



ANALYTICAL SUMMARY REPORT

March 06, 2017

Lehrkinds Big Spring
201 1st Ave N
Lewistown, MT 59457-1725

Work Order: B17020465
Project Name: MT0001229

Energy Laboratories Inc Billings MT received the following 1 sample for Lehrkinds Big Spring on 2/8/2017 for analysis.

Lab ID	Client Sample ID	Collect Date	Receive Date	Matrix	Test
B17020465-001	Spring Water (Drinking)	02/08/17 10:50	02/08/17	Drinking Water	Metals by ICP/ICPMS, Drinking Water Drinking Water Metals Digestion by EPA 200.2 Gross Alpha Calculated Gross Alpha, Gross Beta Radium 226 + Radium 228 Radium 226, Total Radium 228, Total

The analyses presented in this report were performed by Energy Laboratories, Inc., 1120 S 27th St., Billings, MT 59101, unless otherwise noted. Any exceptions or problems with the analyses are noted in the Laboratory Analytical Report, the QA/QC Summary Report, or the Case Narrative.

The results as reported relate only to the item(s) submitted for testing.

If you have any questions regarding these test results, please call.

Report Approved By:



CLIENT: Lehrkinds Big Spring
Project: MT0001229
Work Order: B17020465

Report Date: 03/06/17

CASE NARRATIVE

RADIONUCLIDES REPORTED ELECTRONICALLY TO REGULATORY AGENICES

The results for radionuclides performed for regulatory purposes under the Safe Drinking Water Act are electronically reported to agencies that are using a database that cannot accept results for radionuclides using the formats required by the methods so the data has been modified to fit the database. Values that are "U" qualified or statistically negative are reported as "non detect" at the concentration level of the MDC.

Tests associated with analyst identified as ELI-CA were subcontracted to Energy Laboratories, PO Box 247, Casper, WY, EPA Number WY00002 and WY00937.



LABORATORY ANALYTICAL REPORT

Prepared by Billings, MT Branch

Client: Lehrkinds Big Spring
Client Sample ID: Spring Water (Drinking)
PWS #: MT0001229 **Name:** LEHRKINDS BIG SPRING WATER
Facility ID: TP001
Sampling Point/Location: EP502 / Spring Water
Project ID: MT0001229
Collector's Name: Don Cates
Compliance Sample: YES

Lab ID: B17020465-001
Report Date: 03/06/17
Collection Date: 02/08/17 10:50
Date Received: 02/08/17
Matrix: Drinking Water
Federal ID#: MT00005

Contact Phone #: (406) 538-3433

Sample Type: RT

FRDS Analyses	Result	Units	Qual	MCL/		Method	Analysis Date / By
				RL	QCL		
RADIONUCLIDES - TOTAL							
4006 Uranium	ND	mg/L		0.001	0.03	E200.8	02/09/17 12:14 / jpv
Uranium, Activity	ND	pCi/L		0.7	20	E200.8	02/09/17 12:14 / jpv
RADIONUCLIDES - TOTAL							
4002 Gross Alpha	1.5	pCi/L			15	E900.0	02/28/17 20:33 / eli-ca
Gross Alpha precision (±)	1.7	pCi/L				E900.0	02/28/17 20:33 / eli-ca
Gross Alpha MDC	1.3	pCi/L				E900.0	02/28/17 20:33 / eli-ca
4000 Gross Alpha - Adjusted	1.5	pCi/L			15	E900.0	03/01/17 10:35 / eli-ca
Gross Alpha - Adjusted precision (±)	1.7	pCi/L				E900.0	03/01/17 10:35 / eli-ca
Gross Alpha - Adjusted MDC	1.3	pCi/L				E900.0	03/01/17 10:35 / eli-ca
4020 Radium 226	0.2	pCi/L			5	E903.0	02/22/17 12:33 / eli-ca
Radium 226 precision (±)	0.1	pCi/L				E903.0	02/22/17 12:33 / eli-ca
Radium 226 MDC	0.1	pCi/L				E903.0	02/22/17 12:33 / eli-ca
4030 Radium 228	1	pCi/L			5	RA-05	02/22/17 11:00 / eli-ca
Radium 228 precision (±)	0.8	pCi/L				RA-05	02/22/17 11:00 / eli-ca
Radium 228 MDC	0.7	pCi/L				RA-05	02/22/17 11:00 / eli-ca
4010 Radium 226 + Radium 228	1.1	pCi/L				A7500-RA	02/28/17 08:07 / eli-ca
Radium 226 + Radium 228 precision (±)	0.8	pCi/L				A7500-RA	02/28/17 08:07 / eli-ca
Radium 226 + Radium 228 MDC	0.7	pCi/L				A7500-RA	02/28/17 08:07 / eli-ca

Report RL - Analyte reporting limit.
Definitions: QCL - Quality control limit.
MDC - Minimum detectable concentration

MCL - Maximum contaminant level.
ND - Not detected at the reporting limit.



