



B25061751_Schwartzwalder Mine

1 message

Laura M. Barlage <LBarlage@energylab.com>

Tue, Jul 15, 2025 at 3:28 PM

To: "Adam.billin@linkan.com" <Adam.billin@linkan.com>, "Alex.schwiebert@linkan.com" <Alex.schwiebert@linkan.com>, "ap@linkan.com" <ap@linkan.com>, "chris.prosper@linkan.com" <chris.prosper@linkan.com>, "Peter.hays@state.co.us" <Peter.hays@state.co.us>

Thank you for choosing Energy Laboratories Inc. for your analytical needs. Attached you will find the completed report for samples received and processed by Energy Laboratories. No hard copy of the report will be mailed, unless it was requested. Please contact one of our project managers by email at billingspm@energylab.com or by calling 406-252-6325 for questions regarding the attached results. Your invoice will be sent separately.

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Please do not reply to this email.

Sincerely,

Energy Laboratories, Inc.

Trust our People. Trust our Data.

Laura Barlage | Administrative Assistant | Billings, MT

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2 attachments



B25061751-EDD-ELICSV-WITH-HEADER-1.CSV

16K



B25061751-FINAL REPORT-1.PDF

2229K



ANALYTICAL SUMMARY REPORT

July 15, 2025

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

Work Order: B25061751 Quote ID: B17287

Project Name: Schwartzwalder Mine

Energy Laboratories Inc Billings MT received the following 1 sample for Linkan Engineering on 6/19/2025 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B25061751-001	SWA-001	06/18/25 11:55	06/19/25	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: B25061751

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: B25061751-001
Client Sample ID: SWA-001

Report Date: 07/15/25
Collection Date: 06/18/25 11:55
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	0.6	mg/L	J	10		A2540 D	06/20/25 10:01 / pjw
Solids, Total Dissolved TDS @ 180 C	176	mg/L		20		A2540 C	06/19/25 16:13 / etv
INORGANICS							
Alkalinity, Total as CaCO ₃	62	mg/L		4		A2320 B	06/20/25 11:47 / spb
Bicarbonate as CaCO ₃	62	mg/L		3		A2320 B	06/20/25 11:47 / spb
Carbonate as CaCO ₃	ND	mg/L		7		A2320 B	06/20/25 11:47 / spb
Chloride	45	mg/L		1		E300.0	06/21/25 05:24 / caa
Sulfate	10	mg/L		1		E300.0	06/21/25 05:24 / caa
Fluoride	0.3	mg/L		0.1		E300.0	06/21/25 05:24 / caa
Hydroxide as CaCO ₃	ND	mg/L		10		A2320 B	06/20/25 11:47 / spb
Cyanide, Weak Acid Dissociable	ND	mg/L		0.005		Kelada-01	06/23/25 11:49 / fap
Oxygen, Dissolved	8.5	mg/L	H	0.1		A4500-O G	06/19/25 16:41 / mbs
NUTRIENTS							
Nitrogen, Nitrate+Nitrite as N	ND	mg/L		0.01		E353.2	06/27/25 13:18 / rs4
Phosphorus, Orthophosphate as P	0.007	mg/L		0.002		E365.1	06/19/25 17:12 / taz
Phosphorus, Total as P	0.005	mg/L		0.002		E365.1	06/30/25 12:29 / taz
- The Orthophosphate result is greater than the Total Phosphorus result. Both results have been confirmed by re-analysis.							
METALS, DISSOLVED							
Aluminum	0.002	mg/L	J	0.03		E200.8	06/21/25 15:15 / aem
Antimony	ND	mg/L		0.001		E200.8	06/21/25 15:15 / aem
Arsenic	ND	mg/L		0.001		E200.8	06/21/25 15:15 / aem
Boron	0.02	mg/L	J	0.05		E200.7	06/20/25 13:57 / enb
Calcium	26	mg/L		1		E200.7	06/20/25 13:57 / enb
Chromium	ND	mg/L		0.005		E200.8	06/21/25 15:15 / aem
Copper	0.0007	mg/L	J	0.005		E200.8	06/21/25 15:15 / aem
Iron	0.03	mg/L		0.02		E200.8	06/21/25 15:15 / aem
Lead	ND	mg/L		0.001		E200.8	06/21/25 15:15 / aem
Magnesium	8	mg/L		1		E200.7	06/20/25 13:57 / enb
Manganese	0.021	mg/L		0.001		E200.7	06/20/25 13:57 / enb
Mercury	ND	mg/L		0.0001		E245.1	06/24/25 13:55 / mjb
Molybdenum	0.001	mg/L	J	0.001		E200.8	06/21/25 15:15 / aem
Potassium	2	mg/L		1		E200.7	06/20/25 13:57 / enb
Silver	ND	mg/L		0.001		E200.8	06/21/25 15:15 / aem
Sodium	16	mg/L		1		E200.7	06/20/25 13:57 / enb
Thallium	ND	mg/L		0.0005		E200.8	06/21/25 15:15 / aem
Uranium	0.0022	mg/L		0.0003		E200.8	06/21/25 15:15 / aem
Zinc	ND	mg/L		0.01		E200.7	06/20/25 13:57 / enb
METALS, TOTAL							
Aluminum	0.02	mg/L	J	0.03		E200.8	06/24/25 18:09 / aem
Antimony	0.00006	mg/L	J	0.001		E200.8	06/24/25 18:09 / 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: B25061751-001
Client Sample ID: SWA-001

