ROCA HONDA RESOURCES LLC

February 20, 2020

Clint Chisler, Permit Lead
Mining Act Reclamation Program
Mining and Minerals Division
1220 South St. Francis Drive
Santa Fe, NM 87505

RE: Rio San Jose Characterization Work and Report; Roca Honda Mine, Permit Application No. MK025RN

Dear Mr. Chisler:

In response to requests from the New Mexico Environment Department for additional characterization of the Rio San Jose below the proposed point of discharge of treated mine water, Roca Honda Resources (RHR) is providing the attached supplement to previous baseline data reports. This supplement provides results of water sampling efforts and channel cross sections constructed last fall.

We appreciate MMD's coordination of the agency reviews and look forward to continuing cooperation as the permitting process moves forward. Please contact me at 208-354-0588 or Scott Bakken at 303-389-4132 with any questions.

Sincerely,

Michael Neumann
Sr. Project Consultant

cc: Jeff Lewellin, NMED MECS
Alan Klatt, NMED SWQB
Ashlynne Winton, NMED GWQB
Holland Shepherd, MMD MARP
Kurt Vollbrecht, NMED
Scott Bakken, Energy Fuels

REPORT FOR RIO SAN JOSE CHARACTERIZATION 2019 FIELD WORK

CHANNEL CROSS SECTIONS AND WATER QUALITY

GRANTS, NEW MEXICO

ROCA HONDA MINE

Permit to Mine MK025RN
Discharge Permit Application DP-1717

February 18, 2020

Submitted To:

New Mexico Mining and Minerals Division
Energy, Minerals and Natural Resources Department
&
New Mexico Environment Department
Ground Water Quality Bureau
&
U.S. Forest Service (Cibola National Forest)

Prepared by:

Roca Honda Resources, LLC
225 Union Blvd., Suite 600, Lakewood, CO 80228

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1.0 Introduction

This report presents the results of field work conducted by Roca Honda Resources, LLC (RHR) in September and October 2019 in the Rio San Jose (RSJ) channel. Channel cross sections were surveyed and surface water samples were collected according to RHR's "*Work Plan for Documentation of the Channel Characteristics and Water Quality of the Rio San Jose, August 2019, Revised 8/28/19, (Rev. 1)*" (2019 RSJ Work Plan). The Work Plan was developed with input from the New Mexico Environment Department (NMED) and approved via a letter from the New Mexico Mining and Minerals Division (MMD) dated September 13, 2019 as provided in Appendix A.

1.1 Background

RHR has proposed discharging treated water from dewatering of a proposed underground uranium mine into the RSJ near the Village of Milan in the Grants, New Mexico area as an alternative (Alternative 4) in the Environmental Impact Statement currently being prepared by the Cibola National Forest. In support of the permitting process, MMD and NMED requested additional documentation of current baseline conditions in the RSJ channel through the Village of Milan and the City of Grants.

The RSJ forms at the confluence of Bluewater Creek and Mitchell Draw approximately 10 miles northwest of the village of Milan and the RHR proposed discharge point. The RSJ receives water from the Bluewater Dam which flows down Bluewater Creek into the RSJ. Most of the RSJ channel above Grants is highly engineered and the channel has been straightened, dredged, and leveed for agricultural use and flood control. The RSJ is typically dry at the proposed discharge point and downstream through the city of Grants where a City well occasionally discharges into the channel. About six miles downstream to the east of Grants, the RSJ is typically flowing due to contributions from Horace Springs. The RSJ channel passes through both the Pueblo of Acoma and Laguna Pueblo as it flows southeast, to confluence with the Rio Puerco approximately 54 miles downstream of the proposed discharge point.

RHR's proposed mine plan includes building a water treatment plant at the mine site and piping treated mine water 19 miles from the mine site to the proposed RSJ discharge point upstream of the Stanley Street Bridge, near Skytop Park in the Village of Milan. This discharge plan is detailed in Addendum 1 to the Roca Honda Mine Baseline Data Report (July 2018), and is being evaluated as part of a Supplemental Environmental Impact Statement (SEIS) under the direction of the Cibola National Forest.

1.2 2015 RSJ Base line Data Collection (2017 RSJ Report)

RHR's first round of baseline data in the RSJ was collected in 2015 in accordance with an agency approved work plan and reported to MMD and NMED, in a document entitled "*Report for Findings of Water Quality and Sediment Chemistry along the Rio San Jose, September 2017*" (2017 RSJ Report). The 2017 RSJ Report provided detailed descriptions and pictures of nine RSJ sample sites and reported results of water quality, sediment chemistry, and sediment Synthetic Precipitation Leach Procedure analysis from the 2015 sampling event.

1.3 2019 RSJ Work Plan

The 2019 RSJ Work Plan scope was developed in response to NMED requests to collect a second round of RSJ characterization data, with a focus on the upper RSJ sample sites.

Four sample sites were chosen for measuring channel cross sections to document the physical characteristics of the RSJ stream channel in the vicinity of and immediately downstream of the discharge. The approved 2019 RSJ Work Plan committed to using the general procedure described by Rosgen and others (*Field Guide for Stream Classification*, Dave Rosgen and Lee Silvey 1998; page 33) for constructing full cross sections at the selected sites.

Additionally, the 2019 RSJ Work Plan called for surface water sampling (if flowing water was present) at five of the most upstream original RSJ sample sites. The approved 2019 RSJ Work Plan committed to standard sampling and laboratory procedures for a specified set of analytes chosen to characterize existing conditions in the RSJ. The analyte list was developed in response to results reported in the 2017 RSJ Report. The 2019 analyte list included selected radiochemistry, metals, and general chemistry for parameters with results greater than non-detect in the previous sampling event. Pesticides and organics were not previously detected, with the exception of one instance of Bis (2-cholorethyl) ether (BCEE) reported at the downstream sample site RSJ #8. Therefore, the 2019 RSJ Work Plan analyte list did not include pesticides and organics with the exception of sampling for BCEE at RSJ Site #7, the 2019 sampling station closest to RSJ #8.

Table 1 identifies the location and describes the nine sample sites identified in the original 2015 RSJ Work Plan. Table 1 additionally gives a summary description of the sites targeted in the 2019 RSJ Work Plan and provides a comparison of the actual field conditions found in both sample events. **Figure 1** provides a map view of the sample site locations.

Sample sites RSJ #1, #2, #4, and #5 were chosen for the 2019 sampling event to represent the section of the RSJ that is currently considered as intermittent/ephemeral. The proposed discharge will enter the RSJ in the segment described by NMED as "Rio San Jose (Grants BNSF RR crossing to headwaters) AU: NM-97.A_028 WQS: 20.6.4.98". This segment has been described in SWQB correspondence as non-perennial and is listed as intermittent, although a note in the *"Final 2016-2018 State of New Mexico Clean Water Act Section 303 (d)/Section 305(b) Integrated Report"* (NMIR) indicates this segment is "likely ephemeral". Additionally, the New Mexico "SWQB Mapper" tool identifies this segment as ephemeral.

Sample site RSJ #7 was chosen for the 2019 sampling event to represent the more downstream section of the RSJ that is currently classified as perennial though flowing water is typically present only when the Grants city well is discharging or following storm events. RSJ #7 is located in the segment approximately 5 miles down gradient of the proposed discharge point identified in the NMIR as "Rio San Jose (non-tribal HWY 117 to Grants BNSF RR crossing) AU:NM-9000.A_003 WQS: 20.6.4.99".

2.0 2019 Characterization Results

2.1 RSJ Channel Cross Sections and Characteristics

The physical characteristics of the RSJ stream channel were measured and described at four RSJ sample sites (RSJ #1, #2, #4, #5) in accordance with the approved 2019 RSJ Work Plan. RHR contracted the engineering firm Critical View Engineering, LLC (Critical View) to perform the channel survey and report results in accordance with the 2019 RSJ Work Plan. Critical View surveyed the channel locations on November 15, 2019 and prepared channel cross sections as reported in Appendix B.

2.2 Water Quality Results

RHR contracted the environmental firm INTERA to collect water samples in the RSJ. Following the approval of the 2019 RJS Work Plan in mid-September 2019, a number of field inspections were made in the in hopes of finding as many of the RSJ sampling sites with flowing water as possible. Unfortunately, precipitation was light and scattered at the end of September and October 2019 and the only station with flowing water this period was RSJ #7, the most downstream of the 2019 sample sites. On October 8, 2019 the decision was made to sample RSJ #7 flow and the stagnant water at RSJ #5 in order to get some background data in both the ephemeral and perennial sections for the season even though the other sites were dry. Appendix C provides a photographic log of field inspections of the sites on September 27 and October 6, 2019 and the sampling event that occurred on October 8th.

INTERA made field measurements and collected water samples according to the approved 2019 RSJ Work Plan. Results of the field measurements are presented in **Table 2.** Field sheets are provided in Appendix D.

All samples were sent to ACZ labs in Steamboat Springs, CO for analysis. A duplicate water sample for quality control was taken at RSJ #7 and labeled RSJ #17 by the INTERA environmental technicians. Both RSJ#7 and RSJ #17 samples were analyzed for the base suite of parameters plus BCEE in accordance with the 2019 Work Plan.

A pool of stagnant water was present at RSJ #5 so a sample was taken in order to gather some information in the RSJ ephemeral segment, even though the 2019 work plan indicated that only flowing water would be sampled. The sample at RSJ#5 was analyzed for the base suite of parameters in accordance with the 2019 Work Plan.

