Laboratory Control Sample				Run: TENNELEC-4_250604A				06/07/25 21:52
Gross Beta		170	pCi/L		92	70	130			
Gross Beta precision (±)		11	pCi/L							
Gross Beta MDC		2.2	pCi/L							
Lab ID: MB-GrAB-3418	6	Method Blank				Run: TENNELEC-4_250604A				06/07/25 21:52
Gross Alpha		-2	pCi/L							U
Gross Alpha precision (±)		0.7	pCi/L							
Gross Alpha MDC		1	pCi/L							
Gross Beta		-0.4	pCi/L							U
Gross Beta precision (±)		1	pCi/L							
Gross Beta MDC		2	pCi/L							
Lab ID: C25050475-001HMS	3	Sample Matrix Spike				Run: TENNELEC-4_250604A				06/07/25 21:52
Gross Alpha		97	pCi/L		95	70	130			
Gross Alpha precision (±)		22	pCi/L							
Gross Alpha MDC		2.6	pCi/L							
Lab ID: C25050475-001HMSD	3	Sample Matrix Spike Duplicate				Run: TENNELEC-4_250604A				06/07/25 23:26
Gross Alpha		92	pCi/L		90	70	130	5.1	30	
Gross Alpha precision (±)		21	pCi/L							
Gross Alpha MDC		2.5	pCi/L							
- The RER result is 0.16.										
Lab ID: C25050553-001AMS1	3	Sample Matrix Spike				Run: TENNELEC-4_250604A				06/07/25 23:26
Gross Beta		190	pCi/L		102	70	130			
Gross Beta precision (±)		13	pCi/L							
Gross Beta MDC		2.6	pCi/L							
Lab ID: C25050553-001AMSD1	3	Sample Matrix Spike Duplicate				Run: TENNELEC-4_250604A				06/07/25 23:26
Gross Beta		190	pCi/L		98	70	130	3.9	30	
Gross Beta precision (±)		13	pCi/L							
Gross Beta MDC		2.7	pCi/L							
- The RER result is 0.40.										

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: B25051252

Report Date: 06/11/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0										Batch: RA226-11681
Lab ID: LCS-RA226-11681	3	Laboratory Control Sample			Run: TENNELEC-4_250521E			06/03/25 10:56		
Radium 226		9.1	pCi/L	91		70	130			
Radium 226 precision (±)		1.5	pCi/L							
Radium 226 MDC		0.18	pCi/L							
Lab ID: MB-RA226-11681	3	Method Blank			Run: TENNELEC-4_250521E			06/03/25 10:56		
Radium 226		-0.002	pCi/L							U
Radium 226 precision (±)		0.09	pCi/L							
Radium 226 MDC		0.2	pCi/L							
Lab ID: C25050219-001DDUP	3	Sample Duplicate			Run: TENNELEC-4_250521E			06/03/25 10:56		
Radium 226		4.2	pCi/L					12	30	
Radium 226 precision (±)		0.72	pCi/L							
Radium 226 MDC		0.19	pCi/L							
- The RER result is 0.50.										

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: B25051252

Report Date: 06/11/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05										Batch: RA228-7652
Lab ID: LCS-228-RA226-11681	3	Laboratory Control Sample				Run: TENNELEC-4_250521B				05/29/25 13:22
Radium 228		7.9	pCi/L	85		70	130			
Radium 228 precision (±)		2.1	pCi/L							
Radium 228 MDC		1.0	pCi/L							
Lab ID: MB-RA226-11681	3	Method Blank				Run: TENNELEC-4_250521B				05/29/25 13:22
Radium 228		0.9	pCi/L							U
Radium 228 precision (±)		0.6	pCi/L							
Radium 228 MDC		1	pCi/L							
Lab ID: C25050219-001DDUP	3	Sample Duplicate				Run: TENNELEC-4_250521B				05/29/25 13:22
Radium 228		1.1	pCi/L					10	30	
Radium 228 precision (±)		0.66	pCi/L							
Radium 228 MDC		0.99	pCi/L							
- The RER result is 0.13.										

Qualifiers:

RL - Analyte Reporting Limit
U - Not detected

ND - Not detected at the Reporting Limit (RL)



Work Order Receipt Checklist

Linkan Engineering

B25051252

Login completed by: Kyelie L. Pflock

Date Received: 5/15/2025

Reviewed by: cindy

Received by: CMJ

Reviewed Date: 5/23/2025

Carrier name: Return-FedEx NDA

Shipping container/cooler in good condition?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all shipping container(s)/cooler(s)?	Yes ☒	No ☐	Not Present ☐
Custody seals intact on all sample bottles?	Yes ☐	No ☐	Not Present ☒
Chain of custody present?	Yes ☒	No ☐	
Chain of custody signed when relinquished and received?	Yes ☒	No ☐	
Chain of custody agrees with sample labels?	Yes ☒	No ☐	
Samples in proper container/bottle?	Yes ☒	No ☐	
Sample containers intact?	Yes ☒	No ☐	
Sufficient sample volume for indicated test?	Yes ☒	No ☐	
All samples received within holding time? (Exclude analyses that are considered field parameters such as pH, DO, Res Cl, Sulfite, Ferrous Iron, etc.)	Yes ☒	No ☐	
Temp Blank received in all shipping container(s)/cooler(s)?	Yes ☒	No ☐	Not Applicable ☐
Container/Temp Blank temperature:	5.6°C Blue Ice		
Containers requiring zero headspace have no headspace or bubble that is <6mm (1/4").	Yes ☐	No ☐	No VOA vials submitted ☒
Water - pH acceptable upon receipt?	Yes ☒	No ☐	Not Applicable ☐

Standard Reporting Procedures:

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

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

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

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

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

Contact and Corrective Action Comments:

None

Laboratory Certifications and Accreditations

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

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



Trust our People. Trust our Data.

Chain of Custody & Analytical Request Record

www.energylab.com

Page _____ of _____

Account Information (Billing Information)

Company/Name	Linkan
Contact	Chris Prosser
Phone	775-777-8003
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	AP@linkan.com
Receive Invoice	☒ Hard Copy ☐ Email
Purchase Order	25-0152
Quote	17287
Receive Report	☐ Hard Copy ☒ Email
Bottle Order	193746

Report Information (if different than Account Information)

Company/Name	Linkan
Contact	Alex Schwiebert
Phone	775-897-6779
Mailing Address	2720 Ruby Vista Dr
City, State, Zip	Elko, NV 89801
Email	see comments
Receive Report	☐ Hard Copy ☒ Email
Special Report/Forms:	☐ LEVEL IV ☐ NELAC ☒ EDD/EDT (contact laboratory) ☐ Other

Comments

Monthly Consent order Sampling
Please email Report and EDD results to:
Chris.Prosser@linkan.com
adam.billin@linkan.com
alex.schwiebert@linkan.com
peter.hays@state.co.us

Project Information

Project Name, PWSID, Permit, etc.	Schwarzwald Mine
Sampler Name	Bryant Arcene
Sampler Phone	720-238-069
Sample Origin State	CO
EPA/State Compliance	☐ Yes ☐ No
URANIUM MINING CLIENTS MUST indicate sample type	
☐ Unprocessed Ore	
☐ Processed Ore (Ground or Refined) **CALL BEFORE SENDING	
☐ 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
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Analysis Requested

Low Level Radionuclides	Metals, Dissolved	Metals, Total	Nitrate + Nitrite	Cyanide, WAF	Gross Alpha, Gross Beta, Total	Radon 226+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 Date	Time	Number of Containers	Matrix (See Codes Above)	Analysis Requested	Rush TAT	ELI LAB ID Laboratory Use Only
1 SW - AWD	8/14/25	11:21	9	W			B25061252
2 SW - BPL	5/14/25	11:38	9	W			
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 Arcene	Signature Bryant Arcene	Date/Time 5/14/25 13:20	Received by (print) Alex Schwiebert	Signature Alex Schwiebert	Date/Time 5/15/25 10:50			
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	Amount \$	Payment Type 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.



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



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.



ATTACHMENT 2

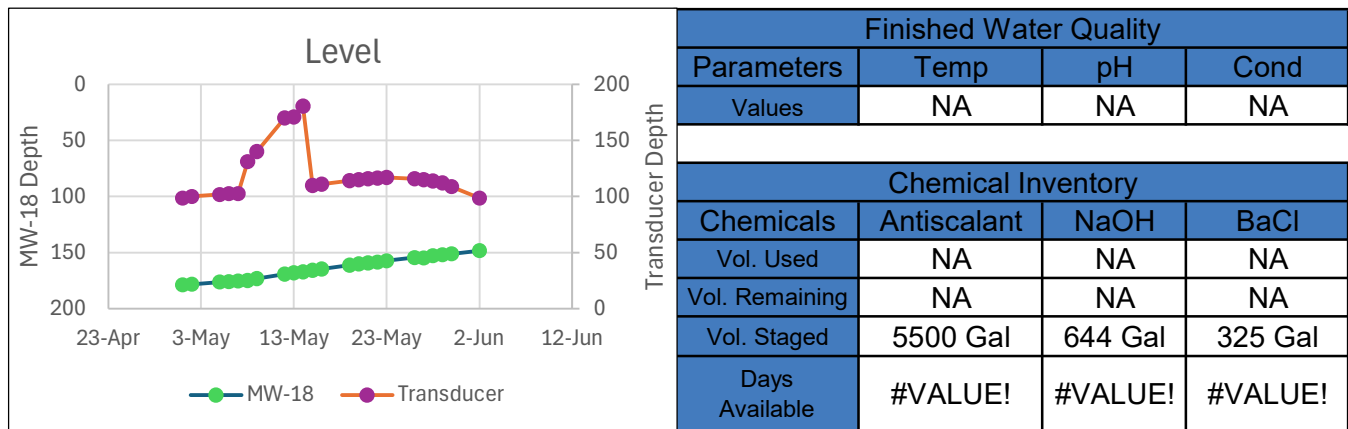
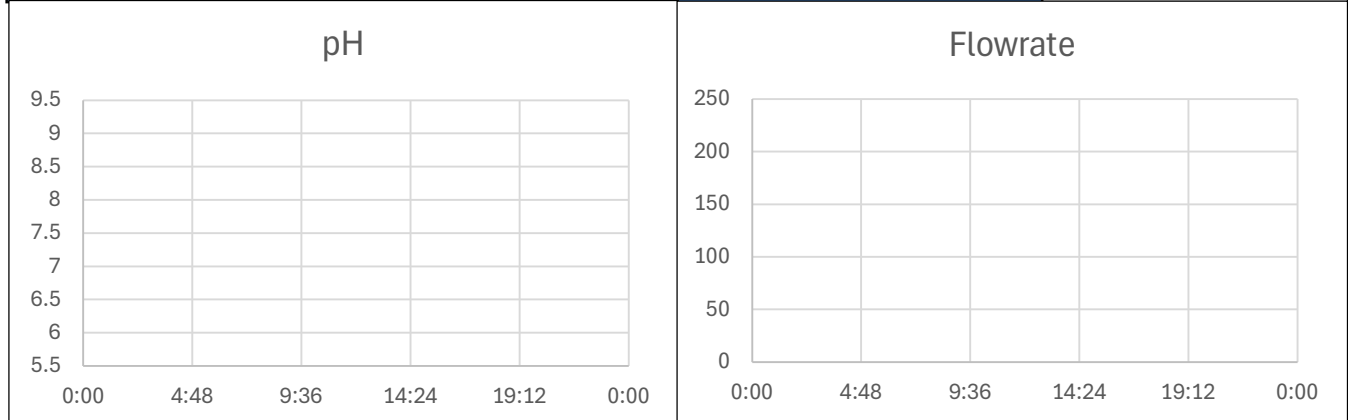
DAILY REPORTS

