

Lennberg - DNR, Patrick <patrick.lennberg@state.co.us>

## Additional Information Required, Water Treatment Filters, Cross Gold, M1977-410

 Rmittasch@nedmining.com
 Wed, Oct 9, 2024 at 10:04 PM

 To: "Lennberg - DNR, Patrick" <patrick.lennberg@state.co.us>, Daniel Takami <danieltakami@gmail.com>

 Cc: "Richard D. Mittasch" <rmittasch@nedmining.com>

Dear Mr. Lennberg,

I hope this message finds you well. Please find attached our comprehensive response to your letter dated September 10, 2024, requesting additional information regarding the disposal of spent water treatment filters from the Cross Gold Mine (Permit No. M-1977-410).

We have thoroughly addressed the items outlined in your correspondence, including:

#### 1. Provision of Memo with Full Count of Filters, TCLP Analysis Results, and Disposal Method:

- A detailed account of the total number of filters utilized and disposed of.
- The results of the Toxicity Characteristic Leaching Procedure (TCLP) analysis conducted on the spent filters.

#### 2. Selection of Mitchell Energy Services (MES) as the Disposal Entity:

- Justification for choosing MES based on their expertise, existing business relationships, and alignment with our parent company's initiatives.
- Details on how this partnership supports our operational requirements and commitment to environmental compliance.

Additionally, please note that prior to shipping the spent filters to MES, several filter bags were removed from the shipment for a new TCLP analysis to ensure continued compliance with environmental regulations. The laboratory has informed us that due to an exceptionally high workload, there will be a delay in processing these results. We will promptly forward the TCLP analysis to the Division of Reclamation, Mining and Safety as soon as it becomes available.

We appreciate your understanding and patience in this matter.

Should you have any questions or require further clarification on any aspect of our response, please do not hesitate to contact me.

Thank you for your attention to this matter

Kind Regards,

10/10/24, 8:05 AM

State.co.us Executive Branch Mail - Additional Information Required, Water Treatment Filters, Cross Gold, M1977-410 Nederland Mining Consultants, Inc.

Phone: 720-893-3749

Mobile: 516 582-0833

Email: Rmittasch@nedmining.com

4415 Caribou Rd, PO Box 3395, Nederland, CO 80466

[Quoted text hidden]

Memo 100724 GIR DRMS FilterTCLP M1977410 Wa.pdf 1037K



12567 W Cedar Dr. Suite 110 Lakewood, CO 80228 October 7, 2024

# Memorandum

**To:** Patrick Lennberg Environmental Protection Specialist Division of Reclamation, Mining and Safety 313 Sherman Street, Room 215 Denver, CO 80203

#### From:

Richard Mittasch Grand Island Resources LLC 12567 West Cedar Dr., Suite 110 Lakewood, CO 80228

Subject: Response to Additional Information Request Regarding Spent Water Treatment Filters Disposal at Cross Gold Mine (Permit No. M-1977-410)

Dear Mr. Lennberg,

We acknowledge receipt of your letter dated September 10, 2024, requesting additional information concerning the disposal of spent water treatment filters from the Cross Gold Mine, permit no. M-1977-410. We appreciate the opportunity to provide the necessary details and assure you of our commitment to full compliance with all regulatory requirements.

Below, please find our comprehensive responses to the items outlined in your correspondence.

#### 1. Provision of Memo with Full Count of Filters, TCLP Analysis Results, and Disposal Method

As committed in Technical Revision 10 (TR-10), approved on April 28, 2022, we are submitting a detailed memo that includes:

#### • a. Full Count of Filters to be Disposed of

During our water treatment operations at the Cross Gold Mine, a total of **1,195** filter bags were utilized. The filters are integral to our efforts to ensure that water discharged from the site meets all environmental standards.