Report Date: 07/15/25
Collection Date: 06/18/25 11:55
Date Received: 06/19/25
Matrix: Aqueous

Analyses	Result	Units	Qualifiers	RL	MCL/ QCL	Method	Analysis Date / By
METALS, TOTAL							
Arsenic	0.00008	mg/L	J	0.001		E200.8	06/24/25 18:09 / aem
Boron	0.02	mg/L	J	0.05		E200.7	06/25/25 16:41 / enb
Chromium	ND	mg/L		0.005		E200.8	06/24/25 18:09 / aem
Copper	0.0009	mg/L	J	0.005		E200.8	06/24/25 18:09 / aem
Iron	0.08	mg/L		0.01		E200.8	06/24/25 18:09 / aem
Lead	0.00004	mg/L	J	0.001		E200.8	06/24/25 18:09 / aem
Manganese	0.021	mg/L		0.001		E200.8	06/24/25 18:09 / aem
Mercury	ND	mg/L		0.0001		E245.1	06/24/25 13:57 / mjb
Molybdenum	0.001	mg/L	J	0.001		E200.8	06/25/25 16:54 / aem
Silver	ND	mg/L		0.001		E200.8	06/25/25 16:54 / aem
Thallium	ND	mg/L		0.0005		E200.8	06/24/25 18:09 / aem
Zinc	ND	mg/L		0.01		E200.8	06/24/25 18:09 / aem
RADIONUCLIDES - DISSOLVED							
Radium 226	0.09	pCi/L	U			E903.0	06/30/25 14:44 / eli-ca
Radium 226 precision (±)	0.2	pCi/L				E903.0	06/30/25 14:44 / eli-ca
Radium 226 MDC	0.3	pCi/L				E903.0	06/30/25 14:44 / eli-ca
RADIONUCLIDES - TOTAL							
Gross Alpha	-2	pCi/L	U			E900.0	07/12/25 02:18 / eli-ca
Gross Alpha precision (±)	1.2	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Gross Alpha MDC	2.2	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Gross Beta	2.1	pCi/L	U			E900.0	07/12/25 02:18 / eli-ca
Gross Beta precision (±)	1.6	pCi/L				E900.0	07/12/25 02:18 / eli-ca
Gross Beta MDC	2.4	pCi/L				E900.0	07/12/25 02:18 / 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	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	0.8	pCi/L	U			A7500-RA	07/15/25 10:19 / eli-ca
Radium 226 + Radium 228 precision (±)	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	RL - Analyte Reporting Limit	MCL - Maximum Contaminant Level
Definitions:	QCL - Quality Control Limit	ND - Not detected at the Reporting Limit (RL)
	J - Estimated value - analyte was present but less than the Reporting Limit (RL)	U - Not detected