Schwartzwalder Daily Summary Report



Report Date:	6/2/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.000 Mgal	MW-18 Level:	148 ft
Average Flowrate:	0 gpm	Transducer Level:	99 ft
Effluent to Date:	0.000 Mgal		



Safety Issues/Concerns:
 - N/A

Notes:

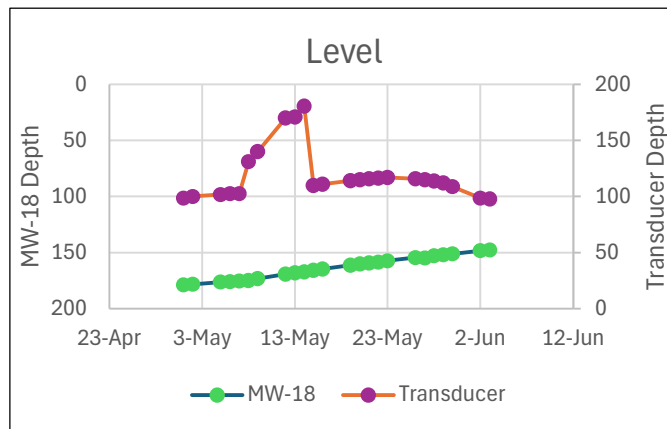
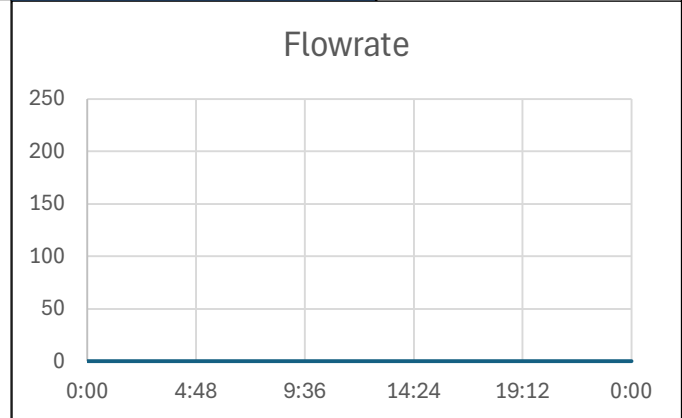
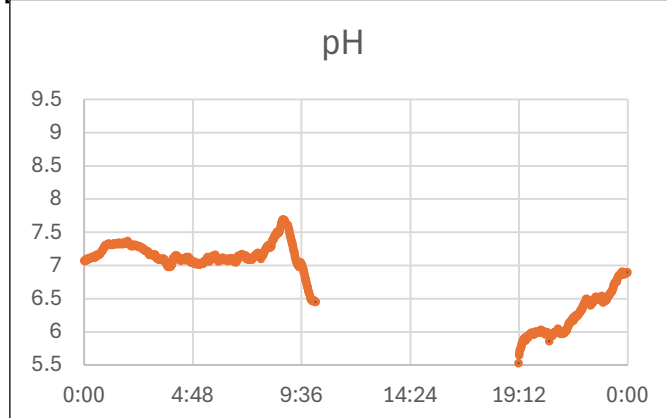
- Patrick Delaney onsite.
- RSO Patrick Hendrickson onsite.
- Item B31 Completed. Installed Sample Port between the RO and IX System.
- Item B29.2 Completed. Added Drain Vlive in the IX Systemt Discharge PVC Line for Winterization.
- Continued woriking on Item B36 -Installation of ORP Sensor at Inlfuent Pipe.
- Finished wiring the Anti-Scale pumps. Ready to be programmed and tested.
- Walchem is having issues receiving Data, Graphs will not be shwoing trends.

Schwartzwalder Daily Summary Report



Report Date:	6/3/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.000 Mgal	MW-18 Level:	148 ft
Average Flowrate:	0 gpm	Transducer Level:	98 ft
Effluent to Date:	0.000 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	NA	NA	NA

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	NA	NA	NA
Vol. Remaining	NA	NA	NA
Vol. Staged	5500 Gal	644 Gal	325 Gal
Days Available	#VALUE!	#VALUE!	#VALUE!

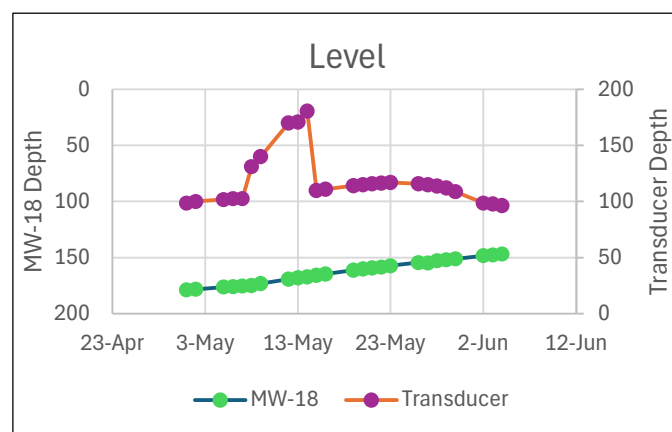
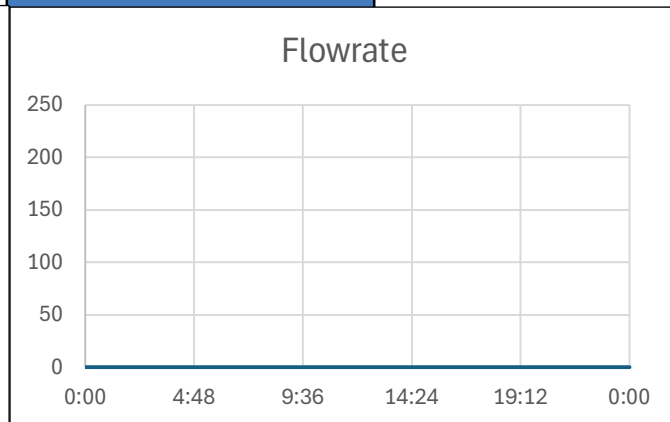
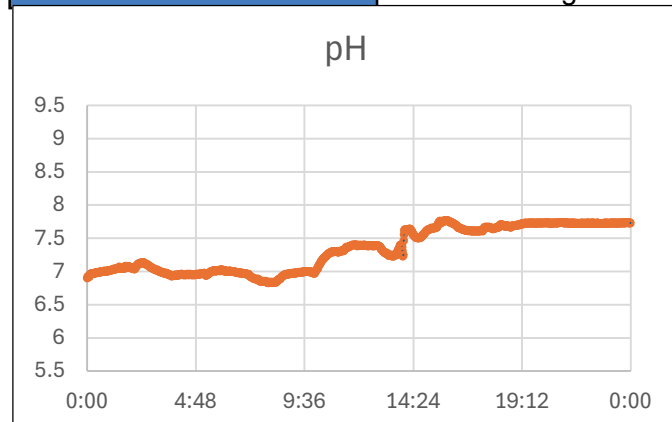
Safety Issues/Concerns: - N/A
Notes: - Patrick Delaney onsite. - Item B27 Completed. Installed Antiscalant Pump and Dosing plumbing Upgrade. - Item B36 Completed. Installed ORP Sensor at Influent Pipe. - Installed New Cartridge Filters for RO #2.

Schwartzwalder Daily Summary Report



Report Date:	6/4/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.000 Mgal	MW-18 Level:	147 ft
Average Flowrate:	0 gpm	Transducer Level:	96 ft
Effluent to Date:	0.000 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	NA	NA	NA

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	NA	NA	NA
Vol. Remaining	NA	NA	NA
Vol. Staged	5500 Gal	644 Gal	325 Gal
Days Available	#VALUE!	#VALUE!	#VALUE!

Safety Issues/Concerns:

- N/A

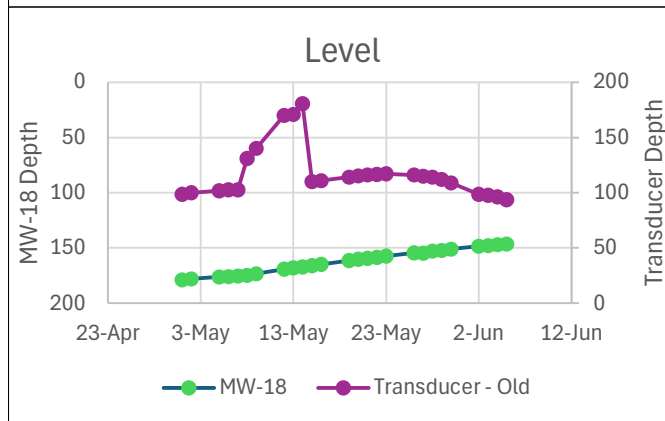
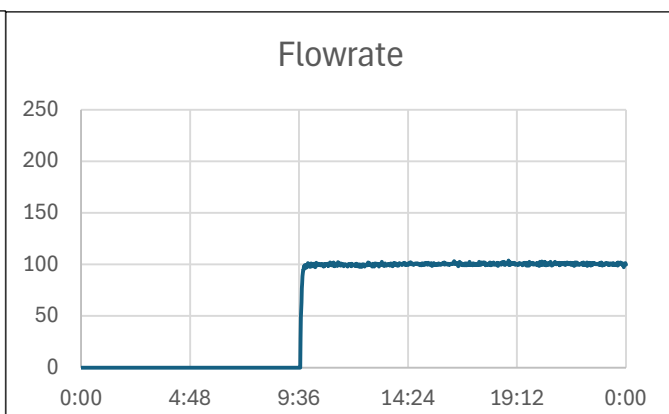
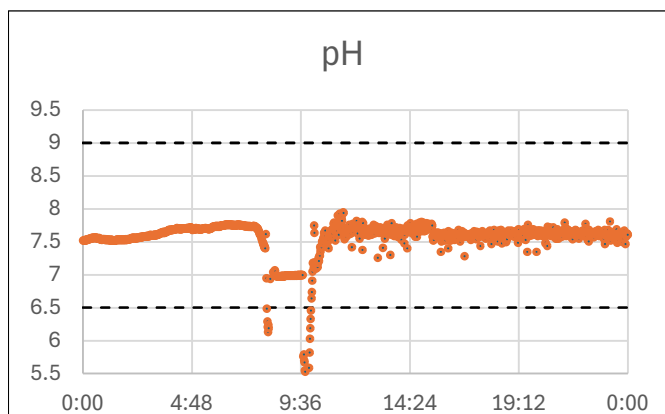
Notes:

- Patrick Delaney onsite.
- Peter Hyas onsite.
- Contractor onsite to fix Garage door getting stuck not opening all the way. Garage door has been fixed.
- Installed Drain between RO's and IX vessel's.
- Batched Barium Chloride.
- Recirculated water from Mine Pump back underground. Checked for leaks. NO leaks.
- Filled RO #1 and bled perservatives from winterization.
- Prepped for Starting the system tomorrow morning.