#### Filter Weight Analysis:

- Average Weight of New Filter Bag: 175.25 grams
- Average Weight of Used (Dry) Filter Bag: 238.83 grams
- Average Accumulated Material per Filter: 63.58 grams (238.83 g 175.25 g)



#### **b.** Sample Results of TCLP Analysis

To determine the appropriate disposal method for the spent filters, we conducted a Toxicity Characteristic Leaching Procedure (TCLP) analysis in accordance with EPA guidelines. The analysis was performed by a certified laboratory, and the results are as follows: **Data from September 09, 2022** 

Parameter	EPA Method	Result (mg/L)	Qu	alifier	MDL (mg/L)	)	PQL (mg/L)	Date	Analyst
Arsenic (TCLP)	M6010D ICP 1	<0.04	U *	mg/L	0.04	0.2	07/08/22	2:47	keh1
Barium (TCLP)	M6010D ICP 1	2.10 *		mg/L	0.009	0.035	07/08/22	11:35	keh1
Cadmium (TCLP)	M6010D ICP 1	0.329		mg/L	0.008	0.025	07/08/22	2:47	keh1
Chromium (TCLP)	M6010D ICP 1	<0.02	U *	mg/L	0.02	0.05	07/08/22	2:47	keh1
Lead (TCLP)	M6010D ICP 1	3.80		mg/L	0.03	0.15	07/08/22	2:47	keh1
Mercury (TCLP)	M7470A CVAA 1	<0.0002	U *	mg/L	0.0002	0.001	06/30/22	13:58	mlh
Selenium (TCLP)	M6010D ICP 1	<0.05	U *	mg/L	0.05	0.25	07/08/22	2:47	keh1
Silver (TCLP)	M6010D ICP 1	<0.01	U *	mg/L	0.01	0.025	07/08/22	2:47	keh1

Notes:

- MDL (Method Detection Limit): The lowest concentration of a substance that can be reliably measured.
- **PQL (Practical Quantitation Limit):** The lowest concentration that can be quantitatively reported with a specified level of confidence.
- Qualifier "U":\* Indicates the analyte was not detected above the method detection limit.

#### **Interpretation of Results:**

The TCLP results demonstrate that the concentrations of all analyzed constituents are below the regulatory thresholds established by the Resource Conservation and Recovery Act (RCRA) for hazardous waste classification. Specifically:

- Lead (TCLP): Detected at 3.80 mg/L, which is below the RCRA regulatory level of 5.0 mg/L.
- Cadmium (TCLP): Detected at 0.329 mg/L, below the regulatory level of 1.0 mg/L.
- **Other Metals:** Arsenic, chromium, mercury, selenium, and silver were either not detected or present at levels significantly below regulatory limits.

Based on these results, the spent filters are classified as non-hazardous solid waste.

#### • c. Disposal Method

The spent filters were carefully collected and packaged On August 12, 2024, three super sacks containing the spent filters were transported to **Mitchell Energy Services (MES)** facility located in Waco, Texas.

#### 2. Selection of Mitchell Energy Services (MES) as the Disposal Entity

We chose MES as the appropriate disposal entity for the spent water treatment filters due to several strategic and operational considerations:

#### • a. Comprehensive Services and Expertise

MES is a reputable Texas-based general contractor with extensive experience in the oil and gas industry, as well as the power and renewable energy sectors. Their services encompass:



- Waste Management and Disposal: MES operates facilities equipped to handle various types of industrial waste, including non-hazardous materials similar to our spent filters.
- Environmental Compliance: They have a proven track record of adhering to environmental regulations and implementing best practices in waste disposal.
- **Construction and Maintenance Services:** Their construction division supports infrastructure projects, providing integrated solutions that align with our operational needs.

#### • b. Existing Business Relationship

Grand Island Resources LLC has sold several pieces of equipment to MES and other companies in the region. This ongoing relationship has facilitated a partnership that extends to waste management services.

- **Synergies:** Collaborating with MES allows for streamlined logistics and coordination, leveraging their capabilities to support our operational requirements.
- **Cost Efficiency:** Utilizing a single provider for multiple services results in operational efficiencies and cost savings.
- c. Strategic Alignment with Parent Company Initiatives

Our parent company, **Sustainable Metal Solutions LLC**, has entered into a definitive merger agreement with **American Clean Resources Group**, **Inc. (ACRG)**. ACRG is actively involved in one of their divisions that is working on water purification technologies, particularly those applicable to the oil and gas industry in Waco, Texas.