Table 3 provides a summary of sample results for selected parameters compared to the ephemeral standards for acute Aquatic Life (warm water) standards and Mt. Taylor Mine permit limits for reference. **Appendix E** provides the ACZ laboratory report for all parameters from samples taken at RSJ #5, RSJ # 7 and the duplicate RSJ #17. All water quality parameters were within ranges obtained from previous sampling. The results of the duplicate RSJ#17 are very similar to RSJ#7, as expected. BCEE was non-detect (<2 ug/l) for both RSJ#7 and the duplicate sample RSJ #17.

An electronic spreadsheet version of the results from the laboratory is available upon request.

Table 1 - RSJ Sampling Location Summary– RHR 2015 and 2019

Location	Description	State Plane NAD 83 Coordinates, NM Western Zone			2017 RSJ Report Summary (observations in 2015)	2019 Work Plan Scope (shaded rows)	2019 Field Sample Summary
		X	Y	Z			
RSJ #1	Upstream Stanley Road Bridge (approx. 1,000 ft. above proposed discharge point) – RSJ ephemeral segment	2704071.474	1525994.638	6526.274	No flow/no water sample, sediment samples collected	Channel cross section, water sample if flowing for base suite parameters	Cross section made, no flow/no water sample
RSJ #2	Downstream Stanley Road Bridge (proposed discharge point) – RSJ ephemeral segment	2703789.289	1525095.352		No flow/no water sample, sediment samples collected	Channel cross section, water sample if flowing for base suite parameters	Cross section made, no flow/no water sample
RSJ #3	Cedar Rd. – Milan – RSJ ephemeral segment	2703832.040	1518004.000		No flow/no water sample, sediment samples collected	*Not included in 2019 RSJ Work Plan*	*Not included in 2019 RSJ Work Plan*
RSJ #4	El Morro Rd at old USGS gauge 08343000 – RSJ ephemeral segment	2711796.186	1511769.314		Flow/water sample collected, sediment samples collected	Channel cross section, water sample if flowing for base suite parameters	Cross section made, no flow/no water sample
RSJ #5	Rio San Jose Park- RSJ ephemeral segment	2715967.689	1510583.591		No flow/no water sample, sediment samples collected	Channel cross section, water sample if flowing for base suite parameters	Cross section made, no flow/ stagnant water sample collected
RSJ #6	Dixie St. – RSJ perennial segment	2719411.599	1510817.826	6426.599	Flow/water sample collected, no sediment sample	*Not included in 2019 RSJ Work Plan*	*Not included in 2019 RSJ Work Plan*
RSJ #7	Nimitz Rd. Bridge – RSJ perennial segment	2722295.276	1508936.121	6403.079	Flow/water sample collected, sediment sample collected	Water sample if flowing for base suite parameters plus BCEE	Flow/ water sample collected with split labeled RSJ#17
RSJ #8	Former Wastewater Treatment Plant Discharge-RSJ perennial segment	2726106.831	1504362.936	6409.816	Flow/water sample collected, no sediment sample	*Not included in 2019 RSJ Work Plan*	*Not included in 2019 RSJ Work Plan*
RSJ #9	Lobo Canyon – RSJ tributary	2722185.392	1509992.114		No flow/no water sample, sediment samples collected	*Not included in 2019 RSJ Work Plan*	*Not included in 2019 RSJ Work Plan*

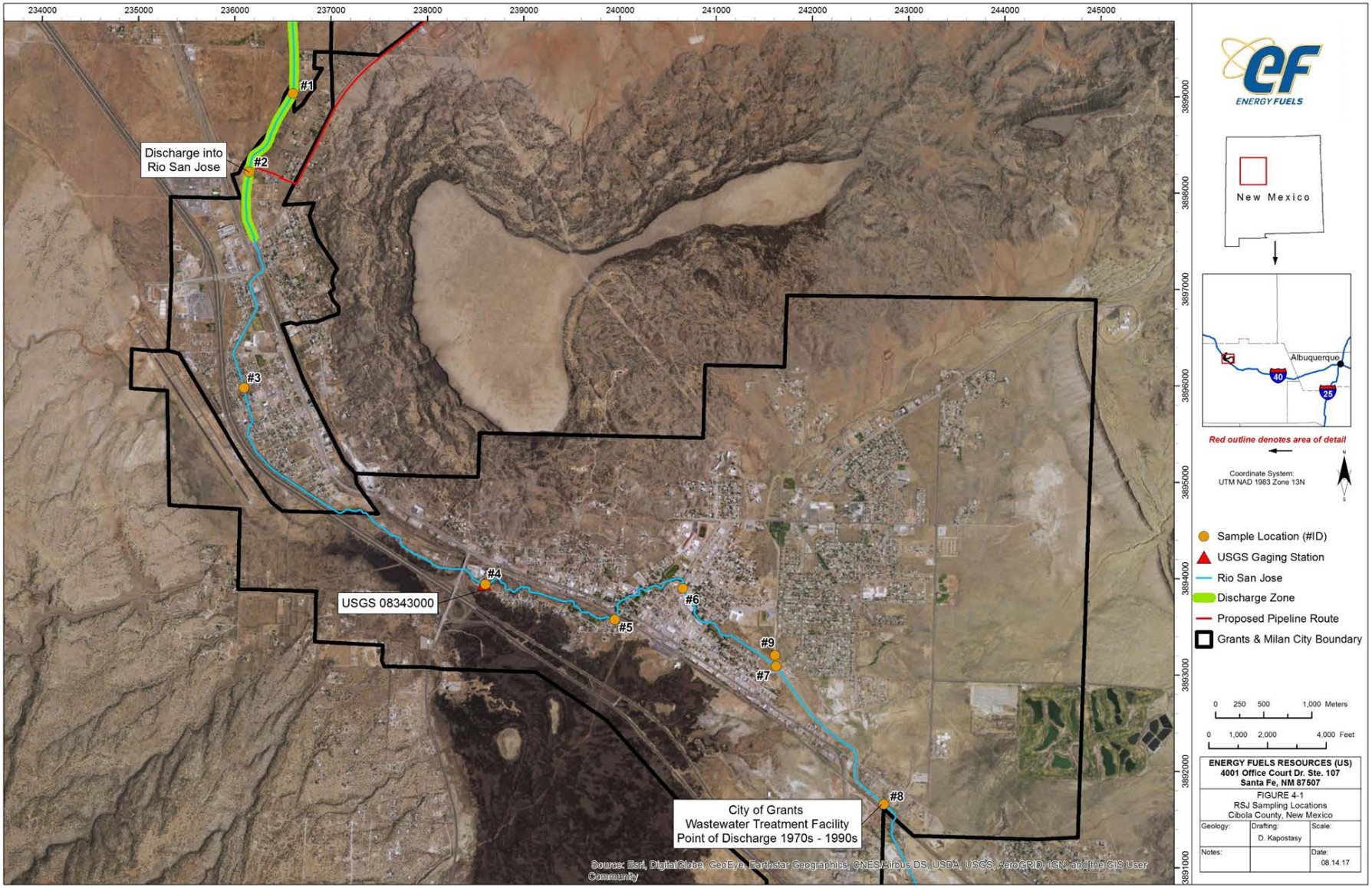


Figure 1 - RSJ Sampling Site Location Map

Table 2 – 2019 Sampling Field Parameters

Field Parameters	RSJ #5 Water Sample 10/8/2019	RSJ #7 Water Sample 10/8/2019	Units	Type
Turbidity	8.65	7.14	NTV	field measurement
TDS	856.7	1721.2	mg/L	calculation
Temp	21.1	16.5	C	field measurement
Salinity	0.65	1.365	ppt	calculation
Resistivity	0.76	0.38	Kohm/cm	calculation
pH	8.24	7.74	s.u.	field measurement
ORP	not measured	not measured		NA
Conductivity	1318	2648	uS/cm	field measurement
Atmospheric Pressure	0.8208	0.8241	atm	measurement
DO	7.88	8.44	mg/L	field measurement
DO%	88.5	87	%	field measurement

Table 3 - Selected 2019 Rio San Jose Water Quality Results

Selected Analyte	UNITS	NM Acute Aquatic Life ww (Ephemeral) *hardness 400	Mt Taylor 2016 NPDES Permit Av/Daily Max	2019 RSJ #5 (pool)	2019 RSJ #7 (flow)	2019 RSJ #17 (duplicate of RSJ #7)
Aluminum, total	mg/L		1.37/1.37	0.72	1.23	0.85
Aluminum, diss		3.421		0.0036	NA	NA
Boron, total	mg/L		5.0/5.0	0.35	1.03	1.03
Cadmium, total			0.00045/0.00045	<0.00005	0.00008	0.00009
Cadmium, diss		0.00538*		<0.00005	<0.00005	<0.00005
Cobalt, total	mg/L		1.0/1.0	0.00071	0.00142	0.00178
Copper, total	mg/L		0.029/0.029	0.0019	0.0008	<0.0008
Copper, dissolved	mg/l	0.05*		0.0013	<0.0008	<0.0008
Mercury, total	mg/L	0.001	0.00077/0.00077	<0.0002	<0.0002	<0.0002
Molybdenum, total	mg/L	7.92	1.895/1.895	0.002	0.0021	0.0019
Selenium, total	mg/L	0.02	0.005/0.005	0.0063	0.0002	0.0002
Uranium, total	mg/L		2.0/4.0	0.0068	0.0051	0.0047
Vanadium, total	mg/L		0.10/0.10	0.0048	0.0038	0.004
Zinc, total	mg/L		0.5/1.0	<0.01	<0.01	<0.01
Zinc, diss		0.564*		<0.01	<0.01	<0.01
Radium226+228, total	pCi/L		20/30	0.32	3.3	3.7
Gross Alpha	pCi/L		15/15	6.7	14	18
Radium226, diss	pCi/L		3/10	0.36	2.6	2.9
Radium 226, total	pCi/L		10/30	0.32	2.3	2.4
TSS	mg/L		20/30	32	11.0	11.0
TDS (calculated)	mg/L		x	898	1810	1790
Hardness as CaCO3, diss	mg/l			530	722	725

Appendix A
Approval Letters for 2019 RSJ Work Plan

State of New Mexico
Energy, Minerals and Natural Resources Department

Michelle Lujan Grisham
Governor

Sarah Cottrell Propst
Cabinet Secretary

Todd E. Leahy, JD, PhD
Deputy Cabinet Secretary

Mike Tompson, Acting Director
Mining and Minerals Division

Electronic Transmittal

September 13, 2019

Mr. Michael Neumann, Sr. Project Consultant
Energy Fuels Resources, Inc.
225 Union Blvd., Suite 600
Lakewood, CO 80228

RE: *Workplan for Documentation of the Channel Characteristics and Water Quality of the Rio San Jose*, August 2019 and Revised 8/28/19 (Rev. 1) Approval

Dear Mr. Neumann:

The Mining and Minerals Division ("MMD") and the Environment Department ("NMED") have reviewed the Roca Honda Resources ("RHR") *Workplan for Documentation of the Channel Characteristics and Water Quality of the Rio San Jose*, August 2019 and the revised 8/28/19 (Rev. 1) ("Workplan") MMD and NMED hereby approve the Workplan.