Schwartzwalder Daily Summary Report



Report Date:	6/5/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A Alex S
Effluent Discharged:	0.080 Mgal	MW-18 Level:	147 ft
Average Flowrate:	60 gpm	Transducer Level:	94 ft
Effluent to Date:	0.080 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	17°C	7.62	66 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	3 Gal	1 Gal
Vol. Remaining	230 Gal	96 Gal	50 Gal
Vol. Staged	255 Gal	550 Gal	270 Gal
Days Available	243 Days	215 Days	320 Days

Safety Issues/Concerns:

- N/A

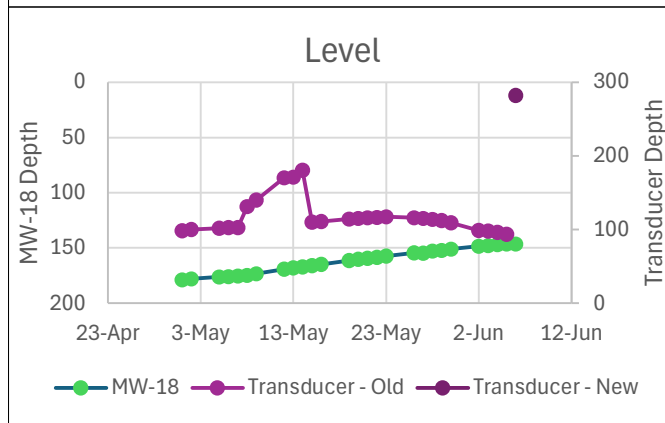
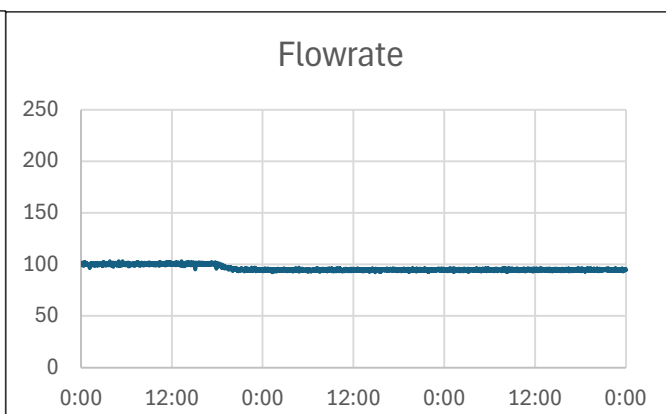
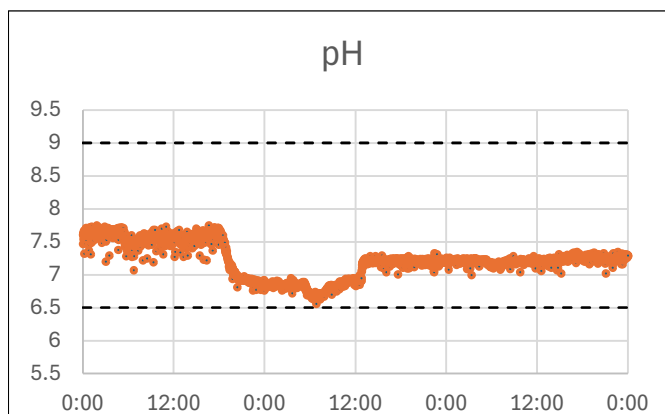
Notes:

- Peter Hays onsite
- Installed and calibrated new pH probe in Finished Water Tank
- Started plant up at 08:45 am.
- Started discharging at 10:00 am.
- Time 15:30. Plant is running smooth. Numbers are looking great within parameters. No issues to report.

Schwartzwalder Daily Summary Report



Report Date:	6/6/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A Alex S
Effluent Discharged:	0.400 Mgal	MW-18 Level:	147 ft
Average Flowrate:	96 gpm	Transducer Level:	282 ft
Effluent to Date:	0.480 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	17°C	7.73	53 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	5 Gal	24 Gal	4 Gal
Vol. Remaining	223 Gal	68 Gal	45 Gal
Vol. Staged	255 Gal	550 Gal	270 Gal
Days Available	96 Days	26 Days	79 Days

Safety Issues/Concerns:
- N/A

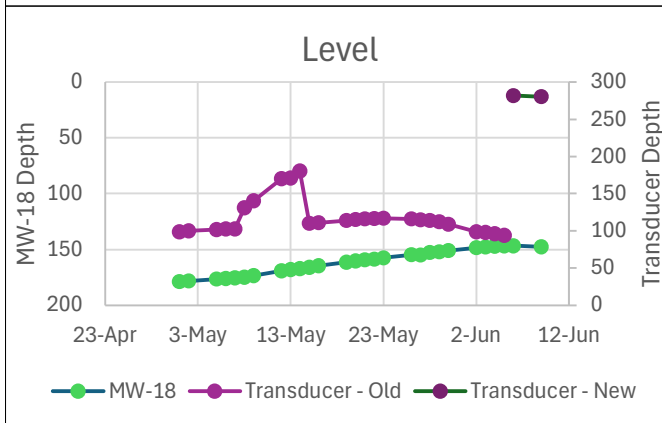
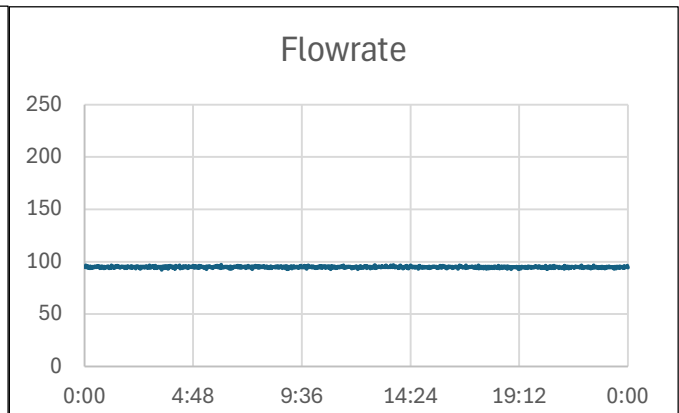
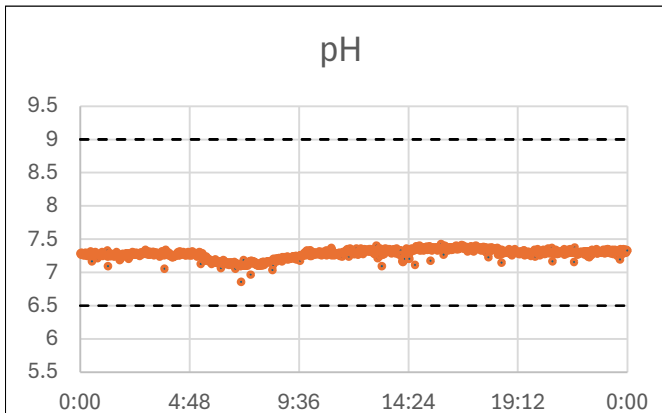
Notes:
 - Matt Collins / Black Fox Mining onsite for new transducer installation.
 - 700 ft DRMS Transducer is stuck.
 - Item B38 Completed. Installed 600' Mine Pool Transducer and cable.
 Note: The New transducer is a longer depth so it will read more head pressure, therefore the Level Graph will spike. The longer depth of the new transducer also uses absolute pressure versus the previous transducer which used atmospheric pressure. The atmospheric probe of the old transducer had some damage which could also contribute to the difference in depth outputs seen between the two transducers. A new trend was created for the new transducer on the level graph.
 - Sampled TSS and COD of Outfall 001A.

Schwartzwalder Daily Summary Report



Report Date:	6/9/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.130 Mgal	MW-18 Level:	148 ft
Average Flowrate:	95 gpm	Transducer Level:	281 ft
Effluent to Date:	0.610 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	19°C	7.47	145 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	1 Gal	10 Gal	1 Gal
Vol. Remaining	222 Gal	58 Gal	44 Gal
Vol. Staged	255 Gal	550 Gal	270 Gal
Days Available	477 Days	58 Days	314 Days