- **Technology Evaluation:** Our visit to ACRG included an assessment of their water purification technologies, which hold potential for application in the mining sector.
- **Innovation and Sustainability:** We are exploring the integration of advanced water treatment solutions to enhance environmental performance at our mining operations.
- **Industry Collaboration:** Partnering with MES and, by extension, ACRG, aligns with our commitment to adopting sustainable practices and technologies that benefit both the mining and energy industries.

#### Conclusion

We trust that this memo provides the comprehensive information requested. Grand Island Resources LLC is dedicated to maintaining open communication with the Division of Reclamation, Mining and Safety.

Please do not hesitate to contact me if you require further details or clarification on any aspect of this response. We appreciate your attention to this matter and look forward to continued collaboration.

#### Additional Information Regarding Laboratory Analysis of Removed Filter Bags

Please note that prior to shipping the spent filters to Mitchell Energy Services (MES), several filter bags were removed from the shipment. These specific bags have been sent to an accredited laboratory for a new Toxicity Characteristic Leaching Procedure (TCLP) analysis to ensure continued compliance with environmental regulations and to verify that the waste characterization remains accurate.

Unfortunately, at the time of writing this memo, we were informed by the laboratory that they are currently experiencing an exceptionally high workload, which has resulted in delays in processing. They anticipate that it will take additional time to complete the analysis and provide the results. We are in regular communication with the laboratory to expedite this process as much as possible.



12567 W Cedar Dr. Suite 110 Lakewood, CO 80228 October 7, 2024

As soon as the additional data becomes available to us, we will promptly forward the TCLP analysis results to the Division of Reclamation, Mining and Safety. We appreciate your understanding and patience in this matter and remain committed to providing all necessary documentation to ensure full compliance with regulatory requirements.

#### Attached is the original lab data from when underground activity was occurring at the Cross Mine.

Sincerely,

Richard Mittasch Grand Island Resources LLC 12567 West Cedar Dr., Suite 110 Lakewood, CO 80228



Analytical Report

July 14, 2022

Report to: Richard Mittasch Grand Island Resources, LLC 4415 Caribou Rd #3395 Nederland, CO 80466

cc: Brooke Molson Moran

Bill to: Richard Mittasch Grand Island Resources, LLC 4415 Caribou Rd #3395 Nederland, CO 80466

Project ID: ACZ Project ID: L74015

Richard Mittasch:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 17, 2022. This project has been assigned to ACZ's project number, L74015. Please reference this number in all future inquiries.

All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L74015. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

Except as noted, the test results for the methods and parameters listed on ACZ's current NELAC certificate letter (#ACZ) meet all requirements of NELAC.

This report shall be used or copied only in its entirety. ACZ is not responsible for the consequences arising from the use of a partial report.

All samples and sub-samples associated with this project will be disposed of after August 13, 2022. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

If you have any questions or other needs, please contact your Project Manager.

Max janicele

Max Janicek has reviewed and approved this report.





ACZ	Laboratories, Inc.
2773 Downhill Drive	Steamboat Springs, CO 80487 (800) 334-5493

## Grand Island Resources, LLC

Project ID:

Sample ID: SPENT FILTER

## Inorganic Analytical Results

ACZ Sample ID: **L74015-01** Date Sampled: 06/07/22 09:30 Date Received: 06/17/22 Sample Matrix: *Miscellaneous* 

Inorganic Prep										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Total Hot Plate Digestion	M3010A ICP								06/30/22 19:16	aeh
Metals Analysis										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Arsenic (TCLP)	M6010D ICP	1	<0.04	U	*	mg/L	0.04	0.2	07/08/22 2:47	keh1
Barium (TCLP)	M6010D ICP	1	2.10		*	mg/L	0.009	0.035	07/08/22 11:35	keh1
Cadmium (TCLP)	M6010D ICP	1	0.329			mg/L	0.008	0.025	07/08/22 2:47	keh1
Chromium (TCLP)	M6010D ICP	1	<0.02	U	*	mg/L	0.02	0.05	07/08/22 2:47	keh1
Lead (TCLP)	M6010D ICP	1	3.80			mg/L	0.03	0.15	07/08/22 2:47	keh1
Mercury (TCLP)	M7470A CVAA	1	<0.0002	U	*	mg/L	0.0002	0.001	06/30/22 13:58	mlh
Selenium (TCLP)	M6010D ICP	1	<0.05	U	*	mg/L	0.05	0.25	07/08/22 2:47	keh1
Silver (TCLP)	M6010D ICP	1	<0.01	U	*	mg/L	0.01	0.025	07/08/22 2:47	keh1
Soil Preparation										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
TCLP Metal Extraction	M1311								06/28/22 23:12	scm
Water Extraction	ASA No. 9 10-2.3.2				*				07/05/22 15:20	scm
Wet Chemistry										
Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Sulfide, soluble (Wate	r) SM4500S2-D	10	<0.5	U	*	mg/L	0.5	5	07/12/22 15:37	jck