MMD Comments

1. MMD has no further comments

NMED Comments

1. Please review the comment from NMED's September 4, 2019 letter from the Surface Water Quality Bureau.

If you have any questions, please contact me at (505) 476-3413 or at clinton.chisler@state.nm.us.

Sincerely,

Clint Chisler
Permit Lead
Mining Act Reclamation Program ("MARP")

Enclosures: The New Mexico Environment Department Surface Water Quality Bureau Letter

cc: Jeff Lewellin, MECS
Alan Klatt, SWQB
Ashlyn Winton, GWQB
Holland Shepherd, MARP
Mine File (MK025RN)

NEW MEXICO
ENVIRONMENT DEPARTMENT

Harold Runnels Building
1190 Saint Francis Drive, PO Box 5469
Santa Fe, NM 87502-5469
Telephone (505) 827-2855
www.env.nm.gov

Michelle Lujan Grisham
Governor

Howie C. Morales
Lt. Governor

James C. Kenney
Cabinet Secretary

Jennifer J. Pruett
Deputy Secretary

MEMORANDUM

DATE: September 4, 2019

TO: Jeff Lewellin, Mining Act Team Leader, NMED-GWQB

FROM: Alan Klatt, Watershed Protection Section, NMED-SWQB

SUBJECT: Work Plan for Additional Characterization of the Rio San Jose, Baseline Data Report Addendum 1, Roca Honda Resources, LLC, McKinley County, MMD Permit No. MK025RN

The New Mexico Surface Water Quality Bureau (SWQB) received the August 2019 "Work Plan for Documentation of the Channel Characteristics and Water Quality of the Rio San Jose Revision 1" from Energy Fuels on August 29, 2019. The purpose of the work plan is to provide additional information in response to SWQB comments provided to Mining and Minerals Division (MMD) on October 29, 2018 regarding the "Baseline Data Report Addendum 1". SWQB, GWQB, MMD, and Energy Fuels held a phone conference on August 21, 2019 to discuss the first version of the work plan that was submitted on August 9, 2019.

SWQB's only comment is the recommendation that the survey be scheduled when surface water is most likely to be present. For example, the nearby gaging station indicates that August and September are the months with the greatest number of days with observed flow in recent decades.

For questions related to these comments, please contact Alan Klatt, SWQB, at 505-827-0388.

Appendix B
Channel Characteristics of Rio San Jose – Critical View Engineering Report

Channel Characteristics of Rio San Jose

In support of:

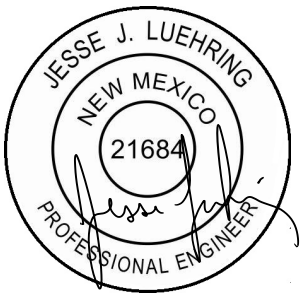
Roca Honda Mine Discharge Permit Application (DP-1717)- *"Work Plan for Documentation of Channel Characteristics and Water Quality of the Rio San Jose"*

November 2019

Data Collected and Report Prepared by:

Critical View Engineering, LLC
11501 Modesto Ave, NE
Albuquerque NM, 87122

CRITICAL VIEW ENGINEERING



11-25-19

Introduction

This report was developed in order to support the Roca Honda Mine Discharge Permit Application (DP-1717) recommended channel surveying of the Rio San Jose below the proposed point of treated mine water discharge. The intent is to set baseline cross-sections and channel characterizations of the identified ephemeral sections of the Rio San Jose that may see impacts from the proposed discharge. The locations analyzed were identified in the document prepared by Roca Honda Resources LLC, entitled '*Work Plan for Documentation of the Channel Characteristics and Water Quality of the Rio San Jose*', dated August 2019.

The locations where stream/channel characterizations and surveyed cross sections were performed are shown in the table below:

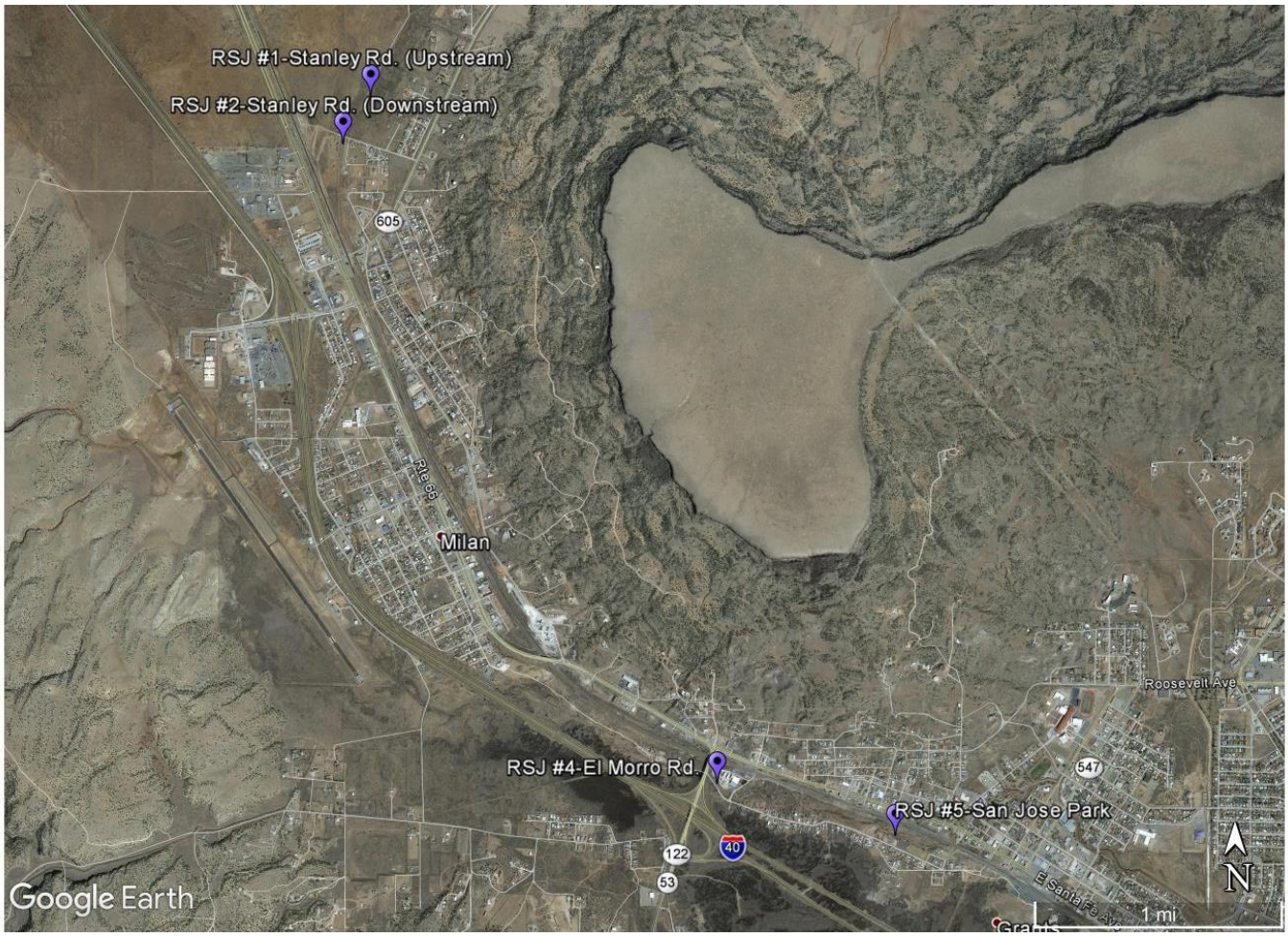
Location Name	*GPS Lat. & Long.*	*Location Notes*	*Channel Type*
RSJ #5: San Jose Park	35° 9'7.88"N, 107°51'31.73"W	Directly North of tennis court at San Jose Park on San Jose Dr.	Ephemeral Section; Natural Stream
RSJ #4: El Morro Rd. at old USGS Gaging Station	35° 9'19.14"N, 107°52'16.97"W	Approx. 400 ft Upstream of El Morro Rd. bridge, at old USGS gauging station	Ephemeral Section; Natural Stream
RSJ #2: Proposed Discharge Location, downstream of Stanley Rd. Bridge	35°11'32.76"N, 107°53'52.47"W	Approx. 150 ft downstream of Stanley Rd. bridge, near proposed discharge point	Ephemeral Section; Engineered Channel
RSJ #1: Upstream of Discharge Point, approx. 1000 ft.	35°11'42.84"N, 107°53'46.19"W	Approx. 1075 ft upsteam of Stanley Rd. bridge and proposed discharge point	Ephemeral Section; Engineered Channel

The following data was obtained in accordance with the policies and procedures outlined in the aforementioned work plan. Specifically, characteristics and classification data were obtained using the *Field Guide for Stream Classification* (Rosgen & Silvey 1998), for each of the locations. Data collection at each location included:

- Dimensional Cross Sections (Presented by location in summary below and in *Appendix A*)
- Maximum Depth
- Bankfull Elevations & Width
- Flood Prone Area (2X Bankfull) Elevations & Width
- Entrenchment Ratio
- Width-to-Depth Ratio
- Stream Gradient
- Sinuosity
- Presence of water, fish, benthic macroinvertebrates, filamentous algae, hydric soils, sediment on plants or debris, and presence of rooted plants.