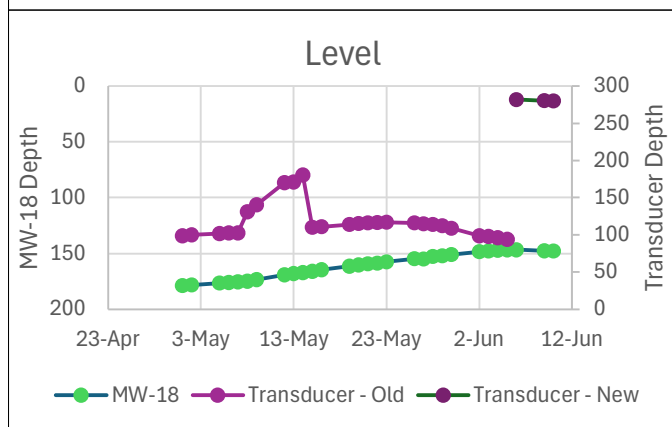
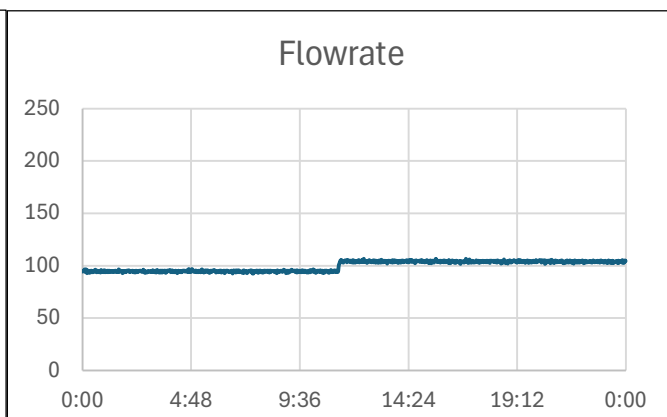
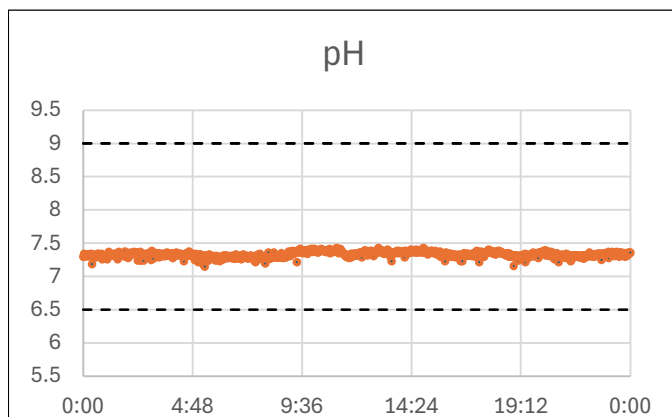
Safety Issues/Concerns:
- N/A

Notes:
- TSS Outfall 001A Sample collected.
- Anti scalant pump discharge side fitting small leak fixed. Tighten the fitting.
- Peter and Jeff onsite for site tour.

Schwartzwalder Daily Summary Report



Report Date:	6/10/2025	Lead Operator:	Chris Prosper
		Assistant Operator(s):	Patrick Delaney Bryant A
Effluent Discharged:	0.130 Mgal	MW-18 Level:	148 ft
Average Flowrate:	95 gpm	Transducer Level:	280 ft
Effluent to Date:	0.740 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	19°C	7.24	154 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	12 Gal	1 Gal
Vol. Remaining	220 Gal	61 Gal	43 Gal
Vol. Staged	255 Gal	534 Gal	270 Gal
Days Available	238 Days	49 Days	313 Days

Safety Issues/Concerns:

- N/A

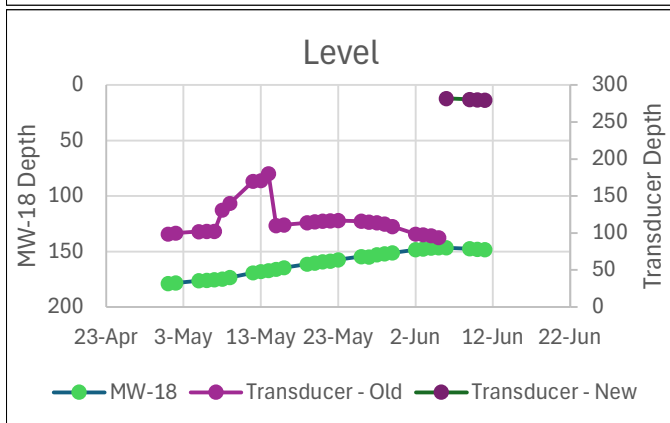
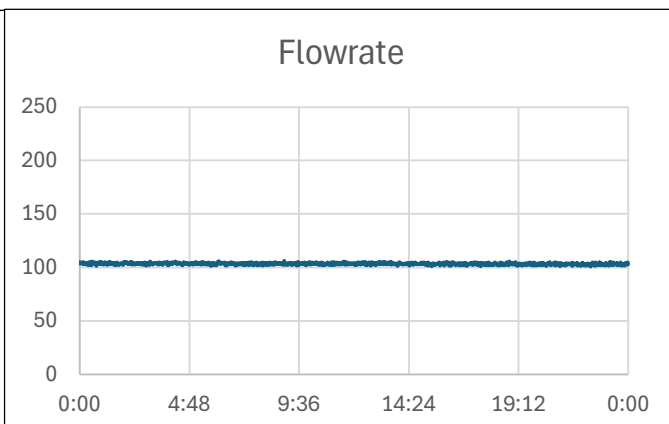
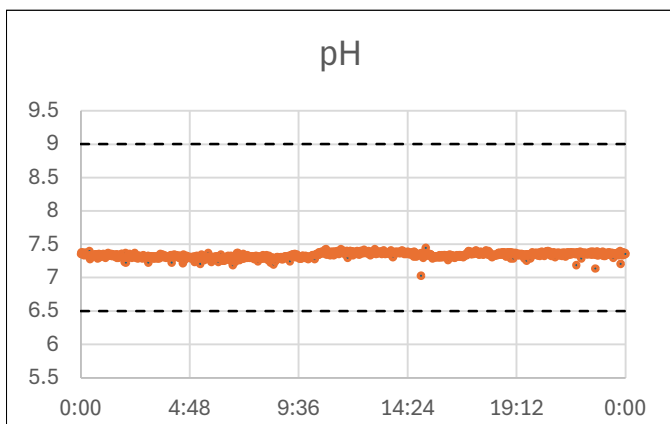
Notes:

- Outfall 001A Bi-Weekly Sample Collected and Shipped.
- Set up pump to transfer NaOH.
- Transferred 16 gallons of NaOH.
- Raised Plant feed pump Hz from 43.6 Hz to 46.0 Hz.

Schwartzwalder Daily Summary Report



Report Date:	6/11/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	
Effluent Discharged:	0.140 Mgal	MW-18 Level:	148 ft
Average Flowrate:	103 gpm	Transducer Level:	280 ft
Effluent to Date:	0.880 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	19°C	7.54	157 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	9 Gal	1 Gal
Vol. Remaining	473 Gal	52 Gal	42 Gal
Vol. Staged	0 Gal	516 Gal	270 Gal
Days Available	237 Days	67 Days	312 Days

Safety Issues/Concerns:

- N/A

Notes:

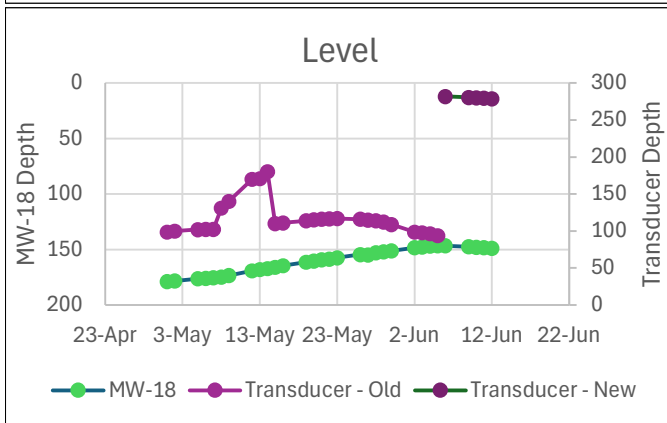
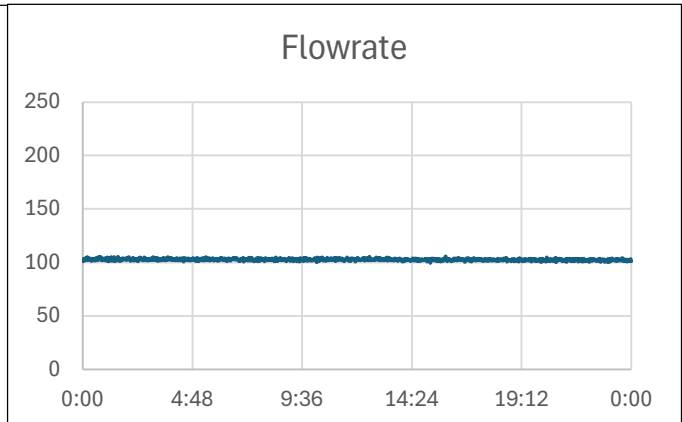
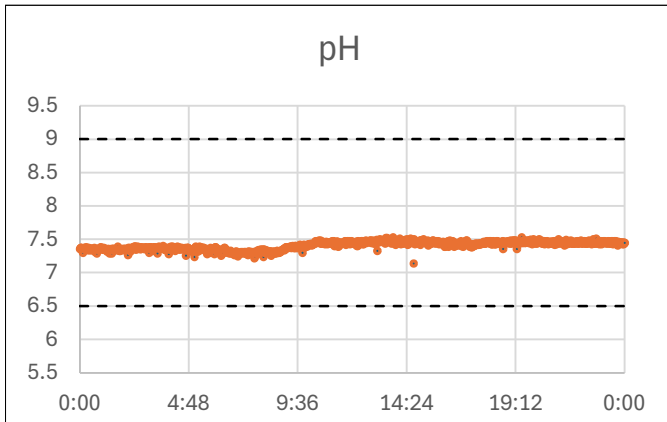
- Collected and shipped Outfall 001A COD TSS and Quarterly TDS samples.
- Transferred 13 gallons of NaOH.

Schwartzwalder Daily Summary Report



Report Date:	6/12/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.140 Mgal	MW-18 Level:	149 ft
Average Flowrate:	103 gpm	Transducer Level:	279 ft
Effluent to Date:	1.020 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.58	158 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	11 Gal	1 Gal
Vol. Remaining	471 Gal	72 Gal	41 Gal
Vol. Staged	0 Gal	333 Gal	270 Gal
Days Available	236 Days	37 Days	311 Days

Safety Issues/Concerns:
- N/A

Notes:

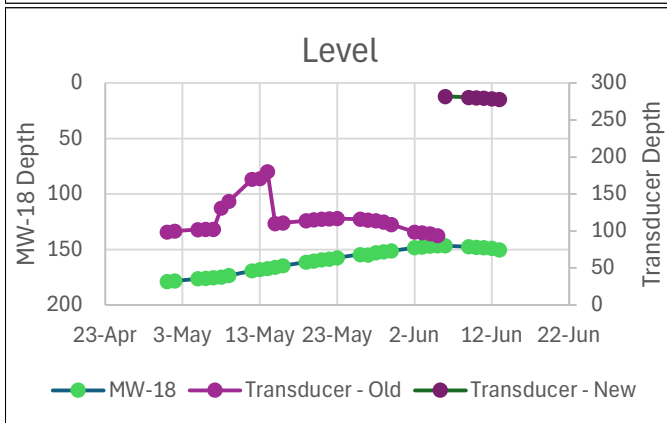
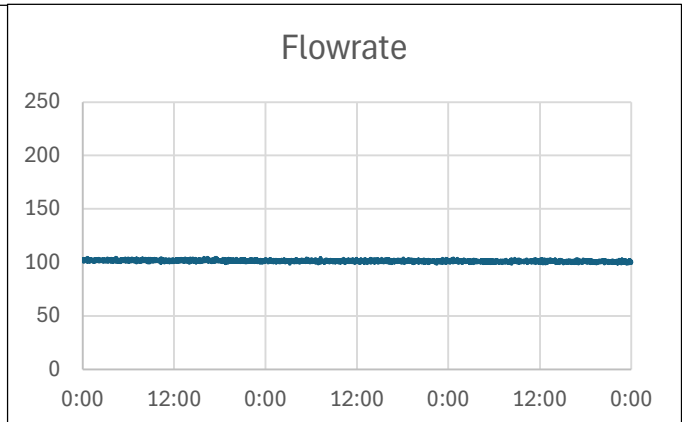
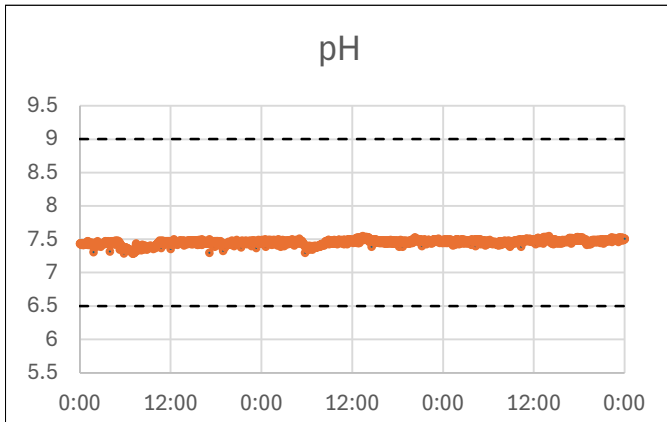
- Transferred 183 gallons of NaOH with new transfer pump.
- Primed RO#2 Anit-scalant pump.
- Staged tools for Item-B29 work.
- Replaced Mine Pump VFD fan filters.

Schwartzwalder Daily Summary Report



Report Date:	6/13/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.420 Mgal	MW-18 Level:	150 ft
Average Flowrate:	101 gpm	Transducer Level:	278 ft
Effluent to Date:	1.440 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.57	157 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	14 Gal	35 Gal	5 Gal
Vol. Remaining	469 Gal	209 Gal	40 Gal
Vol. Staged	0 Gal	333 Gal	270 Gal
Days Available	34 Days	16 Days	62 Days

Safety Issues/Concerns:
 - N/A

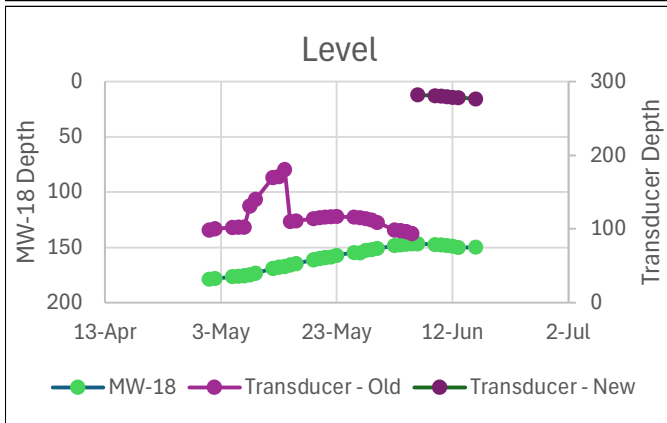
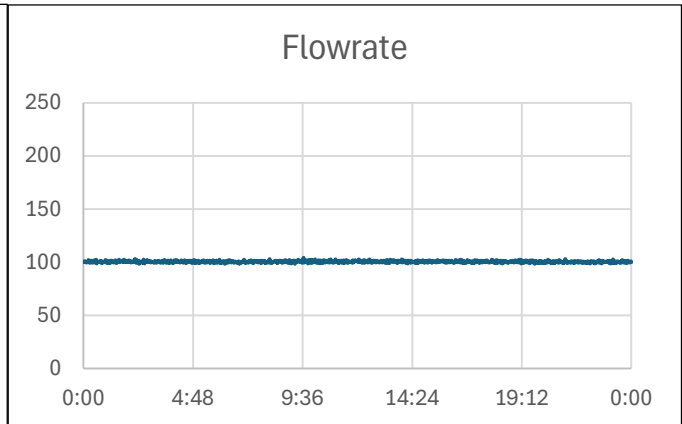
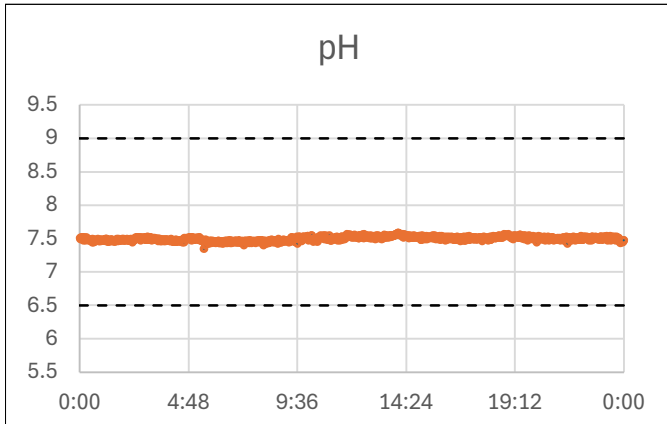
Notes:
 - Collected Weekly Outfall TSS 001A Sample.
 -

Schwartzwalder Daily Summary Report



Report Date:	6/16/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.140 Mgal	MW-18 Level:	149.9 ft
Average Flowrate:	100.6 gpm	Transducer Level:	276.5 ft
Effluent to Date:	1.580 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.61	159 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	14 Gal	12 Gal	3 Gal
Vol. Remaining	455 Gal	209 Gal	40 Gal
Vol. Staged	0 Gal	333 Gal	270 Gal
Days Available	33 Days	47 Days	103 Days

Safety Issues/Concerns:

- N/A

Notes:

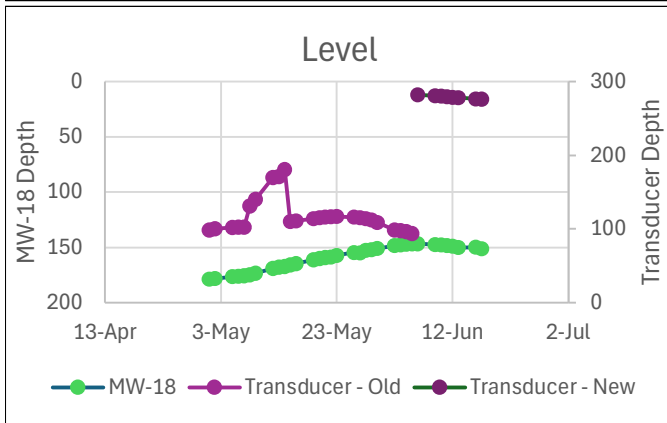
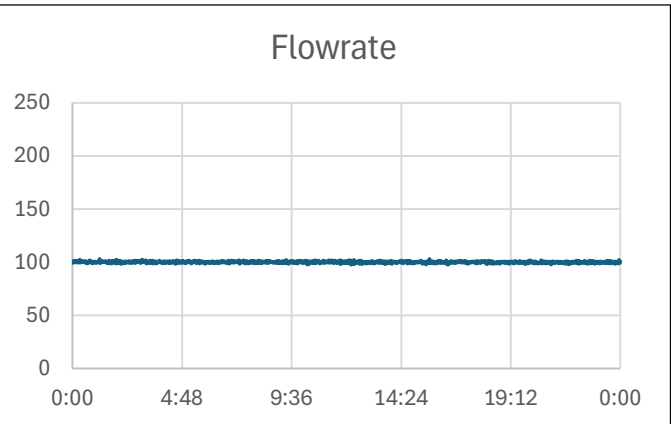
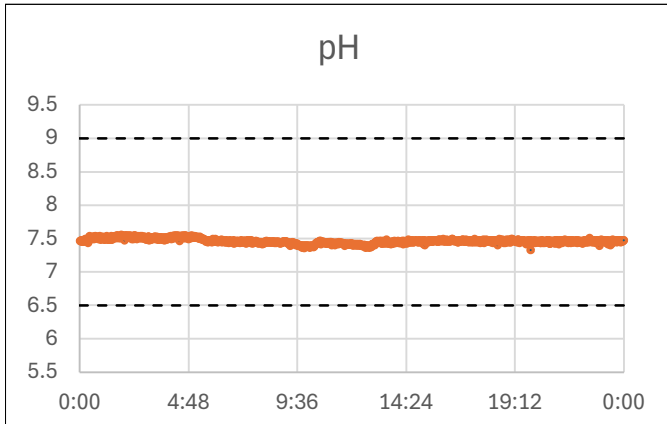
- Collected Weekly Outfall 001A TSS Sample
-

Schwartzwalder Daily Summary Report



Report Date:	6/17/2025	Lead Operator:	Chris Prosper
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.140 Mgal	MW-18 Level:	151.4 ft
Average Flowrate:	100.2 gpm	Transducer Level:	276.0 ft
Effluent to Date:	1.720 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	19°C	7.61	159 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	7 Gal	11 Gal	8 Gal
Vol. Remaining	452 Gal	198 Gal	38 Gal
Vol. Staged	0 Gal	333 Gal	270 Gal
Days Available	65 Days	48 Days	39 Days

Safety Issues/Concerns:

- N/A

Notes:

- Collected and Shipped SW-AWD , SW-BPL and Denver Water samples.