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

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: MBLK Method Blank Run: METROHM 2_250620A 06/20/25 10:39										
Alkalinity, Total as CaCO ₃		ND	mg/L	4						
Lab ID: LCS Laboratory Control Sample Run: METROHM 2_250620A 06/20/25 10:43										
Alkalinity, Total as CaCO ₃		102	mg/L	4.0	102	90	110			
Lab ID: B25061781-005ADUP 7 Sample Duplicate Run: METROHM 2_250620A 06/20/25 12:12										
Alkalinity, Total as CaCO ₃		51.3	mg/L	4.0				2.2	10	
Bicarbonate as HCO ₃		62.5	mg/L	4.0				2.2	10	
Carbonate as CO ₃		ND	mg/L	4.0					10	
Hydroxide as OH		ND	mg/L	4.0					10	
Bicarbonate as CaCO ₃		51.3	mg/L	3.3				2.2	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: B25061751

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: A2540 C										Batch: TDS20250619D
Lab ID: MBLK_20250619-6		Method Blank					Run: Bal #30_250619B			06/19/25 16:10
Solids, Total Dissolved TDS @ 180 C		ND	mg/L	20						
Lab ID: LCS_20250619-5		Laboratory Control Sample					Run: Bal #30_250619B			06/19/25 16:10
Solids, Total Dissolved TDS @ 180 C		929	mg/L	25	93	90	110			
Lab ID: B25061763-001ADUP		Sample Duplicate					Run: Bal #30_250619B			06/19/25 16:14
Solids, Total Dissolved TDS @ 180 C		292	mg/L	25				0.3	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: B25061751

Report Date: 07/01/25

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: B25061751

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method:	A4500-O G								Batch: R444453	
Lab ID:	B25061749-001BDUP		Sample Duplicate			Run: DO_METER_250619A			06/19/25 16:38	
Oxygen, Dissolved		8.54	mg/L	0.10				3.6	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: B25061751

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 02:55	
Chloride		25.3	mg/L	1.0	101	90	110			
Sulfate		102	mg/L	1.0	102	90	110			
Fluoride		1.24	mg/L	0.10	99	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: B25061665-010AMS	3	Sample Matrix Spike							Run: IC METROHM 1_250619A 06/21/25 03:45	
Chloride		561	mg/L	5.3	105	90	110			
Sulfate		9250	mg/L	21	94	90	110			
Fluoride		25.5	mg/L	0.26	101	90	110			
Lab ID: B25061665-010AMSD	3	Sample Matrix Spike Duplicate							Run: IC METROHM 1_250619A 06/21/25 04:01	
Chloride		549	mg/L	5.3	103	90	110	2.0	20	
Sulfate		9130	mg/L	21	88	90	110	1.3	20	S
Fluoride		25.0	mg/L	0.26	99	90	110	2.1	20	

Qualifiers:

RL - Analyte Reporting Limit

S - Spike recovery outside of advisory limits

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

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_20250627-8	Continuing Calibration Verification Standard								06/27/25 13:04	
Nitrogen, Nitrate+Nitrite as N		1.01	mg/L	0.010	101	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: B25061763-001CMS	Sample Matrix Spike					Run: FIA203-B_250627A			06/27/25 13:22	
Nitrogen, Nitrate+Nitrite as N		1.10	mg/L	0.010	103	90	110			
Lab ID: B25061763-001CMSD	Sample Matrix Spike Duplicate					Run: FIA203-B_250627A			06/27/25 13:24	
Nitrogen, Nitrate+Nitrite as N		1.14	mg/L	0.010	107	90	110	3.4	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: B25061751