QA/QC Summary Report

Prepared by Billings, MT Branch

Client: Lehrkinds Big Spring

Report Date: 03/06/17

Project: MT0001229

Work Order: B17020465

Analyte	Count	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E200.8										Analytical Run: ICPMS202-B_170209A
Lab ID: QCS		Initial Calibration Verification Standard								02/09/17 10:47
Uranium		0.0218	mg/L	0.0010	109	90	110			
Method: E200.8										Batch: R274586
Lab ID: LRB		Method Blank								02/09/17 11:03
Uranium		ND	mg/L	0.00001						Run: ICPMS202-B_170209A
Lab ID: LFB		Laboratory Fortified Blank								02/09/17 11:05
Uranium		0.0515	mg/L	0.0010	103	85	115			Run: ICPMS202-B_170209A
Lab ID: B17020430-004BMS		Sample Matrix Spike								02/09/17 12:20
Uranium		0.0537	mg/L	0.00030	106	70	130			Run: ICPMS202-B_170209A
Lab ID: B17020430-004BMSD		Sample Matrix Spike Duplicate								02/09/17 12:22
Uranium		0.0525	mg/L	0.00030	104	70	130	2.2	20	Run: ICPMS202-B_170209A

Qualifiers:

RL - Analyte reporting limit.

ND - Not detected at the reporting limit.

MDC - Minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Lehrkinds Big Spring
Project: MT0001229

Report Date: 03/01/17
Work Order: B17020465

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E900.0							Batch: GrDW-0983		
Lab ID: MB-GrDW-0983	Method Blank				Run: G542M_170222E				02/28/17 20:33
Gross Alpha	0.02	pCi/L							U
Gross Alpha precision (±)	1	pCi/L							
Gross Alpha MDC	1	pCi/L							
Lab ID: C17020233-001AMS	Sample Matrix Spike				Run: G542M_170222E				02/28/17 20:33
Gross Alpha	120	pCi/L	123		70	130			
Lab ID: C17020233-001AMSD	Sample Matrix Spike Duplicate				Run: G542M_170222E				02/28/17 20:33
Gross Alpha	100	pCi/L	102		70	130	18	20	
Lab ID: Th230-GrDW-0983	Laboratory Control Sample				Run: G542M_170222E				02/28/17 20:33
Gross Alpha	92	pCi/L	92		80	120			

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Lehrkinds Big Spring

Report Date: 03/01/17

Project: MT0001229

Work Order: B17020465

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: E903.0									Batch: RA226DW-0457R
Lab ID: LCS-RA226DW-0457	Laboratory Control Sample								02/22/17 12:33
Radium 226	9.9	pCi/L		95	90	110			
Lab ID: MB-RA226DW-0457	Method Blank								02/22/17 12:33
Radium 226	0.07	pCi/L							U
Radium 226 precision (±)	0.10	pCi/L							
Radium 226 MDC	0.1	pCi/L							
Lab ID: C17020309-001AMS	Sample Matrix Spike								02/22/17 12:33
Radium 226	25	pCi/L		110	80	120			
Lab ID: C17020309-001AMSD	Sample Matrix Spike Duplicate								02/22/17 12:33
Radium 226	25	pCi/L		107	80	120	1.2	20	

Qualifiers:

RL - Analyte reporting limit.

MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.

U - Not detected at minimum detectable concentration



QA/QC Summary Report

Prepared by Casper, WY Branch

Client: Lehrkinds Big Spring
Project: MT0001229

Report Date: 03/01/17
Work Order: B17020465

Analyte	Result	Units	RL	%REC	Low Limit	High Limit	RPD	RPDLimit	Qual
Method: RA-05									Batch: RA228DW-0477
Lab ID: LCS-228-RA228DW-0477	Laboratory Control Sample								Run: TENNELEC-3_170214A 02/22/17 11:00
Radium 228	7.4	pCi/L	100		80	120			
Lab ID: MB-228-RA228DW-0477	Method Blank								Run: TENNELEC-3_170214A 02/22/17 11:00
Radium 228	0.2	pCi/L							U
Radium 228 precision (±)	0.7	pCi/L							
Radium 228 MDC	0.7	pCi/L							
Lab ID: C17020316-001BMS	Sample Matrix Spike								Run: TENNELEC-3_170214A 02/22/17 11:00
Radium 228	16	pCi/L	91		70	130			
Lab ID: C17020316-001BMSD	Sample Matrix Spike Duplicate								Run: TENNELEC-3_170214A 02/22/17 11:00
Radium 228	15	pCi/L	84		70	130	6.5	20	