- Photographs of stream parallel and perpendicular to stream flow

Location Map



Locations Surveyed

RSJ #5—San Jose Park

Time/Date: November 15th 2019, 9:30 AM

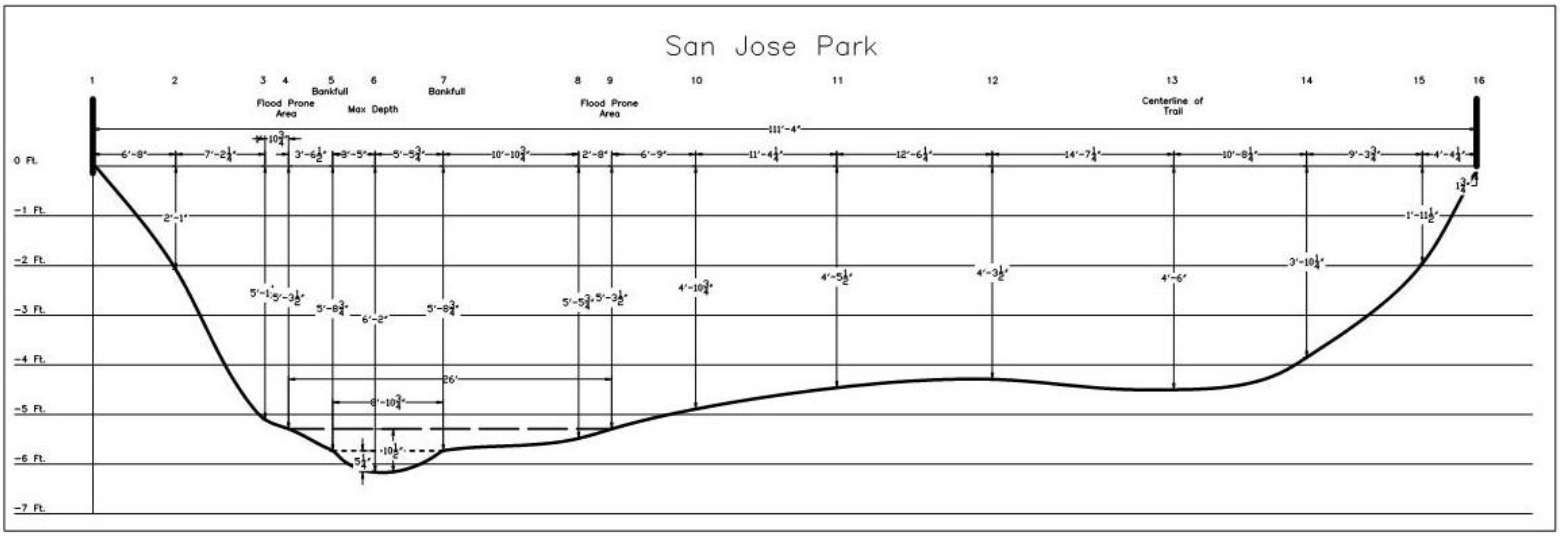
Location Notes: Directly North of tennis court at San Jose Park on San Jose Dr.

Location: 35° 9'7.88"N, 107°51'31.73"W (Left Stake); 35° 9'8.73"N, 107°51'30.68"W (Right Stake)

Channel Type: Ephemeral Section; Natural Stream

Rosgen Classification: C5

RSJ #5 San Jose Park—Cross Section:



Note: Vertical scale shown is exaggerated at 4X the horizontal scale

RSJ #5 San Jose Park —Key Metrics:

Metric	Measurement	Unit
Bank Full Max Depth	0.44	Feet
Bank Mean Depth	0.36	Feet
Bank Full Width	8.90	Feet
Flood Prone Area Depth	0.88	Feet
Flood Prone Area Width	26.00	Feet
Entrenchment Ratio	2.92	
Width to Depth Ratio	24.71	
Stream Gradient	2.47%	Percent
Sinuosity	1.09	

RSJ #5 San Jose Park —Presence of Biological Indicators:

Water: None present

Fish: None present

Benthic Macroinvertebrates: None present

Filamentous Algae: None present

Hydric Soils: None present

Sediment on plants or debris: None noted

Presence of rooted plants: Grasses, bushes, and brush noted outside of bankfull indicators (see pictures)

RSJ #5 San Jose Park—Vicinity Map:

RSJ #5 San Jose Park—Pictures:

Looking Upstream at location of Cross-Section, Parallel to Flow

Looking Downstream at location of Cross-Section, Parallel to Flow

RSJ #5 San Jose Park—Pictures:

Looking South, Perpendicular to Flow

Looking North, Perpendicular to Flow

Representative Stream Bed Pictures

RSJ #4 – El Morro Rd.

Time/Date: November 15th 2019, 11:00 AM

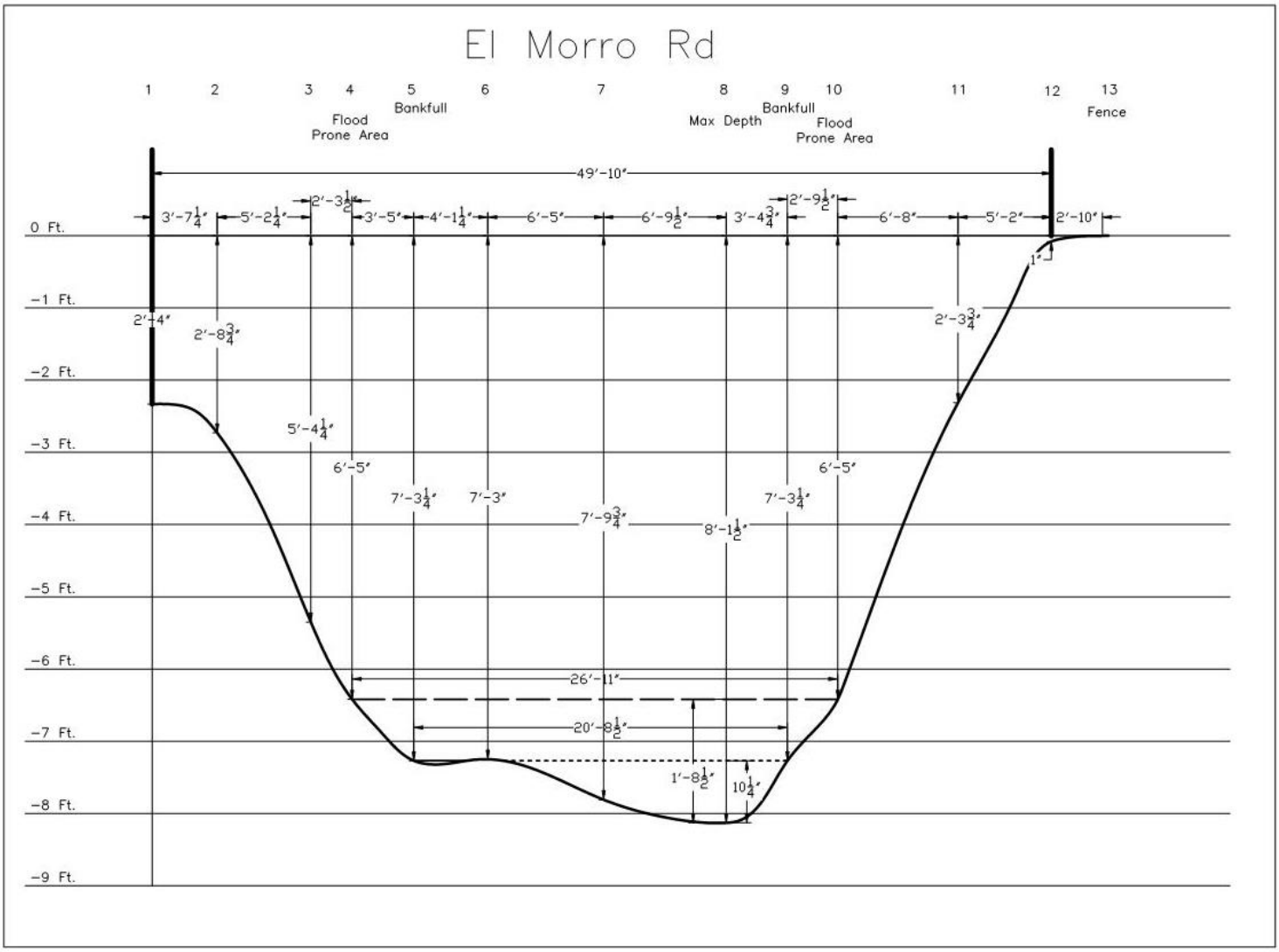
Location Notes: Approx. 400 ft Upstream of El Morro Rd. bridge, at old USGS gauging station