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_250619A
Lab ID: CCV		Continuing Calibration Verification Standard								06/19/25 16:23
Phosphorus, Orthophosphate as P		0.498	mg/L	0.0050	100	90	110			
Lab ID: ICV		Initial Calibration Verification Standard								06/19/25 16:49
Phosphorus, Orthophosphate as P		0.251	mg/L	0.0050	100	90	110			
Lab ID: CCV		Continuing Calibration Verification Standard								06/19/25 17:08
Phosphorus, Orthophosphate as P		0.490	mg/L	0.0050	98	90	110			
Method: E365.1										Batch: R444469
Lab ID: ICB		Method Blank								06/19/25 16:52
Phosphorus, Orthophosphate as P		ND	mg/L	0.001						
Lab ID: LFB		Laboratory Fortified Blank								06/19/25 16:53
Phosphorus, Orthophosphate as P		0.256	mg/L	0.0050	102	90	110			
Lab ID: B25061751-001AMS		Sample Matrix Spike								06/19/25 16:58
Phosphorus, Orthophosphate as P		0.251	mg/L	0.0020	98	90	110			
Lab ID: B25061751-001AMSD		Sample Matrix Spike Duplicate								06/19/25 16:59
Phosphorus, Orthophosphate as P		0.257	mg/L	0.0020	100	90	110	2.4	10	
Method: E365.1										Analytical Run: SEAL201-B_250630A
Lab ID: ICV-198785		Initial Calibration Verification Standard								06/30/25 10:34
Phosphorus, Total as P		0.506	mg/L	0.0050	101	90	110			
Lab ID: CCV-198785		Continuing Calibration Verification Standard								06/30/25 12:22
Phosphorus, Total as P		0.511	mg/L	0.0050	102	90	110			
Method: E365.1										Batch: 200963
Lab ID: MB-200963		Method Blank								06/30/25 12:25
Phosphorus, Total as P		ND	mg/L	0.002						
Lab ID: LCS-200963		Laboratory Control Sample								06/30/25 12:26
Phosphorus, Total as P		0.187	mg/L	0.0020	94	90	110			
Lab ID: B25062151-009DMS		Sample Matrix Spike								06/30/25 12:31
Phosphorus, Total as P		0.190	mg/L	0.0020	95	90	110			
Lab ID: B25062151-009DMSD		Sample Matrix Spike Duplicate								06/30/25 12:32
Phosphorus, Total as P		0.190	mg/L	0.0020	95	90	110	0.1	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: B25061751

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: B25061751

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_250620A								
Lab ID: ICV	7	Continuing Calibration Verification Standard							06/20/25 11:21	
Boron		2.57	mg/L	0.10	103	95	105			
Calcium		25.1	mg/L	1.0	100	95	105			
Magnesium		25.0	mg/L	1.0	100	95	105			
Manganese		2.45	mg/L	0.010	98	95	105			
Potassium		24.9	mg/L	1.0	99	95	105			
Sodium		25.2	mg/L	1.0	101	95	105			
Zinc		2.40	mg/L	0.010	96	95	105			
Lab ID: CCV	7	Continuing Calibration Verification Standard							06/20/25 13:51	
Boron		2.52	mg/L	0.10	101	90	110			
Calcium		24.8	mg/L	1.0	99	90	110			
Magnesium		24.5	mg/L	1.0	98	90	110			
Manganese		2.43	mg/L	0.010	97	90	110			
Potassium		24.4	mg/L	1.0	97	90	110			
Sodium		24.7	mg/L	1.0	99	90	110			
Zinc		2.39	mg/L	0.010	95	90	110			
Method: E200.7		Batch: R444597								
Lab ID: MB-5900DIS250620A	7	Method Blank							Run: ICP205-B_250620A 06/20/25 11:37	
Boron		ND	mg/L	0.006						
Calcium		ND	mg/L	0.06						
Magnesium		ND	mg/L	0.05						
Manganese		ND	mg/L	0.0004						
Potassium		ND	mg/L	0.1						
Sodium		ND	mg/L	0.05						
Zinc		ND	mg/L	0.005						
Lab ID: LFB-5900DIS250620A	7	Laboratory Fortified Blank							Run: ICP205-B_250620A 06/20/25 11:38	
Boron		1.06	mg/L	0.10	106	85	115			
Calcium		51.2	mg/L	1.0	102	85	115			
Magnesium		51.0	mg/L	1.0	102	85	115			
Manganese		4.91	mg/L	0.010	98	85	115			
Potassium		51.1	mg/L	1.0	102	85	115			
Sodium		51.7	mg/L	1.0	103	85	115			
Zinc		0.960	mg/L	0.010	96	85	115			
Lab ID: B25061732-001BMS2	7	Sample Matrix Spike							Run: ICP205-B_250620A 06/20/25 13:54	
Boron		5.78	mg/L	0.10	105	70	130			
Calcium		448	mg/L	1.0	104	70	130			
Magnesium		389	mg/L	1.0	102	70	130			
Manganese		24.4	mg/L	0.0052	98	70	130			
Potassium		268	mg/L	1.5	103	70	130			
Sodium		996	mg/L	1.0	97	70	130			
Zinc		4.73	mg/L	0.052	94	70	130			