Qualifiers:

RL - Analyte reporting limit.
MDC - Minimum detectable concentration

ND - Not detected at the reporting limit.
U - Not detected at minimum detectable concentration



Work Order Receipt Checklist

Lehrkinds Big Spring

B17020465

Login completed by: Gina McCartney

Date Received: 2/8/2017

Reviewed by: BL2000\tedwards

Received by: qej

Reviewed Date: 2/9/2017

Carrier name: Return-UPS Ground N/C

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

Standard Reporting Procedures:

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

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

Contact and Corrective Action Comments:

The Radio Chemistry analysis for sample Spring Water (Drinking) was subsampled and preserved in lab.

Sample collection date and time starts at the time of subsampling and preservation per Wynn Pippin, Energy Laboratory Project Manager. Sample were subsampled and preserved on 2/8/17 at 10:50.

Two of the three containers/coolers were received with custody seals on them.

The container temperature for Cooler 2 was 0.2°C with no ice and Cooler 3 was -0.8°C with no ice.

The Temperature Blank temperature for Cooler 1 was -1.6°C with Blue Ice.



Chain of Custody & Analytical Request Record

www.energylab.com

Page 1 of 1

Account Information (Billing information)

Company Name Lehckinds Big Spring Water
 Contact Don Cates
 Phone (406) 538-3433
 Mailing Address 201 1st Ave No
 City, State, Zip Leavittown MT 59457
 Email Randerson@Lehckinds.com
 Receive Invoice Hard Copy Email
 Purchase Order 7155 Quote 109632
 Bottle Order

Report Information (if different than Account Information)

Company Name Lehckinds Inc
 Contact Rae Sising
 Phone 406 586-2029
 Mailing Address 1715 N. Route
 City, State, Zip Bozeman MT 59719
 Email r.sising@Lehckinds
 Receive Report Hard Copy Email
 Special Report Formats: LEVEL IV NELAC EDD/EDT (contact laboratory) Other

Comments

Rad Chem
 ANALYSIS ONLY
 ON TMS
 WORK ORDER
 gm 2-8-17

Project Information

Project Name, PWSID, Permit, etc. MT 0001229
 Sampler Name Don Cates Sampler Phone 366-2161
 Sample Origin State MT EPA/State Compliance Yes No
 MINING CLIENTS, please indicate sample type
 Byproduct 11 (e)2 material Unprocessed ore (NOT ground or refined)*

Matrix Codes

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

Analysis Requested

Analysis Requested	Drinking Water	Hot Springs	Metals Total	Pathogens	Microbiol	Heavy Metals	Trace Metals	Other
Drinking Water	X	X	X	X	X	X	X	X
Hot Springs	X	X	X	X	X	X	X	X
Metals Total	X	X	X	X	X	X	X	X
Pathogens	X	X	X	X	X	X	X	X
Microbiol	X	X	X	X	X	X	X	X
Heavy Metals	X	X	X	X	X	X	X	X
Trace Metals	X	X	X	X	X	X	X	X
Other	X	X	X	X	X	X	X	X

Sample Identification

Sample Identification (Name, Location, Interval, etc.)	Collection Date	Time	Number of Containers	Matrix (See Codes Above)
1 4/1 plastic gallons	2-7-17	9:30AM	4	
2 Drinking	2-7-17	8:15AM	2	
3 2/1 gallon plastic				
4 1/2 liter plastic	2-7-17	10:00AM	1	
5 1-250 ml Plastic	2-7-17	10:00AM	1	
6 1-250 ml Plastic	2-7-17	10:00AM	1	
7 1-250 ml Plastic	2-7-17	10:00AM	1	
8 1-250 ml Plastic	2-7-17	10:00AM	1	
9				
10				

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

ELI LAB ID Laboratory Use Only
B1702046500
 RUSH TAT
 Separate work order

Custody Record MUST be signed

Relinquished by (print) Don Cates
 Relinquished by (print) Don Cates
 Date/Time 2-7-17 10:30am
 Signature [Signature]

Shipped By

Cooler ID(s) Custody Seals Y N C B
 Receipt Temp °C Intact Y N
 Temp Blank Y N On Ice Y N
 Payment Type Check Cash CC
 Amount \$
 Receipt Number (cash/check only)

Received by (print) Quinn Jones
 Received by Laboratory (print) Quinn Jones
 Date/Time 2/8/17 09:15
 Signature [Signature]

LABORATORY USE 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.