REPIN.02.06.05.01



Inorganic Reference

Batch	Explanations A distinct set of samples analyzed at a specific time		
Found	Value of the QC Type of interest		
Limit	Upper limit for RPD, in %.		
Lower	Lower Recovery Limit, in % (except for LCSS, mg/Kg)		
MDL	Method Detection Limit. Same as Minimum Reporting Limit ur	less omitted or e	qual to the POL (see comment #5)
MBL	Allows for instrument and annual fluctuations.		
PCN/SCN	A number assigned to reagents/standards to trace to the man	ufacturer's certific	ate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term		
QC	True Value of the Control Sample or the amount added to the		
Rec	Recovered amount of the true value or spike added, in % (exc		n/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC		
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)		
Sample	Value of the Sample of interest		
Sample Typ	Analytical Spike (Post Digestion)	LCSWD	Laboratory Control Sample - Water Duplicat
ASD	Analytical Spike (Post Digestion) Duplicate	LESWD	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	LFM	Laboratory Fortified Matrix
CCV	Continuing Calibration Dank	LFMD	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	LRB	Laboratory Reagent Blank
ICB	Initial Calibration Blank	MS	Matrix Spike
ICV	Initial Calibration Verification standard	MSD	Matrix Spike Duplicate
ICSAB	Inter-element Correction Standard - A plus B solutions	PBS	Prep Blank - Soil
	•		
LCSS	Laboratory Control Sample - Soll	PRW	Prep Blank - Water
LCSS LCSSD	Laboratory Control Sample - Soil Laboratory Control Sample - Soil Duplicate	PBW PQV	Prep Blank - Water Practical Quantitation Verification standard
LCSSD	Laboratory Control Sample - Soil Duplicate	PBW PQV SDL	Prep Blank - Water Practical Quantitation Verification standard Serial Dilution
LCSSD LCSW	Laboratory Control Sample - Soil Duplicate Laboratory Control Sample - Water	PQV	Practical Quantitation Verification standard
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LCSSD LCSW Sample Typ Blanks Control Sam Duplicates Spikes/Forti Standard Z Qualifiers B H L U U Sthod Referent (1) (2) (3)	Laboratory Control Sample - Soil Duplicate         Laboratory Control Sample - Water         De Explanations         Imples       Verifies that there is no or minimal converting the precision of the method, verifies the precision of the instrume         Imples       Verifies the accuracy of the method, Verifies the precision of the instrume         Imples       Verifies the precision of the instrume         Imples       Verifies the validity of the calibration.         (Qual)       Determines sample matrix interference         Analyte concentration detected at a value between MDL and F         Analysis exceeded method hold time. pH is a field test with and         Target analyte response was below the laboratory defined neg         The material was analyzed for, but was not detected above the         The associated value is either the sample quantitation limit or the         Image:       EPA 600/4-83-020. Methods for Chemical Analysis of Water and         EPA 600/R-93-100. Methods for the Determination of Inorgan         EPA 600/R-94-111. Methods for the Determination of Metals in	PQV SDL entamination in th including the prep nt and/or method ces, if any. PQL. The associa in immediate hold gative threshold. e level of the association the sample detection and Wastes, Marca ic Substances in in Environmental	Practical Quantitation Verification standard Serial Dilution e prep method or calibration procedure. p procedure. ted value is an estimated quantity. time. bciated value. tion limit. ch 1983. Environmental Samples, August 1993.