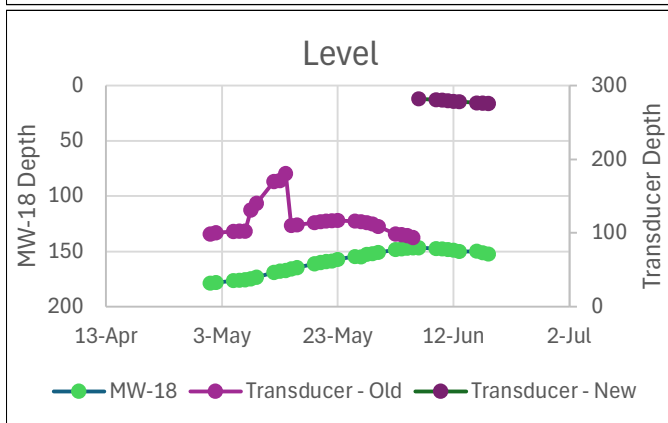
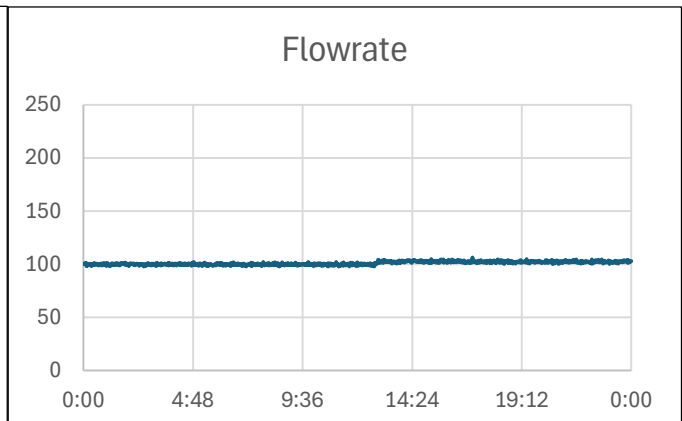
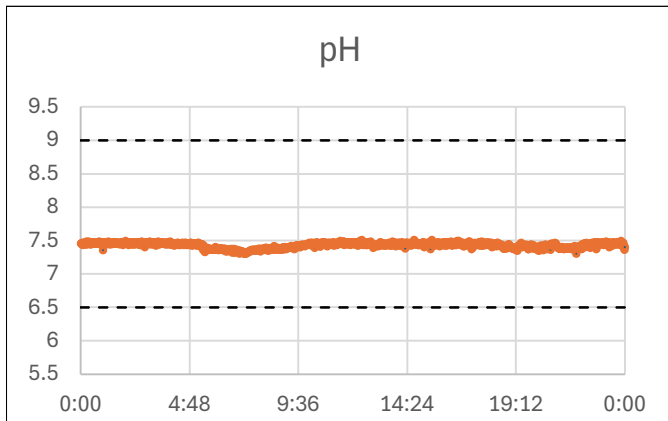
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Schwartzwalder Daily Summary Report



Report Date:	6/18/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A

Effluent Discharged:	0.014 Mgal	MW-18 Level:	152.5 ft
Average Flowrate:	101.1 gpm	Transducer Level:	275.6 ft
Effluent to Date:	1.734 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	19°C	7.65	159 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	4 Gal	12 Gal	10 Gal
Vol. Remaining	445 Gal	187 Gal	30 Gal
Vol. Staged	0 Gal	333 Gal	270 Gal
Days Available	111 Days	45 Days	30 Days

Safety Issues/Concerns:

- N/A

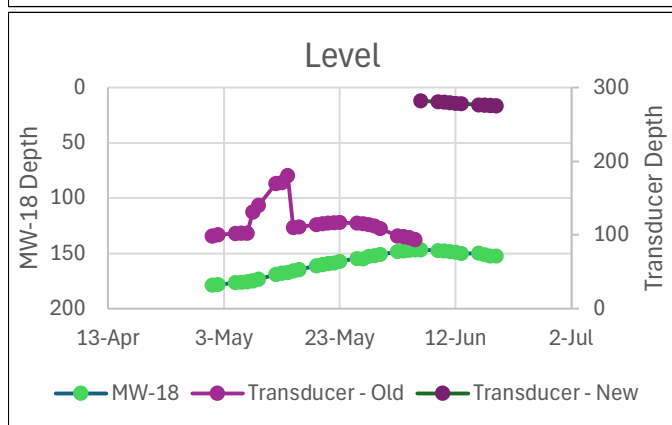
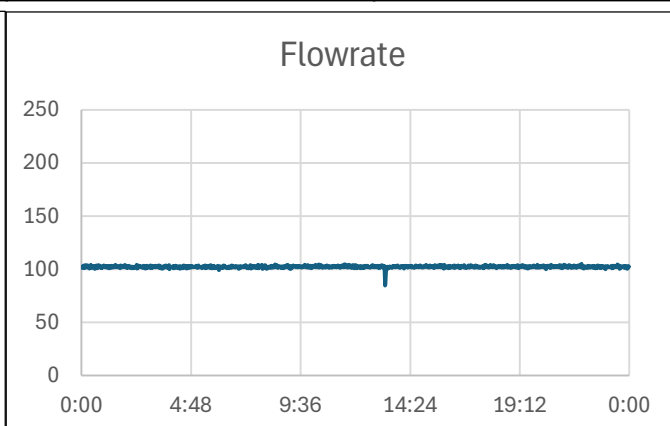
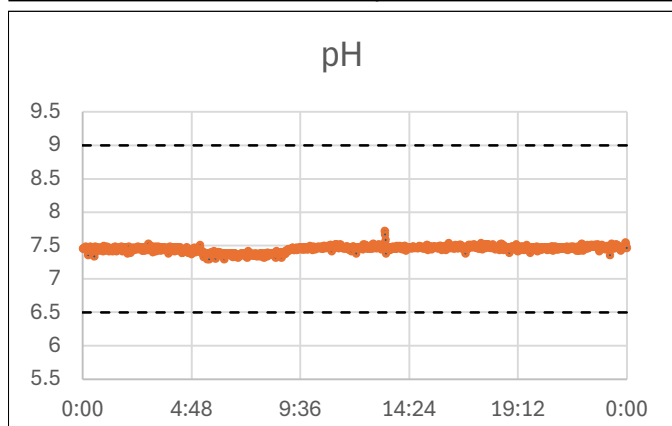
Notes:

- Collected and Shipped SWA-001 , SW-NWRP Quarterly and TSS COD Weekly Samples.
- Item B29 in progress. Removed Flange and pipe section from IX Vessel #3 where leak existed.
- Fixed RO#2 Antiscalant pump discharge side fitting leak. Replaced O ring gasket in discharge fitting. RO#2 anti scalant pump is now primed. No Leaks.

Schwartzwalder Daily Summary Report



Report Date:	6/19/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A
Effluent Discharged:	0.140 Mgal	MW-18 Level:	152.3 ft
Average Flowrate:	102.4 gpm	Transducer Level:	275.0 ft
Effluent to Date:	1.874 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.7	159 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	5 Gal	12 Gal	10 Gal
Vol. Remaining	441 Gal	175 Gal	20 Gal
Vol. Staged	0 Gal	333 Gal	270 Gal
Days Available	88 Days	44 Days	29 Days

Safety Issues/Concerns:

- N/A

Notes:

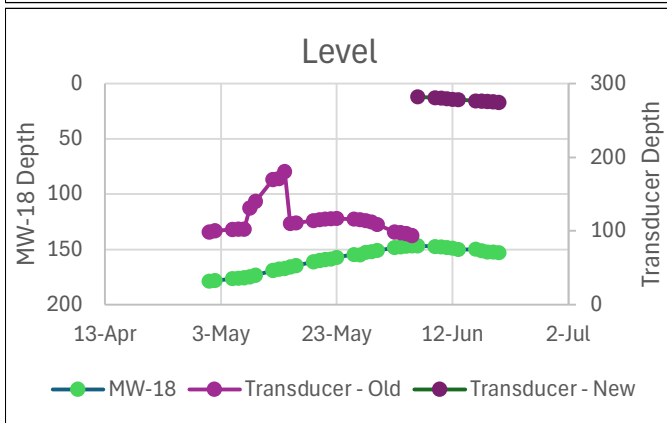
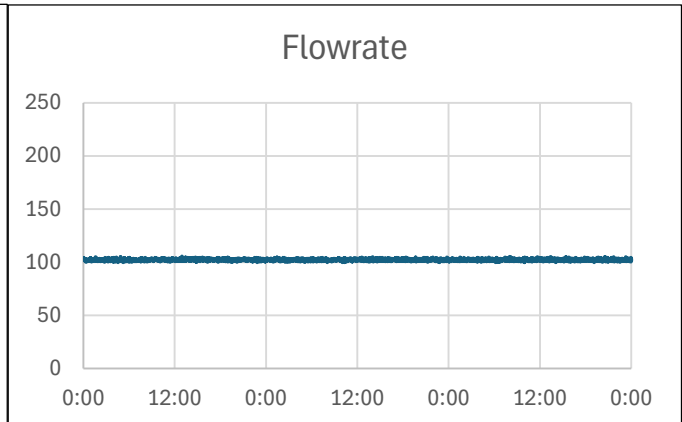
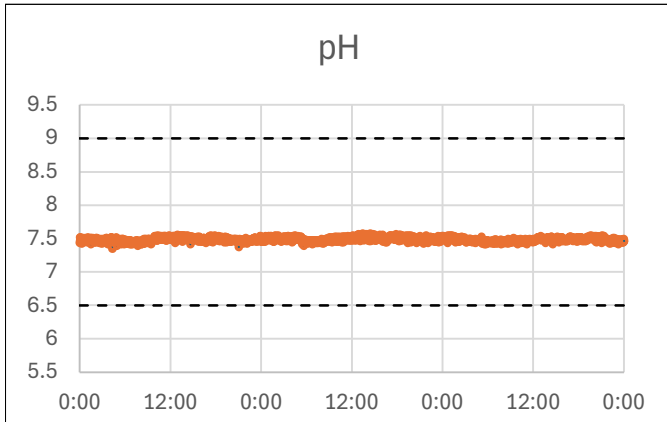
- Collected and Shipped Outfall Table 1 Biweekly and Minepool Quarterly samples.
- Item B29 in progress. Final assembly of connecting piece to IX Vessel #3.
- Batched 30 gallons of BaCl.
- Staged parts for Item B34. Install of Ethernet Extender for comms to PLC at the plant.