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)



QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.7										Batch: R444597
Lab ID: B25061732-001BMSD2	7	Sample Matrix Spike Duplicate			Run: ICP205-B_250620A				06/20/25 13:55	
Boron		5.95	mg/L	0.10	109	70	130	2.9	20	
Calcium		454	mg/L	1.0	106	70	130	1.4	20	
Magnesium		397	mg/L	1.0	105	70	130	1.9	20	
Manganese		25.2	mg/L	0.0052	101	70	130	3.3	20	
Potassium		275	mg/L	1.5	106	70	130	2.9	20	
Sodium		1000	mg/L	1.0	99	70	130	0.7	20	
Zinc		4.88	mg/L	0.052	97	70	130	3.2	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 16:33
Boron		2.53	mg/L	0.10	101	90	110			
Method: E200.7										Batch: 200863
Lab ID: MB-200863	Method Blank			Run: ICP205-B_250625B				06/25/25 16:30		
Boron		ND	mg/L	0.008						
Lab ID: LCS3-200863	Laboratory Control Sample			Run: ICP205-B_250625B				06/25/25 16:31		
Boron		1.06	mg/L	0.10	106	85	115			
Lab ID: B25061765-002CMS3	Sample Matrix Spike			Run: ICP205-B_250625B				06/25/25 16:50		
Boron		1.07	mg/L	0.050	106	70	130			
Lab ID: B25061765-002CMSD3	Sample Matrix Spike Duplicate			Run: ICP205-B_250625B				06/25/25 16:51		
Boron		1.08	mg/L	0.050	106	70	130	0.2	20	

Qualifiers:

RL - Analyte Reporting Limit

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

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_250625A								
Lab ID: QCS		2 Initial Calibration Verification Standard								06/25/25 13:06
Molybdenum		0.0406	mg/L	0.0050	101	90	110			
Silver		0.0200	mg/L	0.0050	100	90	110			
Lab ID: CCV		2 Continuing Calibration Verification Standard								06/25/25 16:13
Molybdenum		0.0524	mg/L	0.0050	105	90	110			
Silver		0.0189	mg/L	0.0050	94	90	110			
Method: E200.8		Batch: 200863								
Lab ID: MB-200863		2 Method Blank								Run: ICPMS207-B_250625A 06/25/25 16:43
Molybdenum		ND	mg/L	0.00009						
Silver		ND	mg/L	4E-6						

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

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_250620A								
Lab ID: QCS	11	Initial Calibration Verification Standard								06/21/25 12:22
Aluminum		0.193	mg/L	0.020	96	90	110			
Antimony		0.0428	mg/L	0.0050	107	90	110			
Arsenic		0.0388	mg/L	0.0050	97	90	110			
Chromium		0.0390	mg/L	0.010	98	90	110			
Copper		0.0384	mg/L	0.010	96	90	110			
Iron		0.199	mg/L	0.020	100	90	110			
Lead		0.0388	mg/L	0.0010	97	90	110			
Molybdenum		0.0430	mg/L	0.0050	108	90	110			
Silver		0.0206	mg/L	0.0050	103	90	110			
Thallium		0.0430	mg/L	0.0050	107	90	110			
Uranium		0.0378	mg/L	0.00030	95	90	110			
Lab ID: CCV	11	Continuing Calibration Verification Standard								06/21/25 14:57
Aluminum		0.0465	mg/L	0.020	93	90	110			
Antimony		0.0519	mg/L	0.0050	104	90	110			
Arsenic		0.0477	mg/L	0.0050	95	90	110			
Chromium		0.0469	mg/L	0.010	94	90	110			
Copper		0.0450	mg/L	0.010	90	90	110			
Iron		1.24	mg/L	0.020	95	90	110			
Lead		0.0484	mg/L	0.0010	97	90	110			
Molybdenum		0.0528	mg/L	0.0050	106	90	110			
Silver		0.0201	mg/L	0.0050	101	90	110			
Thallium		0.0503	mg/L	0.0050	101	90	110			
Uranium		0.0466	mg/L	0.00030	93	90	110			
Method: E200.8		Batch: R444549								
Lab ID: LRB	11	Method Blank								Run: ICPMS208-B_250620A 06/20/25 17:50
Aluminum		ND	mg/L	0.0009						
Antimony		ND	mg/L	0.0006						
Arsenic		ND	mg/L	0.0001						
Chromium		ND	mg/L	0.0002						
Copper		ND	mg/L	0.00007						
Iron		ND	mg/L	0.004						
Lead		ND	mg/L	0.00002						
Molybdenum		ND	mg/L	0.00005						
Silver		ND	mg/L	5E-6						
Thallium		ND	mg/L	0.00009						
Uranium		ND	mg/L	0.00002						
Lab ID: LFB	11	Laboratory Fortified Blank								Run: ICPMS208-B_250620A 06/20/25 18:08
Aluminum		0.0486	mg/L	0.020	97	85	115			
Antimony		0.0482	mg/L	0.0050	96	85	115			
Arsenic		0.0465	mg/L	0.0050	93	85	115			
Chromium		0.0466	mg/L	0.010	93	85	115			
Copper		0.0451	mg/L	0.010	90	85	115			
Iron		4.79	mg/L	0.020	96	85	115			