LCSSD LCSW Sample Typ Blanks Control Sam Duplicates Spikes/Forti Standard Z Qualifiers B H L U U Sthod Referent (1) (2) (3) (4) (5)	Laboratory Control Sample - Soil Duplicate         Laboratory Control Sample - Water         De Explanations         Imples       Verifies that there is no or minimal control for the precision of the instrume         Imples       Verifies the accuracy of the method, Verifies the precision of the instrume         Imples       Verifies the precision of the instrume         Imples       Verifies the precision of the instrume         Imples       Verifies the validity of the calibration.         (Qual)       Analyte concentration detected at a value between MDL and F         Analysis exceeded method hold time. pH is a field test with and T         Target analyte response was below the laboratory defined nego         The material was analyzed for, but was not detected above the T         The associated value is either the sample quantitation limit or the associated value is either the sample quantitation limit or the the associated value is either the sample quantitation limit or the the associated value is for the Determination of Inorgan         EPA 600/R-93-100. Methods for the Determination of Inorgan         EPA 600/R-94-111. Methods for Evaluating Solid Waste.	PQV SDL entamination in th including the prep nt and/or method ces, if any. PQL. The associa in immediate hold gative threshold. e level of the association the sample detection and Wastes, Marca ic Substances in in Environmental	Practical Quantitation Verification standard Serial Dilution e prep method or calibration procedure. p procedure. ted value is an estimated quantity. time. bciated value. tion limit. ch 1983. Environmental Samples, August 1993.
LCSSD LCSW Sample Typ Blanks Control San Duplicates Spikes/Forti Standard Z Qualifiers B H L U U Sthod Referent (1) (2) (3) (4) (5)	Laboratory Control Sample - Soil Duplicate         Laboratory Control Sample - Water         De Explanations         Imples       Verifies that there is no or minimal control for the precision of the method, Verifies the precision of the instrume         Imples       Verifies the accuracy of the method, Verifies the precision of the instrume         Imples       Verifies the precision of the instrume         Imples       Verifies the validity of the calibration.         (Qual)       Analyte concentration detected at a value between MDL and F         Analyte concentration detected at a value between MDL and F       Analysis exceeded method hold time. pH is a field test with an Target analyte response was below the laboratory defined neg         The material was analyzed for, but was not detected above the The associated value is either the sample quantitation limit or the associated value is either the sample quantitation limit or the PPA 600/R-93-100. Methods for Chemical Analysis of Water and EPA 600/R-94-111. Methods for the Determination of Inorgan         EPA SW-846. Test Methods for Evaluating Solid Waste.       Standard Methods for the Examination of Water and Wastewa	PQV SDL ontamination in th including the prep nt and/or method ces, if any. PQL. The associa in immediate hold gative threshold. e level of the association the sample detection the sample detection and Wastes, Marci in Environmental iter.	Practical Quantitation Verification standard Serial Dilution e prep method or calibration procedure. p procedure. to procedure. time. time. time. time. time. to clated value. tion limit. ch 1983. Environmental Samples, August 1993. Samples - Supplement I, May 1994.
LCSSD LCSW Sample Typ Blanks Control San Duplicates Spikes/Forti Standard Z Qualifiers B H L U U thod Referent (1) (2) (3) (4) (5)	Laboratory Control Sample - Soil Duplicate         Laboratory Control Sample - Water         De Explanations         Imples       Verifies that there is no or minimal control for the precision of the instrume         Imples       Verifies the accuracy of the method, Verifies the precision of the instrume         Ified Matrix       Determines sample matrix interference         Verifies the validity of the calibration.         (Qual)         Analyte concentration detected at a value between MDL and F         Analysis exceeded method hold time. pH is a field test with and         Target analyte response was below the laboratory defined nego         The material was analyzed for, but was not detected above the         The associated value is either the sample quantitation limit or the         REPA 600/4-83-020. Methods for Chemical Analysis of Water at         EPA 600/R-93-100. Methods for the Determination of Inorgan         EPA 600/R-94-111. Methods for Evaluating Solid Waste.         