Location: 35° 9'19.14"N, 107°52'16.97"W (Left Stake); 35° 9'19.42"N, 107°52'16.49"W (Right Stake)

Channel Type: Ephemeral Section; Natural Stream

Rosgen Classification: F4

RSJ #4 El Morro Rd. – Cross Section:



Note: Vertical scale shown is exaggerated at 4X the horizontal scale

RSJ #4 El Morro Rd.—Key Metrics:

Metric	Measurement	Unit
Bank Full Max Depth	0.85	Feet
Bank Mean Depth	0.67	Feet
Bank Full Width	20.71	Feet
Flood Prone Area Depth	1.71	Feet
Flood Prone Area Width	26.92	Feet
Entrenchment Ratio	1.30	
Width to Depth Ratio	31.07	
Stream Gradient	0.61%	Percent
Sinuosity	1.14	

RSJ #4 El Morro Rd.—Presence of Biological Indicators:

Water: None present

Fish: None present

Benthic Macroinvertebrates: None present

Filamentous Algae: None present

Hydric Soils: None present

Sediment on plants or debris: None noted

Presence of rooted plants: Grasses, bushes, and brush noted outside of bankfull indicators (see pictures)

RSJ #4 El Morro Rd. – Vicinity Map:

RSJ #4 El Morro Rd.—Pictures:

Looking Upstream at location of Cross-Section, Parallel to Flow

Looking Downstream at location of Cross-Section, Parallel to Flow

RSJ #4 El Morro Rd. – Pictures:

Looking South, Perpendicular to Flow

Looking North, Perpendicular to Flow

Representative Stream Bed Pictures

RSJ #2—Stanley Rd. (Downstream of Proposed Discharge)

Time/Date: November 15th 2019, 1:00 PM

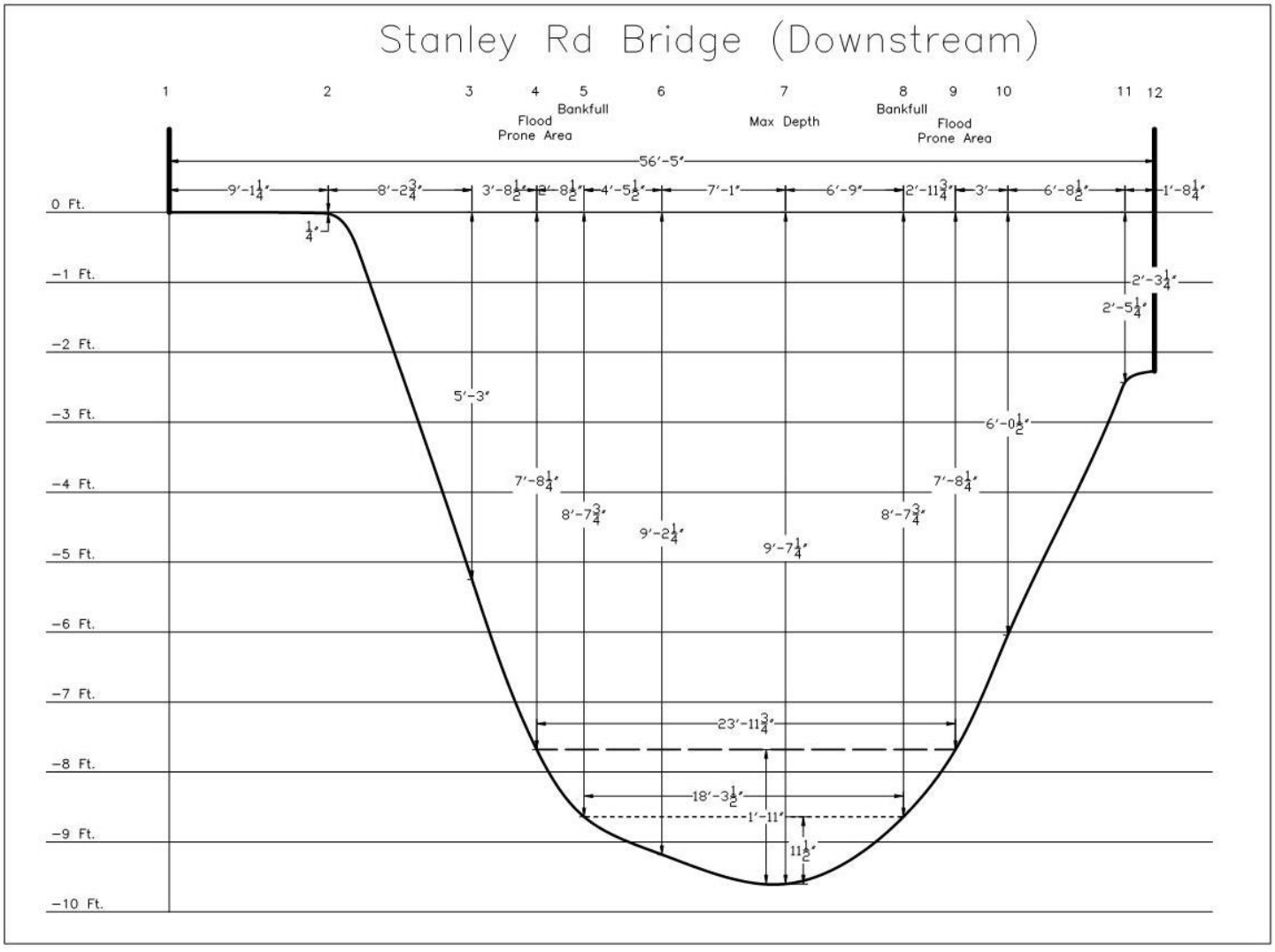
Location Notes: Approx. 150 ft downstream of Stanley Rd. bridge, near proposed discharge point

Location: 35°11'32.76"N, 107°53'52.47"W (Left Stake); 35°11'32.68"N,107°53'51.88"W (Right Stake)

Channel Type: Ephemeral Section; Engineered Channel

Rosgen Classification: Not Applicable (Engineered Channel)

RSJ #2 Stanley Rd. (Downstream)—Cross Section:



Note: Vertical scale shown is exaggerated at 4X the horizontal scale

RSJ #2 Stanley Rd. (Downstream)—Key Metrics:

Metric	Measurement	Unit
Bank Full Max Depth	0.96	Feet
Bank Mean Depth	0.75	Feet
Bank Full Width	18.29	Feet
Flood Prone Area Depth	1.92	Feet
Flood Prone Area Width	23.98	Feet
Entrenchment Ratio	1.31	
Width to Depth Ratio	24.39	
Stream Gradient	0.21%	Percent
Sinuosity	N/A	

Note: Engineered channel sections do not have well defined bankfull indicators, data is provided based on best judgement.

RSJ #2 Stanley Rd. (Downstream)—Presence of Biological Indicators:

Water: None present

Fish: None present

Benthic Macroinvertebrates: None present

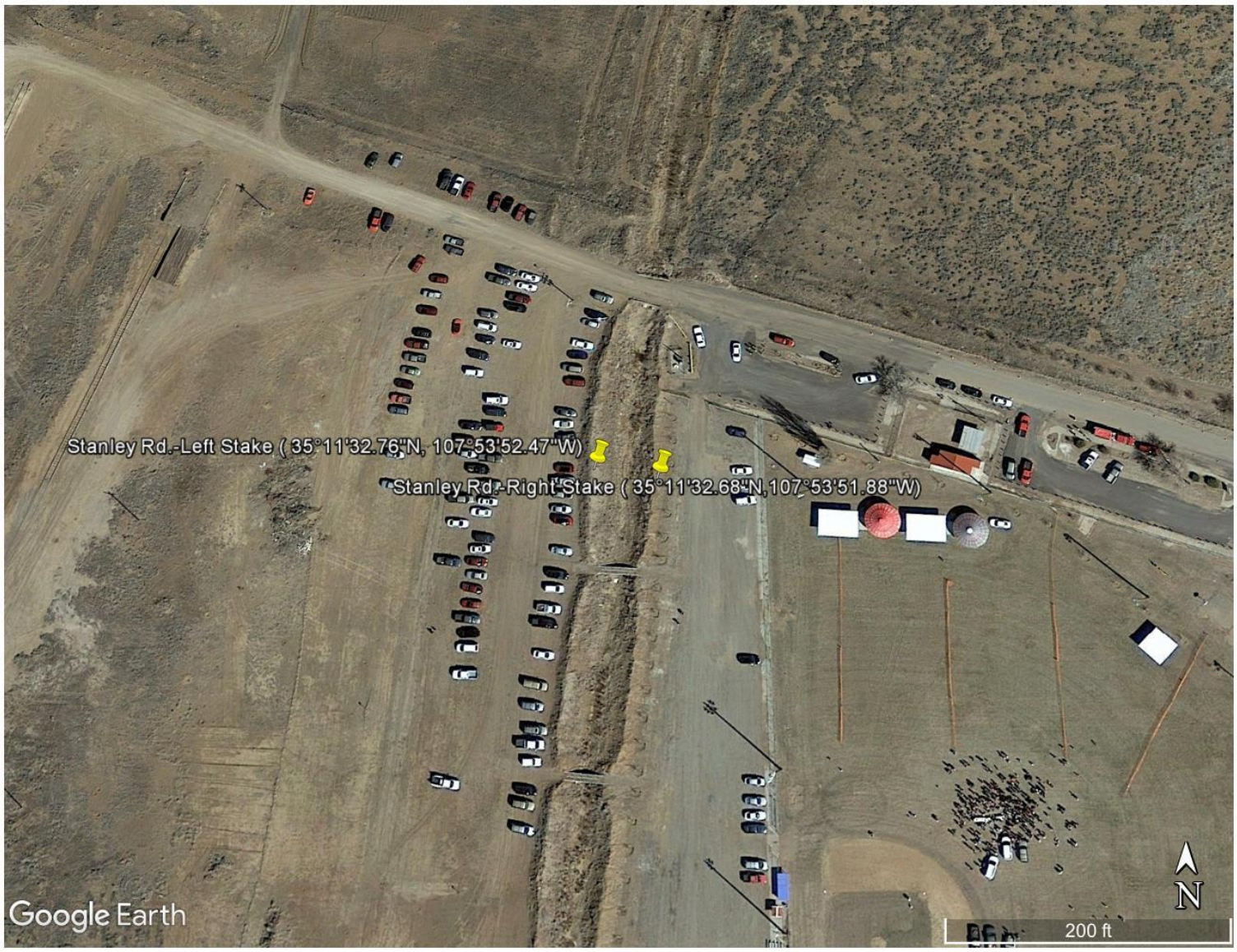
Filamentous Algae: None present

Hydric Soils: None present

Sediment on plants or debris: None noted

Presence of rooted plants: Minimal vegetation; some non-native weeds and grasses, mainly within bankfull areas