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: R444549
Lab ID: LFB	11	Laboratory Fortified Blank				Run: ICPMS208-B_250620A				06/20/25 18:08
Lead		0.0485	mg/L	0.0010	97	85	115			
Molybdenum		0.0488	mg/L	0.0050	98	85	115			
Silver		0.0185	mg/L	0.0050	92	85	115			
Thallium		0.0464	mg/L	0.0050	93	85	115			
Uranium		0.0509	mg/L	0.00030	102	85	115			
Lab ID: B25061762-001BMS	11	Sample Matrix Spike				Run: ICPMS208-B_250620A				06/21/25 15:44
Aluminum		0.0552	mg/L	0.030	93	70	130			
Antimony		0.0487	mg/L	0.0010	97	70	130			
Arsenic		0.0465	mg/L	0.0010	93	70	130			
Chromium		0.0440	mg/L	0.0050	88	70	130			
Copper		0.0419	mg/L	0.0050	83	70	130			
Iron		4.89	mg/L	0.020	97	70	130			
Lead		0.0469	mg/L	0.0010	94	70	130			
Molybdenum		0.0538	mg/L	0.0010	104	70	130			
Silver		0.0183	mg/L	0.0010	92	70	130			
Thallium		0.0443	mg/L	0.00052	89	70	130			
Uranium		0.0935	mg/L	0.00030	99	70	130			
Lab ID: B25061762-001BMSD	11	Sample Matrix Spike Duplicate				Run: ICPMS208-B_250620A				06/21/25 15:50
Aluminum		0.0549	mg/L	0.030	92	70	130	0.6	20	
Antimony		0.0499	mg/L	0.0010	100	70	130	2.4	20	
Arsenic		0.0475	mg/L	0.0010	95	70	130	2.1	20	
Chromium		0.0449	mg/L	0.0050	90	70	130	2.1	20	
Copper		0.0428	mg/L	0.0050	85	70	130	2.2	20	
Iron		4.92	mg/L	0.020	98	70	130	0.7	20	
Lead		0.0490	mg/L	0.0010	98	70	130	4.3	20	
Molybdenum		0.0561	mg/L	0.0010	108	70	130	4.2	20	
Silver		0.0191	mg/L	0.0010	95	70	130	3.9	20	
Thallium		0.0484	mg/L	0.00052	97	70	130	9.0	20	
Uranium		0.0950	mg/L	0.00030	102	70	130	1.6	20	

Qualifiers:

RL - Analyte Reporting Limit

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

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							06/24/25 15:41	
Aluminum		0.212	mg/L	0.020	106	90	110			
Antimony		0.0390	mg/L	0.0050	98	90	110			
Arsenic		0.0392	mg/L	0.0050	98	90	110			
Chromium		0.0395	mg/L	0.010	99	90	110			
Copper		0.0386	mg/L	0.010	96	90	110			
Iron		0.199	mg/L	0.020	99	90	110			
Lead		0.0404	mg/L	0.0010	101	90	110			
Manganese		0.195	mg/L	0.0050	98	90	110			
Thallium		0.0417	mg/L	0.0050	104	90	110			
Zinc		0.0391	mg/L	0.0050	98	90	110			
Lab ID: CCV	10	Continuing Calibration Verification Standard							06/24/25 17:42	
Aluminum		0.0494	mg/L	0.020	99	90	110			
Antimony		0.0472	mg/L	0.0050	94	90	110			
Arsenic		0.0488	mg/L	0.0050	98	90	110			
Chromium		0.0486	mg/L	0.010	97	90	110			
Copper		0.0479	mg/L	0.010	96	90	110			
Iron		1.23	mg/L	0.020	95	90	110			
Lead		0.0486	mg/L	0.0010	97	90	110			
Manganese		0.0478	mg/L	0.0050	95	90	110			
Thallium		0.0488	mg/L	0.0050	98	90	110			
Zinc		0.0482	mg/L	0.0050	96	90	110			
Method: E200.8						Batch: 200863				
Lab ID: MB-200863	12	Method Blank							Run: ICPMS209-B_250623A	
Aluminum		ND	mg/L	0.002					06/24/25 16:47	
Antimony		0.0001	mg/L	0.00002						
Arsenic		ND	mg/L	0.00003						
Chromium		ND	mg/L	0.0003						
Copper		ND	mg/L	0.0001						
Iron		0.01	mg/L	0.004						
Lead		ND	mg/L	0.00002						
Manganese		0.00009	mg/L	0.00007						
Molybdenum		ND	mg/L	0.0001						
Silver		ND	mg/L	5E-6						
Thallium		ND	mg/L	0.00008						
Zinc		ND	mg/L	0.001						
Lab ID: LCS4-200863	12	Laboratory Control Sample							Run: ICPMS209-B_250623A	
Aluminum		0.547	mg/L	0.010	109	85	115		06/24/25 16:53	
Antimony		0.0991	mg/L	0.0050	99	85	115			
Arsenic		0.0956	mg/L	0.0010	96	85	115			
Chromium		0.0945	mg/L	0.0010	94	85	115			
Copper		0.0945	mg/L	0.0010	94	85	115			
Iron		0.488	mg/L	0.010	98	85	115			
Lead		0.0995	mg/L	0.0010	99	85	115			

Qualifiers:

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

Report Date: 07/01/25

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Batch: 200863
Lab ID: LCS4-200863	12	Laboratory Control Sample				Run: ICPMS209-B_250623A			06/24/25 16:53	
Manganese		0.469	mg/L	0.0010	94	85	115			
Molybdenum		0.0949	mg/L	0.0050	95	85	115			
Silver		0.0102	mg/L	0.0050	102	85	115			
Thallium		0.103	mg/L	0.0010	103	85	115			
Zinc		0.0937	mg/L	0.0020	94	85	115			
Lab ID: B25061749-001EMS4	12	Sample Matrix Spike				Run: ICPMS209-B_250623A			06/24/25 17:36	
Aluminum		0.981	mg/L	0.030	109	70	130			
Antimony		0.0944	mg/L	0.0010	94	70	130			
Arsenic		0.0964	mg/L	0.0010	96	70	130			
Chromium		0.0949	mg/L	0.0050	94	70	130			
Copper		0.0960	mg/L	0.0050	94	70	130			
Iron		1.12	mg/L	0.020	95	70	130			
Lead		0.0968	mg/L	0.0010	96	70	130			
Manganese		0.485	mg/L	0.0010	93	70	130			
Molybdenum		0.0926	mg/L	0.0010	92	70	130			
Silver		0.00964	mg/L	0.0010	96	70	130			
Thallium		0.101	mg/L	0.00050	101	70	130			
Zinc		0.0969	mg/L	0.010	93	70	130			
Lab ID: B25061749-001EMSD4	12	Sample Matrix Spike Duplicate				Run: ICPMS209-B_250623A			06/24/25 17:53	
Aluminum		1.00	mg/L	0.030	113	70	130	2.3	20	
Antimony		0.0954	mg/L	0.0010	95	70	130	1.1	20	
Arsenic		0.0953	mg/L	0.0010	95	70	130	1.1	20	
Chromium		0.0934	mg/L	0.0050	93	70	130	1.7	20	
Copper		0.0953	mg/L	0.0050	94	70	130	0.8	20	
Iron		1.14	mg/L	0.020	98	70	130	1.5	20	
Lead		0.0987	mg/L	0.0010	98	70	130	1.9	20	
Manganese		0.480	mg/L	0.0010	92	70	130	1.1	20	
Molybdenum		0.0928	mg/L	0.0010	92	70	130	0.2	20	
Silver		0.00976	mg/L	0.0010	98	70	130	1.2	20	
Thallium		0.104	mg/L	0.00050	104	70	130	2.3	20	
Zinc		0.0968	mg/L	0.010	93	70	130	0.1	20	