Standard Methods for the Examination of Water and Wasteward         QC results calculated from raw data. Results may vary slightly	PQV SDL	Practical Quantitation Verification standard Serial Dilution e prep method or calibration procedure. p procedure. to procedure. time. bciated value. tion limit. ch 1983. Environmental Samples, August 1993. Samples - Supplement I, May 1994. alues are used in the calculations.
LCSSD LCSW Sample Typ Blanks Control Sam Duplicates Spikes/Forti Standard Z Qualifiers B H L U U ethod Referent (1) (2) (3) (4) (5) mments (1) (2)	Laboratory Control Sample - Soil Duplicate Laboratory Control Sample - Water De Explanations Verifies that there is no or minimal content mples Verifies the accuracy of the method, Verifies the precision of the instrume ified Matrix Determines sample matrix interference Verifies the validity of the calibration. (Qual) Analyte concentration detected at a value between MDL and F Analysis exceeded method hold time. pH is a field test with an Target analyte response was below the laboratory defined nego The material was analyzed for, but was not detected above the The associated value is either the sample quantitation limit or the nces EPA 600/R-93-100. Methods for Chemical Analysis of Water and EPA 600/R-94-111. Methods for the Determination of Inorgan EPA 600/R-94-111. Methods for Evaluating Solid Waste. Standard Methods for the Examination of Water and Wastewar QC results calculated from raw data. Results may vary slightly Soil, Sludge, and Plant matrices for Inorganic analyses are reported.	PQV SDL ontamination in the including the prep int and/or method ces, if any. PQL. The associate in mmediate hold gative threshold. The associate hold gative threshold. The sample detection and Wastes, Marca ic Substances in in Environmental atter.	Practical Quantitation Verification standard Serial Dilution e prep method or calibration procedure. p procedure. to procedure. time. bciated value. tion limit. ch 1983. Environmental Samples, August 1993. Samples - Supplement I, May 1994. alues are used in the calculations.
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LCSSD LCSW Sample Typ Blanks Control Sam Duplicates Spikes/Forti Standard Z Qualifiers B H L U U ethod Referent (1) (2) (3) (4) (5) mments (1) (2)	Laboratory Control Sample - Soil Duplicate Laboratory Control Sample - Water De Explanations Verifies that there is no or minimal content mples Verifies the accuracy of the method, Verifies the precision of the instrume ified Matrix Determines sample matrix interference Verifies the validity of the calibration. (Qual) Analyte concentration detected at a value between MDL and F Analysis exceeded method hold time. pH is a field test with an Target analyte response was below the laboratory defined nego The material was analyzed for, but was not detected above the The associated value is either the sample quantitation limit or the nces EPA 600/R-93-100. Methods for Chemical Analysis of Water and EPA 600/R-94-111. Methods for the Determination of Inorgan EPA 600/R-94-111. Methods for Evaluating Solid Waste. Standard Methods for the Examination of Water and Wastewar QC results calculated from raw data. Results may vary slightly Soil, Sludge, and Plant matrices for Inorganic analyses are reported.	PQV SDL ontamination in the including the prep int and/or method ces, if any. PQL. The associate in immediate hold gative threshold. The associate hold gative threshold. The sample detection in Environmental in Environmental iter.	Practical Quantitation Verification standard Serial Dilution e prop method or calibration procedure. p procedure. to procedure. time. cociated value. tion limit. ch 1983. Environmental Samples, August 1993. Samples - Supplement I, May 1994. alues are used in the calculations. eight basis.