Schwartzwalder Daily Summary Report



Report Date:	6/20/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.420 Mgal	MW-18 Level:	152.9 ft
Average Flowrate:	102.4 gpm	Transducer Level:	274.2 ft
Effluent to Date:	2.420 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.74	160 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	11 Gal	35 Gal	10 Gal
Vol. Remaining	436 Gal	164 Gal	50 Gal
Vol. Staged	0 Gal	333 Gal	240 Gal
Days Available	40 Days	14 Days	29 Days

Safety Issues/Concerns:
- N/A

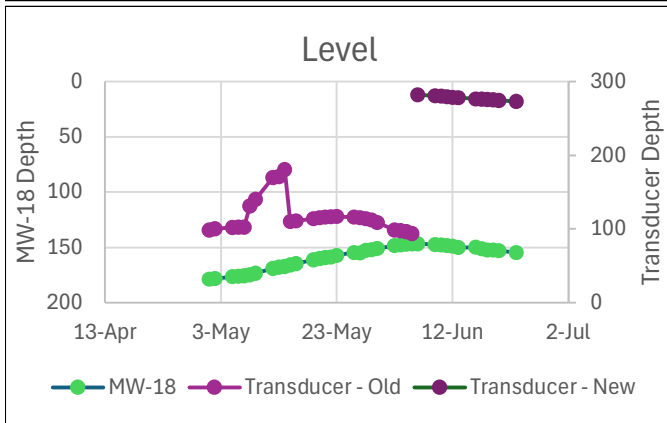
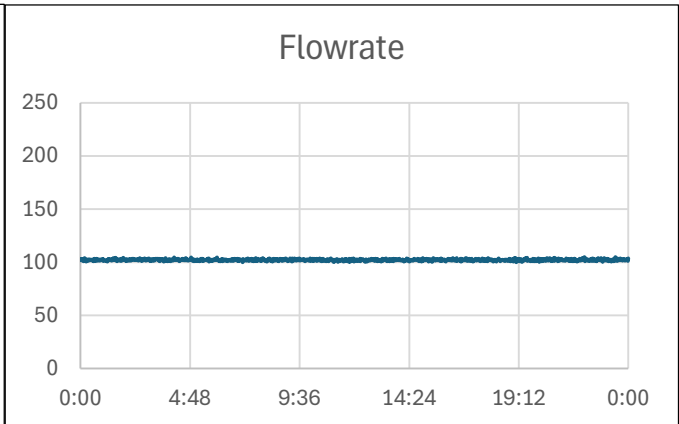
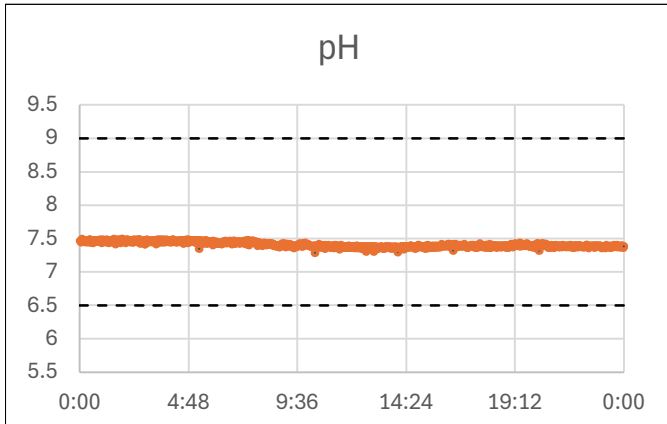
Notes:
- Collected Outfall 001A Weekly TSS Sample.

Schwartzwalder Daily Summary Report



Report Date:	6/23/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.140 Mgal	MW-18 Level:	154.8 ft
Average Flowrate:	102.3 gpm	Transducer Level:	272.9 ft
Effluent to Date:	2.560 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	19°C	7.18	155 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	12 Gal	3 Gal
Vol. Remaining	425 Gal	129 Gal	40 Gal
Vol. Staged	0 Gal	333 Gal	240 Gal
Days Available	142 Days	40 Days	93 Days

Safety Issues/Concerns:

- N/A

Notes:

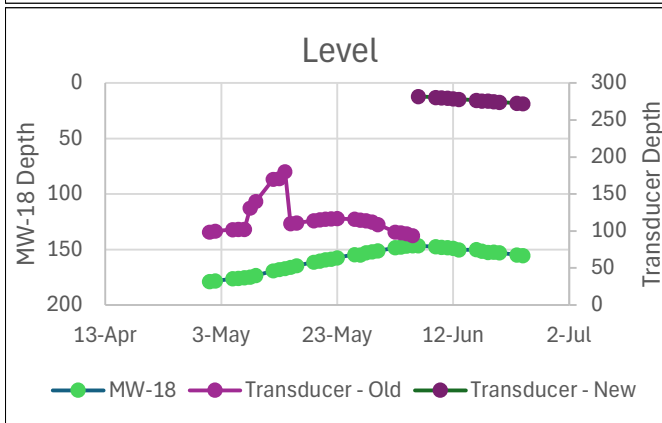
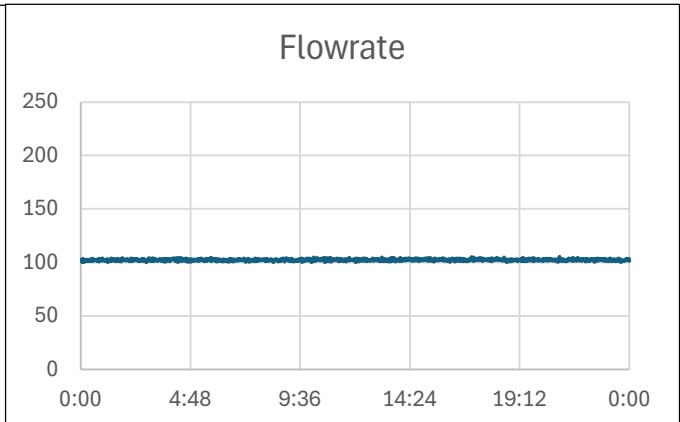
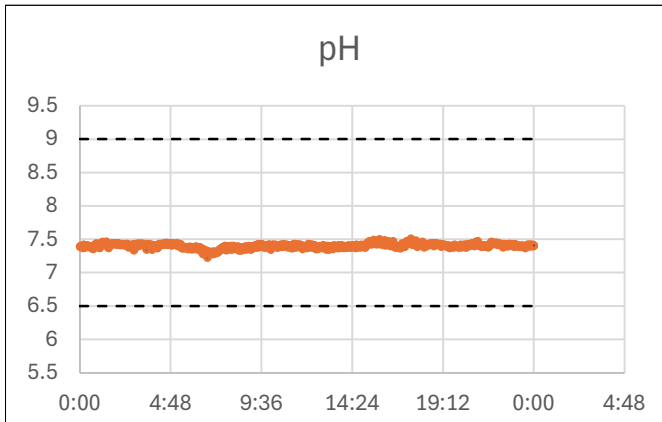
- Collected Outfall 001A Weekly TSS Sample.
- Collected and delivered Outfall 001A Quarterly WET sample to Seacrest.

Schwartzwalder Daily Summary Report



Report Date:	6/24/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.140 Mgal	MW-18 Level:	155.4 ft
Average Flowrate:	102.4 gpm	Transducer Level:	272.1 ft
Effluent to Date:	2.700 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	19°C	7.1	154 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	11 Gal	4 Gal
Vol. Remaining	422 Gal	117 Gal	37 Gal
Vol. Staged	0 Gal	333 Gal	240 Gal
Days Available	141 Days	42 Days	69 Days

Safety Issues/Concerns:

- N/A

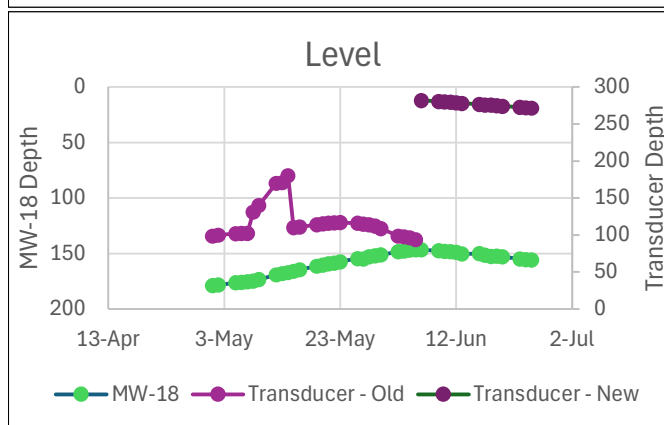
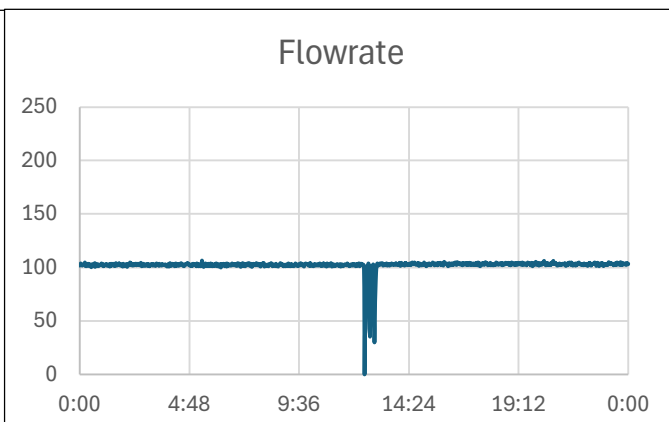
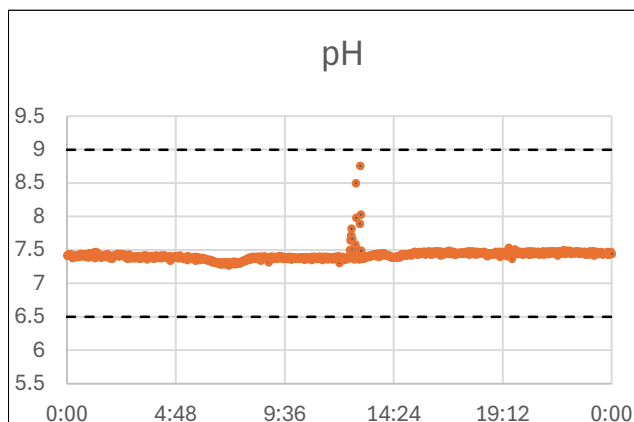
Notes:

- Collected and delivered Outfall 001A Quarterly WET sample to Seacrest.