Qualifiers:

RL - Analyte Reporting Limit

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QA/QC Summary Report

Prepared by Billings, MT Branch

Work Order: B25061751

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							06/24/25 12:51		
Mercury		0.00201	mg/L	0.00010	101	90	110				
Lab ID:	CCV1	Continuing Calibration Verification Standard							06/24/25 12:54		
Mercury		0.00250	mg/L	0.00010	100	95	105				
Lab ID:	CCV	Continuing Calibration Verification Standard							06/24/25 13:51		
Mercury		0.00262	mg/L	0.00010	105	90	110				
Method:	E245.1								Batch: 200857		
Lab ID:	MB-200857	Method Blank			Run: HGCV203-B_250624A				06/24/25 13:38		
Mercury		ND	mg/L	0.00006							
Lab ID:	LCS-200857	Laboratory Control Sample			Run: HGCV203-B_250624A				06/24/25 13:40		
Mercury		0.00207	mg/L	0.00010	104	85	115				
Lab ID:	B25061694-001FMS	Sample Matrix Spike			Run: HGCV203-B_250624A				06/24/25 13:42		
Mercury		0.00201	mg/L	0.00010	100	70	130				
Lab ID:	B25061694-001FMSD	Sample Matrix Spike Duplicate			Run: HGCV203-B_250624A				06/24/25 13:44		
Mercury		0.00217	mg/L	0.00010	109	70	130	7.9	30		

Qualifiers:

RL - Analyte Reporting Limit

ND - Not detected at the Reporting Limit (RL)

QA/QC Summary Report

Prepared by Casper, WY Branch

Work Order: B25061751

Report Date: 07/15/25

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: B25061751

Report Date: 07/15/25

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: RA226-11722
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: B25061751

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



Work Order Receipt Checklist

Linkan Engineering

B25061751

Login completed by: Danielle N. Harris

Date Received: 6/19/2025

Reviewed by: gmccartney

Received by: LDS

Reviewed Date: 6/28/2025

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:	3.0°C On 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 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	☐ Hard Copy ☒ 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	☐ Hard Copy ☒ Email
Special Report/Formats:	☐ LEVEL IV ☐ NELAC ☐ EDD/EDT (contact laboratory) ☐ Other

Comments

Quarterly Sampling - Table 2B

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	720-238-6169
Sample Origin State	Colorado
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	

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 + 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)	Received by Laboratory (print)	Signature	Date/Time	Signature
1 SWA-001	6/18/25	11:55	10	W	Locis Sander	[Signature]	06-19-25 10:30	[Signature]
2 SW-NWRP	6/18/25	11:30	10	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 Acuña	Signature [Signature]	Date/Time 6/18/25 15:00
Shipped By	Cooler ID(s)	Custody Seals Y N C B	Intact Y N
		Receipt Temp °C	Temp Blank Y N
		Payment Type Cash Check	Amount \$
		CC	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 193747

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 2B

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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Table 2B Quarterly (4 Sets)

120 mL Plastic	1	E365.1	Low Level Phosphorus, Orthophosphate as P	48.00 hrs		Filter Sample	1
1 Liter Plastic	1	A2320 B A4500-O G E300.0 A2540 C	Alkalinity to pH 4.5 Oxygen, Dissolved Anions by Ion Chromatography Solids, Total Dissolved	0.25 hrs			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 E245.1 E245.1	Metals by ICP/ICPMS, Dissolved Mercury, Dissolved Mercury Digestion by E245.1		HNO3	Filter before preservation	1
250 mL Plastic	1	E200.7_8 E245.1 E200.2 E245.1	Metals by ICP/ICPMS, Total Mercury, Total Metals Digestion by E200.2 Mercury Digestion by E245.1		HNO3		1

BO#: 193747

1 of 2

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					

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#: 193747