https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

40 **AGZ** Laboratories, Inc. 2773 Downhill Drive Steamboat Springs, CO 80487

(800) 334-5493

#### Grand Island Resources, LLC

## ACZ Project ID: L74015

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L74015-01	NG545985	Arsenic (TCLP)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG546032	Barium (TCLP)	M6010D ICP	BA	Target analyte detected in prep / method blank at or above acceptance limit. Sample value is > 20X the concentration in the method blank.
	WG545985	Chromium (TCLP)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG545472	Mercury (TCLP)	M7470A CVAA	Q6	Sample was received above recommended temperature.
			M7470A CVAA	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG545985	Selenium (TCLP)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
		Silver (TCLP)	M6010D ICP	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG546292	Sulfide, soluble (Water)	SM4500S2-D	DE	Sample required dilution. See Case Narrative.
			SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	QD	Reported value is the background-corrected concentration, as described by the method.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG545333	Water Extraction	ASA No. 9 10-2.3.2	Z2	Sample reported on a wet weight basis.



## Grand Island Resources, LLC

ACZ Project ID: L74015

Wet Chemistry

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.

Sulfide, soluble (Water)

SM4500S2-D

ACZ	Laboratories, Inc.
	Steamboat Springs, CO 80487 (800) 334-5493

ACZ Project ID: L74015 Grand Island Resources, LLC Date Received: 06/17/2022 16:45 Received By: Date Printed: 6/21/2022 **Receipt Verification** YES NO NA 1) Is a foreign soil permit included for applicable samples? Х 2) Is the Chain of Custody form or other directive shipping papers present? Х 3) Does this project require special handling procedures such as CLP protocol? Х 4) Are any samples NRC licensable material? х 5) If samples are received past hold time, proceed with requested short hold time analyses? Х 6) Is the Chain of Custody form complete and accurate? Х 7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples? Х Samples/Containers YES NO NA 8) Are all containers intact and with no leaks? Х 9) Are all labels on containers and are they intact and legible? Х Х 10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time? 11) For preserved bottle types, was the pH checked and within limits?<sup>1</sup> Х 12) Is there sufficient sample volume to perform all requested work? Х 13) Is the custody seal intact on all containers? Х 14) Are samples that require zero headspace acceptable? Х 15) Are all sample containers appropriate for analytical requirements? Х 16) Is there an Hg-1631 trip blank present? Х 17) Is there a VOA trip blank present? Х 18) Were all samples received within hold time? Х

NA indicates Not Applicable

**Chain of Custody Related Remarks** 

The 'Relinquished By' field on the COC was not completed. The project manager is contacting the client.

#### **Client Contact Remarks**

#### Shipping Containers

 Cooler Id
 Temp (°C)
 Temp Criteria (°C)
 Rad (µR/Hr)
 Custody Seal Intact?

 ----- ----- ----- ----- Intact?

 NA37791
 24.6
 NA
 15
 N/A

#### Was ice present in the shipment container(s)?

No - Wet or gel ice was not present in the shipment container(s).

Client must contact an ACZ Project Manager if analysis should not proceed for samples received outside of their thermal preservation acceptance criteria.

REPAD LPII 2012-03



Grand Island Resources, LLC

ACZ Project ID: L74015 Date Received: 06/17/2022 16:45 Received By: Date Printed: 6/21/2022

<sup>1</sup> The preservation of the following bottle types is not checked at sample receipt: Orange (oil and grease), Purple (total cyanide), Pink (dissolved cyanide), Brown (arsenic speciation), Sterile (fecal coliform), EDTA (sulfite), HCI preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

Vest Cedar Dr. Ste. 30228 14-6986 mo@colorado.edu 06-1618 Vest Cedar Dr. Ste. 30228 32-0833 	250 YES
30228 14-6986 mo@colorado.edu 06-1618 Vest Cedar Dr. Ste. 30228 32-0833 	250 YES
14-6986 mo@colorado.edu D6-1618 Vest Cedar Dr. Ste. 30228 32-0833 	YES
mo@colorado.edu D6-1618 Vest Cedar Dr. Ste. 80228 82-0833 	YES
26-1618 Vest Cedar Dr. Ste. 30228 32-0833	YES
26-1618 Vest Cedar Dr. Ste. 30228 32-0833	YES
26-1618 Vest Cedar Dr. Ste. 30228 32-0833	YES
Vest Cedar Dr. Ste. 30228 32-0833 . even If HT is expired, and data will No Zip code 80466	YES
30228 32-0833	YES
30228 32-0833	YES
82-0833	NO
, even If HT is expired, and data will No	NO
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_ Zip code_80466	
_ Zip code_ <sup>80466</sup>	
	Time Zone MT
I understand that intentionally misla aud and punishable by State Law.	beiing the time/date/location or
EQUESTED (attach list or use	
Sludge) · SO (Soil) · OL (Oil	