Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528
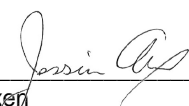
Customer ID: 20040H
Account ID: Z01034

Stuart Nielson
Colorado Analytical Laboratories, Inc.
10411 Heinz Way
Commerce City, CO 80640

ANALYTICAL REPORT

Report may only be copied in its entirety.
Results reported herein relate only to discrete samples
submitted by the client. Hazen Research, Inc. does not warrant
that the results are representative of anything other than the
samples that were received in the laboratory

By:_____

Jessica Axen
Analytical Laboratories Director

An Employee-Owned Company

Hazen Research, Inc.
4601 Indiana Street
Golden, CO 80403 USA
Tel: (303) 279-4501
Fax: (303) 278-1528

Lab Control ID: 21M03471
Received: Nov 18, 2021
Reported: Dec 21, 2021
Purchase Order No.
None Received

Customer ID: 20040H
Account ID: Z01034

ANALYTICAL REPORT

Stuart Nielson
Colorado Analytical Laboratories, Inc.

Lab Sample ID			21M03471-001					
Customer Sample ID			**211117042-01** - McDermott Property - 1					
			sampled on 11/16/21 @ 0849					
				Precision*	Detection		Analysis	
Parameter	Units	Code	Result	+/-	Limit	Method	Date / Time	Analyst
Radium-226	**pCi/L**	**T**	1.3	0.4	0.2	SM 7500-Ra B	12/10/21 @ 0910	KT
Radium-228	**pCi/L**	**T**	3.8	1.0	0.3	EPA Ra-05	12/14/21 @1228	JR

Certification ID's: CO/EPA CO00008

*Variability of the radioactive decay process (counting error) at the 95% confidence level, 1.96 sigma.

Codes: (T) = Total (D) = Dissolved (S) = Suspended (R) = Total Residual (AR) = As Received < = Less Than

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY   Date: 12/10/2021

Batch QC Summary Form

Analyte: Radium-226

Control Standard/LFB: ID: C1-002   pCi/mL: 23   (use 2 diluted)

Spike Solution: ID: C1-002   pCi/mL: 23   (use 2 mL)

Spike Recovery Calculation: Sample: 21M03478-02a

Calculation: <u>(46.4)   (1.000)   -   (0.1)   (1.000)</u>   x 100 =   101%
                                          46

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap	x		

* Required for batch size greater than 10 samples.

Conclusions:

    x   Batch QC Passes**
        Batch QC Fails
        Batch QC Passes, with exceptions**:

        Reruns Required:

        Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical methods and procedures. State Maximum Contamination Levels (MCLs) are not eveluted in this report.

Batch Listing by Lab Control Number:

21M02672	21M03514
21M03470	21M03515
21M03471	21M03517
21M03472	21M03539
21M03473	21M03540
21M03475	21M03554
21M03478	
21M03497	
21M03500	
21M03511	

Evaluator:

Roxane Sullivan

12/16/2021
Date

HAZEN RESEARCH, INC.
RADIOCHEMISTRY LABORATORY   Date: 12/14/2021

Batch QC Summary Form

Analyte: Radium-228

Control Standard/LFB: ID: C6-001   pCi/mL: 13.3   (use 10 diluted)

Spike Solution: ID: C6-001   pCi/mL: 13.3   (use 10 mL)

Spike Recovery Calculation: Sample: 21M03462-1c

Calculation: $\dfrac{(159.5)\ (0.890)\ \ -\ \ (0.4)\ (0.890)}{133}$ x 100 =   106%

Batch QC Evaluation:

Parameter	Criteria	Pass	Fail	N/A
Control Std./LFB	+/- 20 %	x		
Spike Recovery	80 - 120 %	x		
Blank	< or = 3 x Uncertainty	x		
Duplicate 1	95% confidence interval overlap	x		
Duplicate 2 *	95% confidence interval overlap			x

* Required for batch size greater than 10 samples.

Conclusions:

_____**x**_____   Batch QC Passes**
_____   Batch QC Fails
_____   Batch QC Passes, with exceptions**:

Reruns Required: _____

Narrative:

**All QC data provided in this section of the report met the acceptance criteria specified in the analytical
methods and procedures. State Maximum Contamination Levels (MCLs) are not evaluted in
this report.

Batch Listing by Lab Control Number:

21M03440	_____
21M03462	_____
21M03471	_____
21M03472	_____
21M03517	_____
_____	_____
_____	_____
_____	_____
_____	_____

Evaluator:

Roxane Sullivan _____

                    12/20/2021
                    _____
                    Date

Colorado Analytical
LABORATORIES, INC.

Sub-Lab Chain of Custody Form

ZLM03471

Report To Information	Bill To Information (If different from report to)	Project Name
Company Name: Colorado Analytical Laboratory		McDermott Property
Report To: Stuart Nielson		
E-Mail: stuartnielson@coloradolab.com		

Address:	Address:	CAL TASK	Compliance Samples: Yes ☐ No ☑
10411 Heinz Way		211117042	Submit Data to CDPHE: Yes ☐ No ☑
Commerce City, CO 80640		JAK	
Phone: 303-659-2313			

Tests Requested

Sample Date/Time		Sample ID	Matrix	Radium 226 (Sub)	Radium 228 (Sub)																							Container Type
																												3 - 1L Cylinder - HNO3
11/16/21	8:49 AM	211117042-01 - 1	Water - Drinking	X	X																							

Comment:

Rec'd pres.

FedEx
5446 7776 0406

Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:	Relinquished by: (Signature)	Date: Time:	Received by: (Signature)	Date: Time:
	11/18/21 900		11/18/21 1600				