Schwartzwalder Daily Summary Report



Report Date:	6/25/2025	Lead Operator:	Patrick D
		Assistant Operator(s):	Bryant A
Effluent Discharged:	0.140 Mgal	MW-18 Level:	155.7 ft
Average Flowrate:	102.2 gpm	Transducer Level:	271.6 ft
Effluent to Date:	2.840 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.52	150 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	13 Gal	3 Gal
Vol. Remaining	419 Gal	106 Gal	33 Gal
Vol. Staged	0 Gal	333 Gal	240 Gal
Days Available	140 Days	33 Days	91 Days

Safety Issues/Concerns:

- N/A

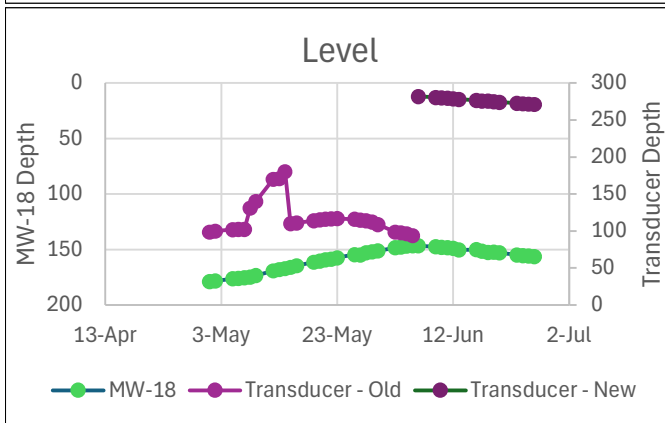
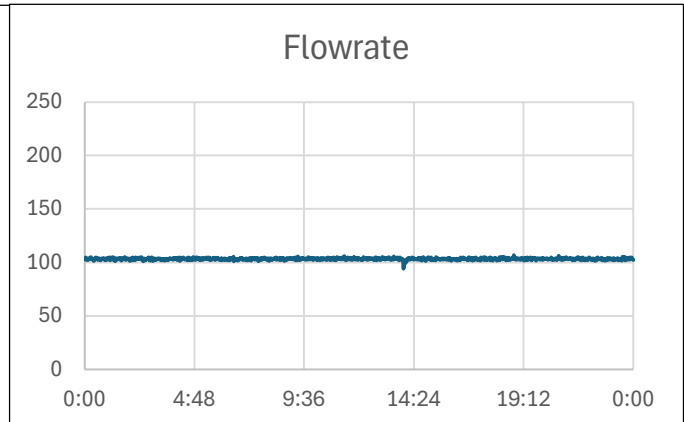
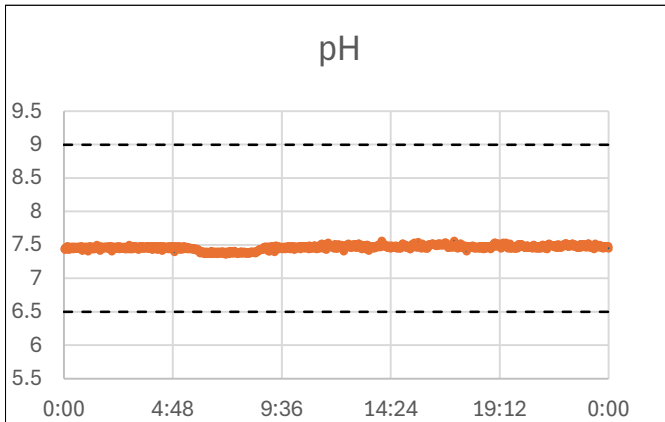
Notes:

- Item B32 Completed. Installed Auto Sampler.
- Made enclosure and mounted Ethernet Extender.
- Transferred 152 gallons of 50% NaOH. Washed out used Cuastic tote. This causes the pH and Flow to fluctuate as we were using Permate Water for cleaning.
- Plant housekeeping and weedwhacking around the WTP.
- Collected and delivered Outfall 001A Quarterly WET sample and Outfall 001A TSS & COD.
- Prepped plant for use of forklift for Garage repair on 6/26/25.

Schwartzwalder Daily Summary Report



Report Date:	6/26/2025	Lead Operator:	Adam B
		Assistant Operator(s):	Patrick D Bryant A
Effluent Discharged:	0.140 Mgal	MW-18 Level:	156.2 ft
Average Flowrate:	103.3 gpm	Transducer Level:	271.0 ft
Effluent to Date:	2.980 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.98	153 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	2 Gal	11 Gal	4 Gal
Vol. Remaining	416 Gal	242 Gal	30 Gal
Vol. Staged	0 Gal	333 Gal	240 Gal
Days Available	208 Days	52 Days	68 Days

Safety Issues/Concerns:

- N/A

Notes:

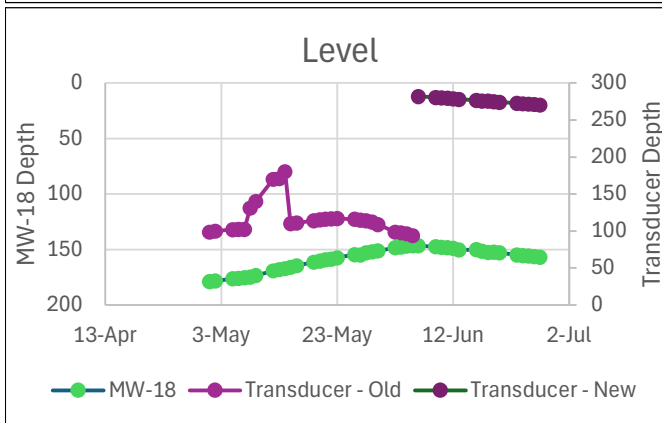
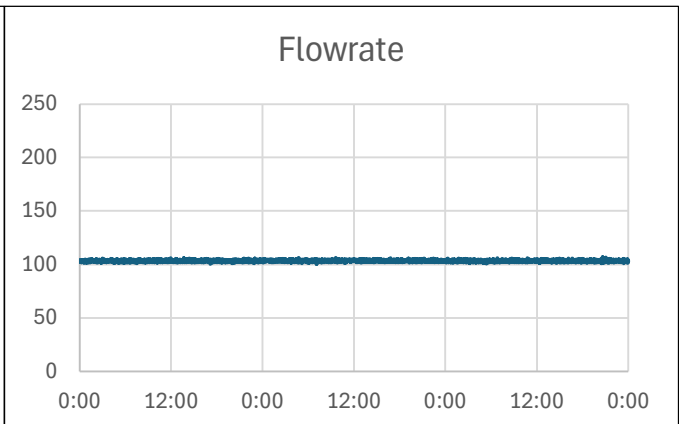
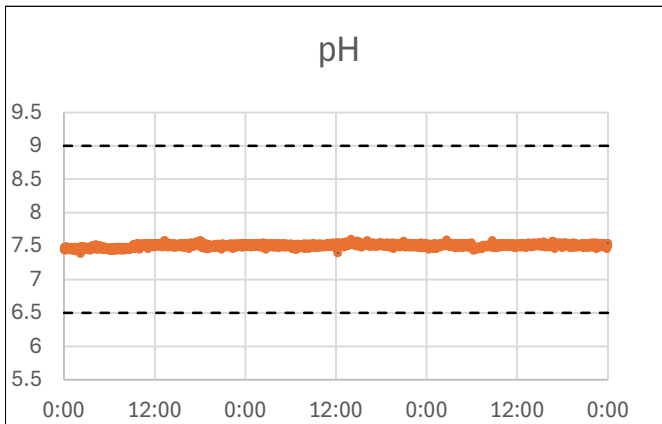
- Peter Hays and CDPHE onsite inspection.
- Batched 30 gallons of BaCl.

Schwartzwalder Daily Summary Report



Report Date:	6/27/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.140 Mgal	MW-18 Level:	156.8 ft
Average Flowrate:	103.4 gpm	Transducer Level:	270.4 ft
Effluent to Date:	3.120 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	20°C	7.74	156 µS/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	6 Gal	10 Gal	11 Gal
Vol. Remaining	414 Gal	234 Gal	50 Gal
Vol. Staged	0 Gal	333 Gal	210 Gal
Days Available	69 Days	57 Days	24 Days

Safety Issues/Concerns:
- N/A

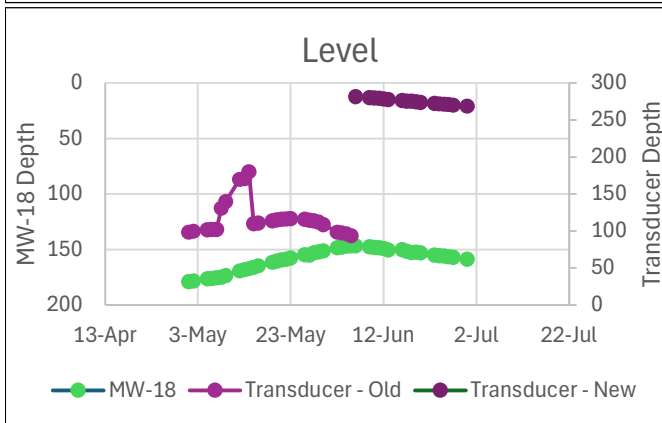
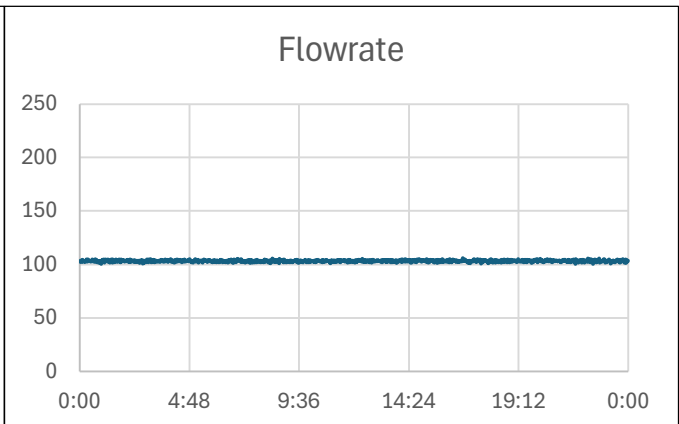
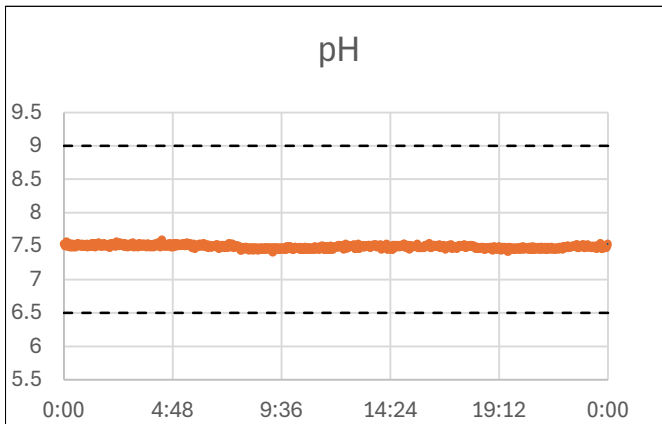
Notes:
- Collected Outfall 001A TSS Sample.
- Organized all Lab Coolers in the WTP.

Schwartzwalder Daily Summary Report



Report Date:	6/30/2025	Lead Operator:	Bryant A
		Assistant Operator(s):	

Effluent Discharged:	0.140 Mgal	MW-18 Level:	158.7 ft
Average Flowrate:	103.3 gpm	Transducer Level:	268.8 ft
Effluent to Date:	3.260 Mgal		



Finished Water Quality			
Parameters	Temp	pH	Cond
Values	19°C	7.35	149 μ S/cm

Chemical Inventory			
Chemicals	Antiscalant	NaOH	BaCl
Vol. Used	3 Gal	6 Gal	2 Gal
Vol. Remaining	408 Gal	244 Gal	39 Gal
Vol. Staged	0 Gal	140 Gal	200 Gal
Days Available	136 Days	65 Days	120 Days

Safety Issues/Concerns:
- N/A

Notes:
- Collected Outfall 001A TSS Sample.