RSJ #2 Stanley Rd. (Downstream)—Vicinity Map:

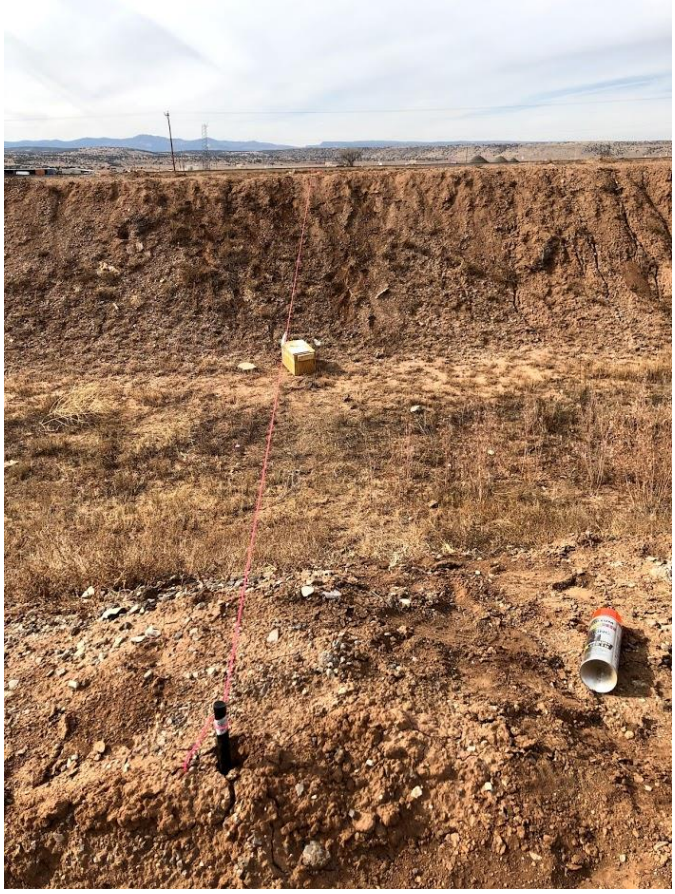


RSJ #2 Stanley Rd. (Downstream)—Pictures:

Looking Upstream at location of Cross-Section, Parallel to Flow

Looking Downstream at location of Cross-Section, Parallel to Flow

RSJ #2 Stanley Rd. (Downstream)—Pictures:



Looking West, Perpendicular to Flow

Looking East, Perpendicular to Flow

Representative Stream Bed Pictures

RSJ #1—Stanley Rd. (Upstream of Proposed Discharge)

Time/Date: November 15th 2019, 2:30 PM

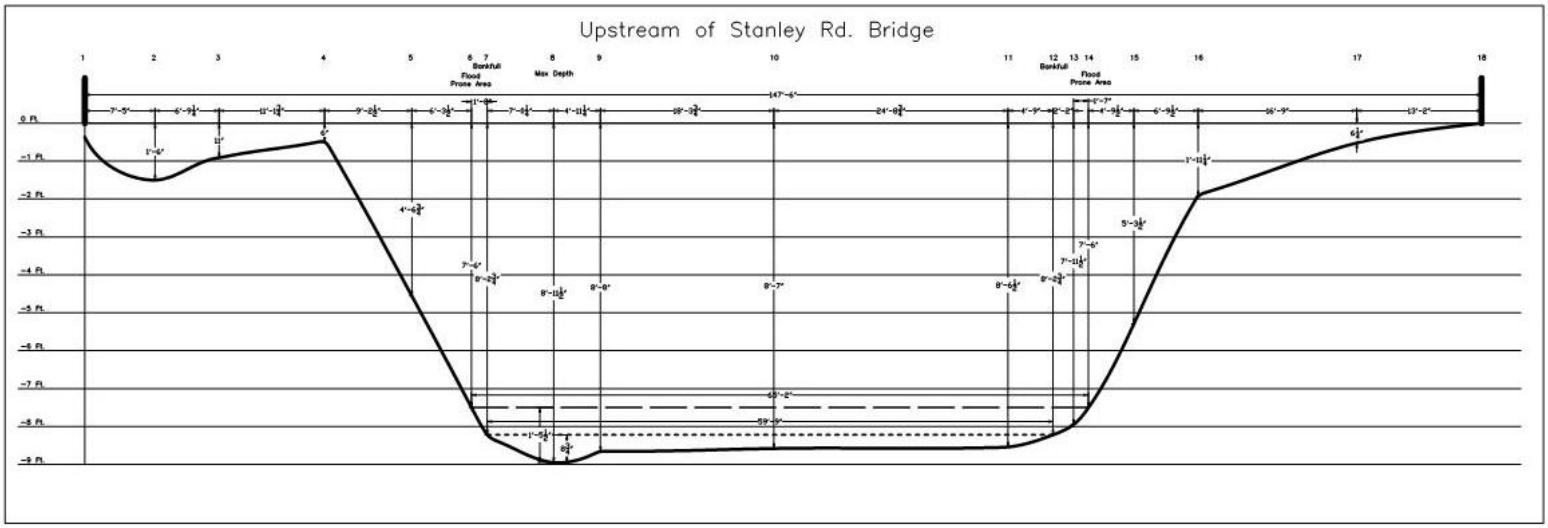
Location Notes: Approx. 1075 ft upsteam of Stanley Rd. bridge and proposed discharge point

Location: 35°11'42.84"N, 107°53'46.19"W (Left Stake); 35°11'42.41"N, 107°53'44.54"W (Right Stake)

Channel Type: Ephemeral Section; Engineered Channel

Rosgen Classification: Not Applicable (Engineered Channel)

RSJ #1 Stanley Rd. (Upstream)—Cross Section:



Note: Vertical scale shown is exaggerated at 4X the horizontal scale

RSJ #1 Stanley Rd. (Upstream)—Key Metrics:

Metric	Measurement	Unit
Bank Full Max Depth	0.73	Feet
Bank Mean Depth	0.40	Feet
Bank Full Width	59.75	Feet
Flood Prone Area Depth	1.46	Feet
Flood Prone Area Width	65.17	Feet
Entrenchment Ratio	1.09	
Width to Depth Ratio	151.27	
Stream Gradient	0.35%	Percent
Sinuosity	N/A	

Note: Engineered channel sections do not have well defined bankfull indicators, data is provided based on best judgement.

RSJ #1 Stanley Rd. (Upstream)—Presence of Biological Indicators:

Water: None present

Fish: None present

Benthic Macroinvertebrates: None present

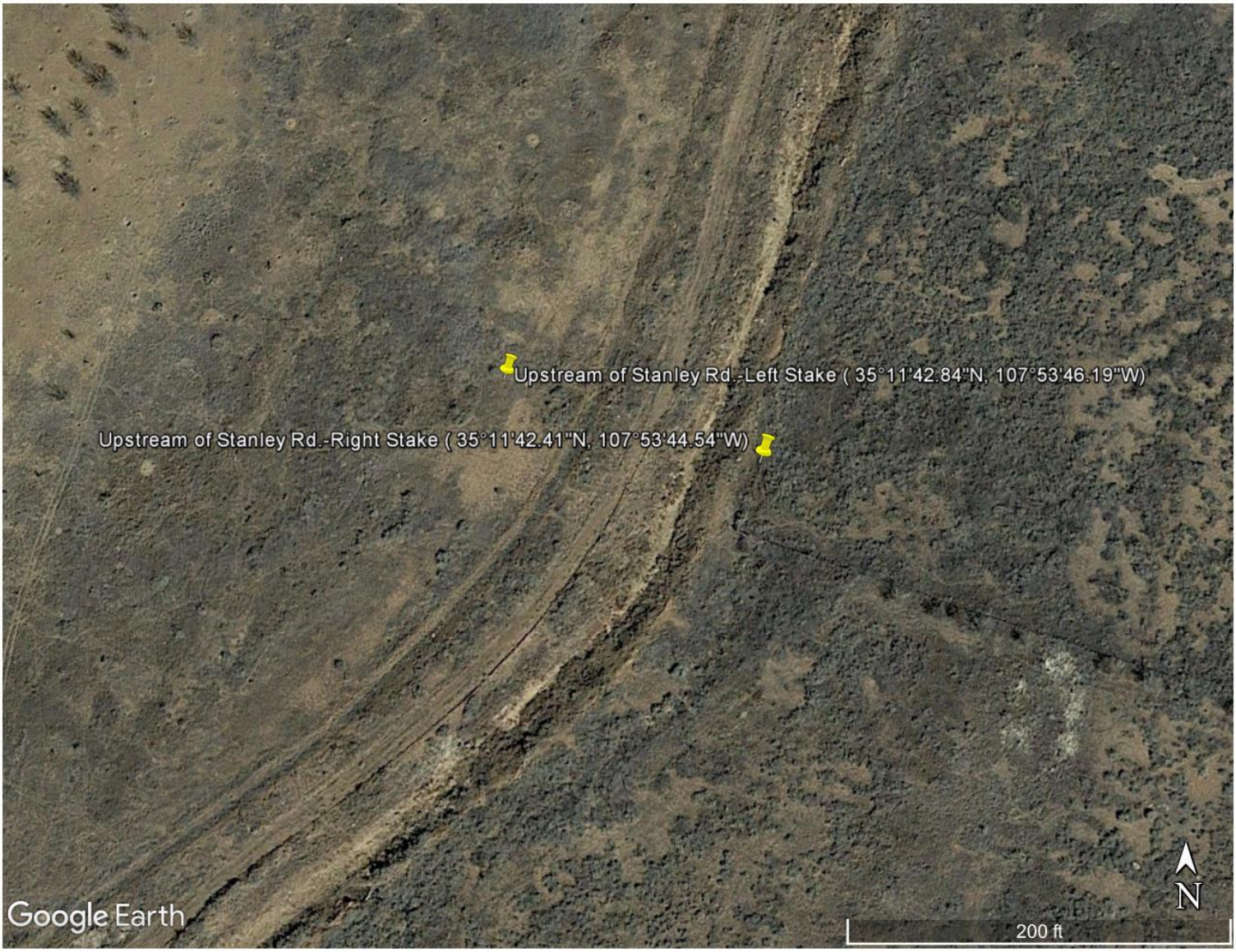
Filamentous Algae: None present

Hydric Soils: None present

Sediment on plants or debris: None noted

Presence of rooted plants: Very minimal vegetation; some non-native weeds and grasses

RSJ #1 Stanley Rd. (Upstream)—Vicinity Map:



RSJ #1 Stanley Rd. (Upstream)—Pictures:

Looking Upstream at location of Cross-Section, Parallel to Flow, Nearest Right Stake

Looking Downstream at location of Cross-Section, Parallel to Flow

RSJ #1 Stanley Rd. (Upstream)—Pictures:

Looking West, Perpendicular to Flow

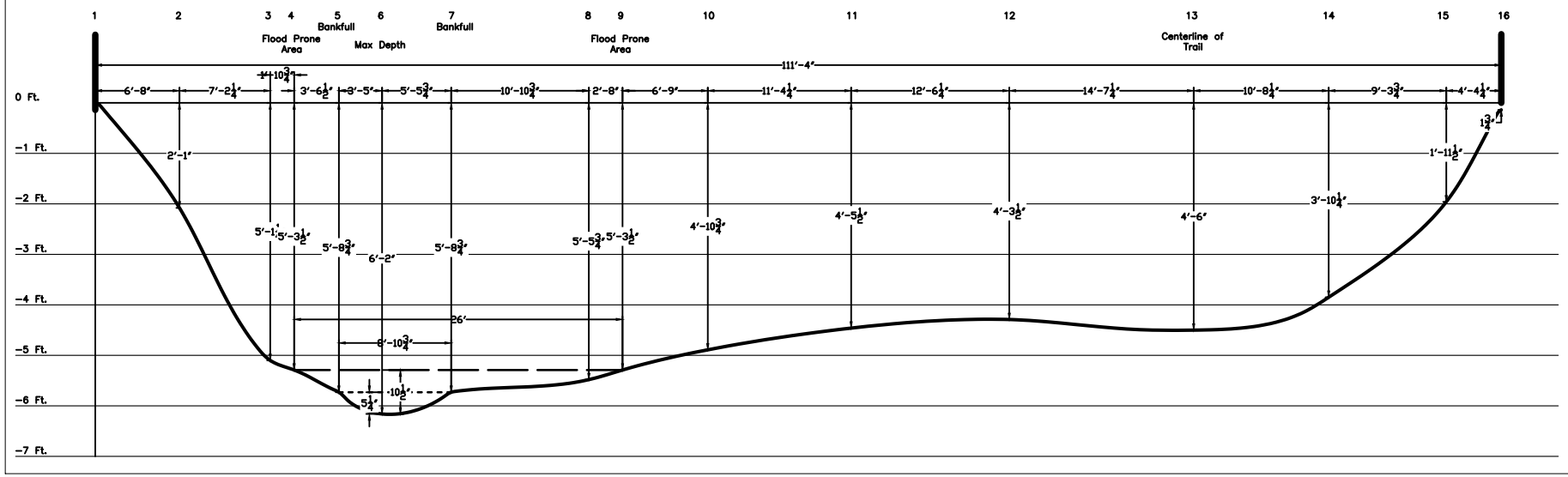
Looking East, Perpendicular to Flow

Representative Stream Bed Pictures

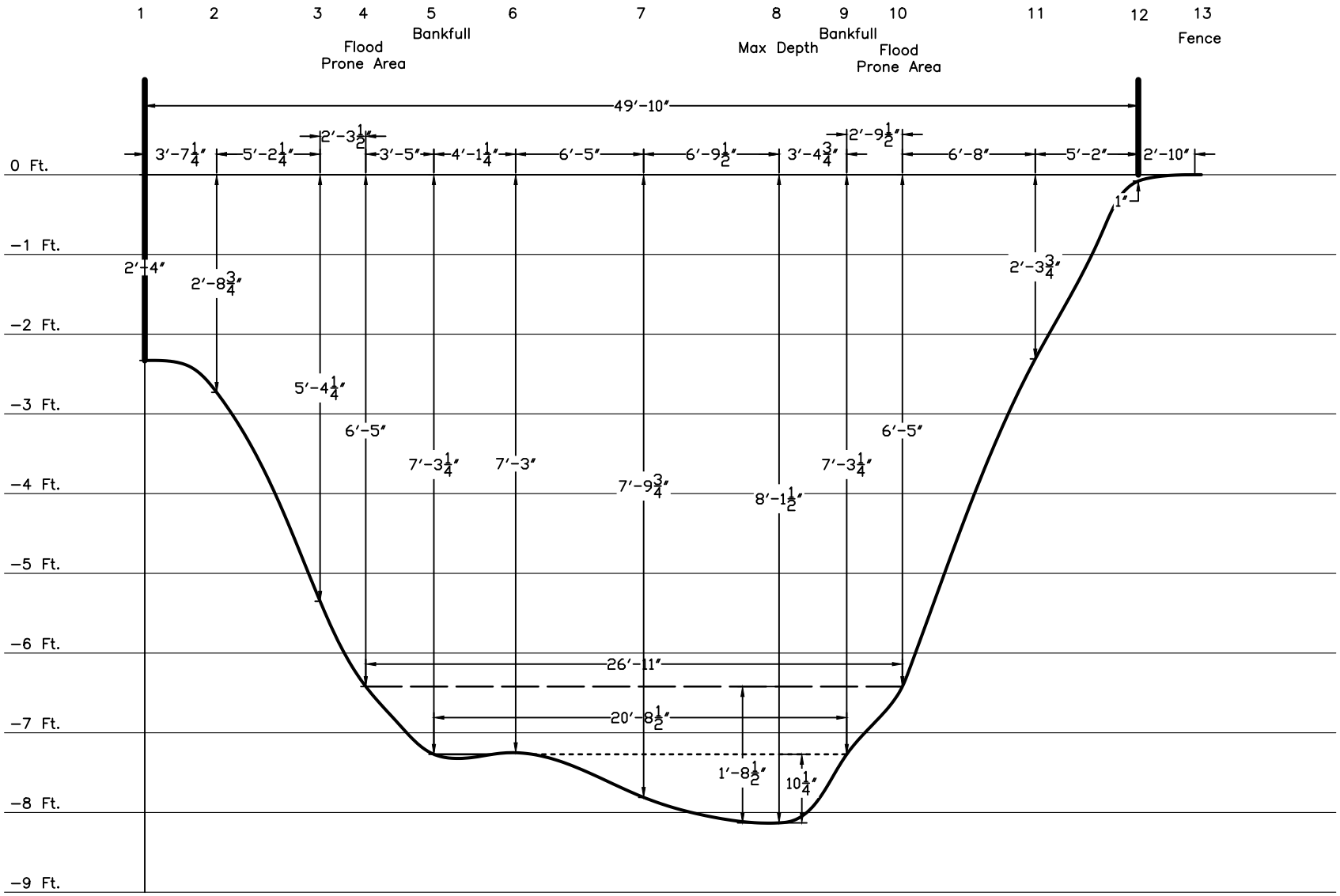
Appendix A

Cross-Sectional Drawings of Locations Analyzed

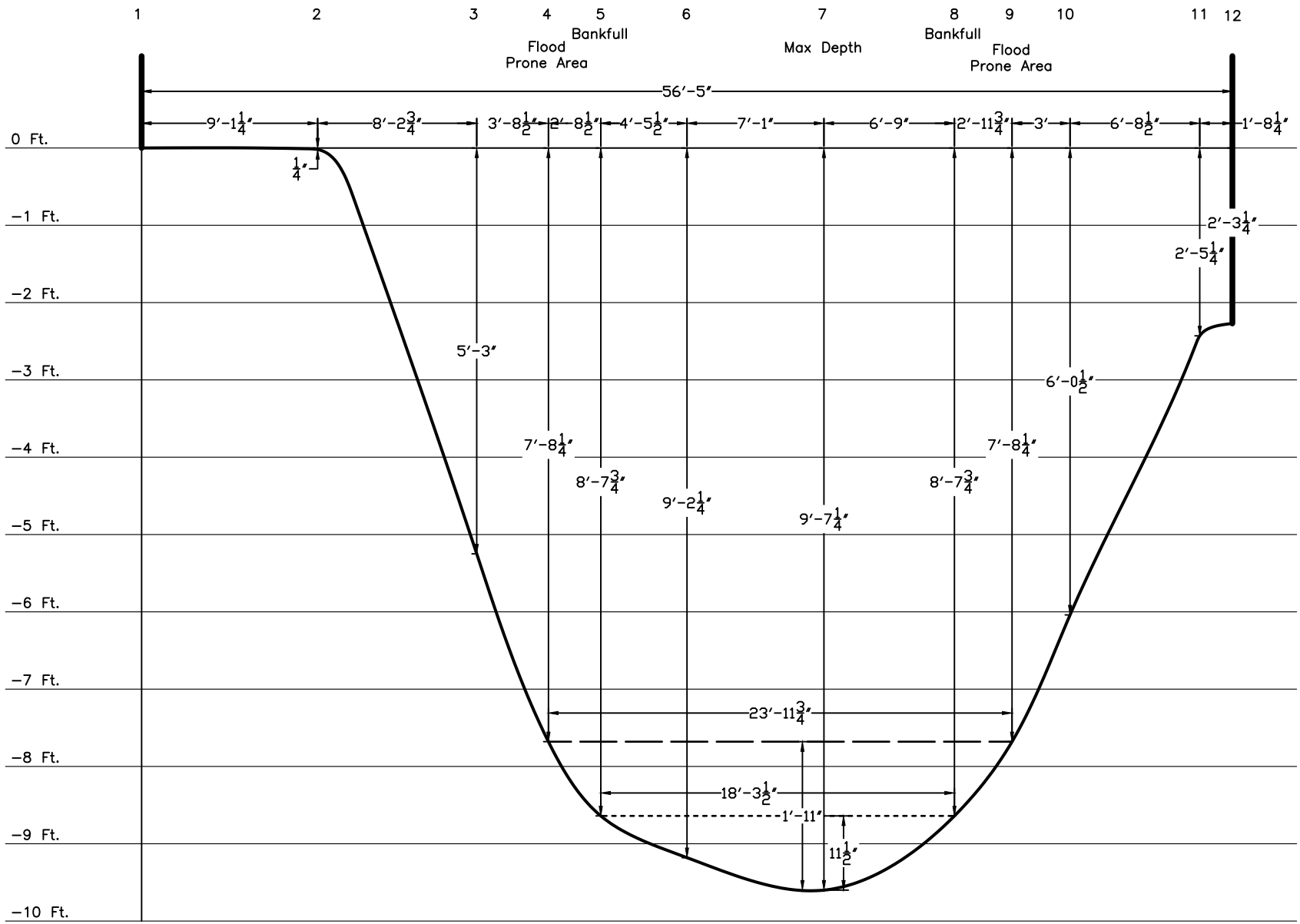
RSJ #5-San Jose Park



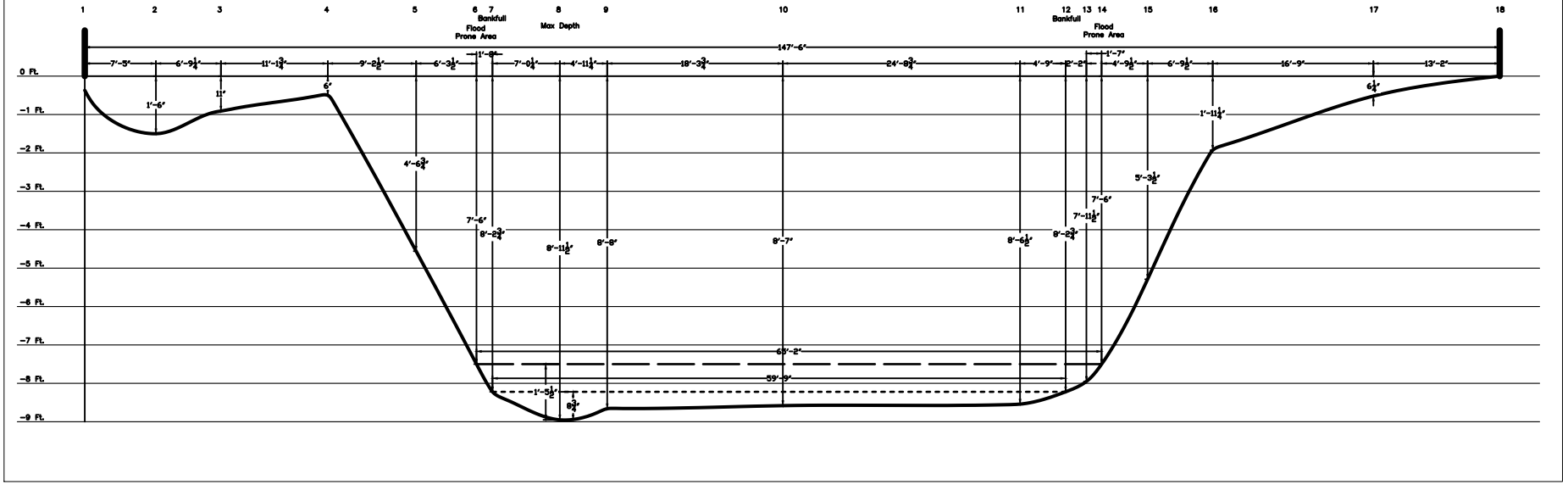
RSJ #4-El Morro Rd.



RSJ #2-Stanley Rd (Downstream of Proposed Discharge)



RSJ #1-Stanley Rd (Upstream of Proposed Discharge)



Appendix C
INTERA Sampling Photo Log

1. Upstream at RSJ#1, September 27, 2019
Photo from INTERA, Brian Archuleta

2. Upstream at RSJ#1, September 27, 2019
Photo from INTERA, Brian Archuleta

3. Downstream at RSJ#1, September 27, 2019
Photo from INTERA, Brian Archuleta

4. Downstream at RSJ#2, September 27, 2019
Photo from INTERA, Brian Archuleta

5. Downstream at RSJ#2, September 27, 2019
Photo from INTERA, Brian Archuleta

6. Downstream at RSJ#1, October 6, 2019
Photo from INTERA, Bryce Williamson

7. Downstream at RSJ#2, , October 6, 2019
Photo from INTERA, Bryce Williamson

8. Downstream at RSJ#4, October 6, 2019
Photo from INTERA, Bryce Williamson

9. Downstream at RSJ#5, 10/6/19 October 6, 2019
Photo from INTERA, Bryce Williamson

10. Downstream at RSJ#5, 10/6/19 October 6, 2019
Photo from INTERA, Bryce Williamson

11. Downstream at RSJ#7, October 6, 2019
Photo from INTERA, Bryce Williamson

12. Downstream at RSJ#4, October 8, 2019
Photo from INTERA, Bryce Williamson

13. Upstream at RSJ#4, October 8, 2019
Photo from INTERA, Bryce Williamson

14. Dam downstream from RSJ#5, October 8, 2019
Photo from INTERA, Bryce Williamson

15. RSJ#5 sampling location, October 8, 2019
Photo from INTERA, Bryce Williamson

16. Grants Riverwalk downstream from RSJ#5, October 8, 2019
Photo from INTERA, Bryce Williamson

17. Original RSJ#5 sampling location from 2017 survey, October 8, 2019
Photo from INTERA, Bryce Williamson

18. Upstream from RSJ#5, October 8, 2019
Photo from INTERA, Bryce Williamson

19. Sampling at RSJ#5, October 8, 2019
Photo from INTERA, Lynda Price

20. October 8, 2019
Photo from INTERA, Lynda Price

21. Downstream at RSJ#7, October 8, 2019
Photo from INTERA, Bryce Williamson

22. Upstream at RSJ#7, October 8, 2019
Photo from INTERA, Bryce Williamson

23. Sampling at RSJ#7, October 8, 2019
Photo from INTERA, Lynda Price

24. Sampling at RSJ#7, October 8, 2019
Photo from INTERA, Lynda Price

Appendix D
INTERA Water Sample Field Sheets

INTERA
GEOSCIENCE & ENGINEERING SOLUTIONS

SURFACE WATER SAMPLING DATA

PROJECT NAME: ETRC SAMPLE LOCATION NO. OR BORING/WELL NO.: RSJ Site #7
PROJECT NO.: TECHNICAL CREW: LP/BW
DATE: 10/8/19 FORM COMPLETED BY: LP
SAMPLING METHOD: Peristaltic Pump / Grab Sample

WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
10/8/19 1230	YSI Prof Pro	Geotech Rental	3pt pH, Sp Cnd, ORP, DO	BW	
10/8/19 1230	HACH 2100Q Turb Meter	13020C023547	20 NTU, 10 NTU	LP	

SURFACE WATER QUALITY READINGS

DATE	TIME	Location Name	TEMP ☒ °C ☐ °F	Spec. CONDUCTIVITY (µS/cm)	pH	DO%	DO (mg/L)	Turbidity (NTU) WQ Sample Collected?	Comments
10/8/19	1303	Pump	on						
10/8/19	1307	RSJ Site #7	16.5	2648	7.74	87.0	8.44	7.14	clear, flowing water
	1310	Sampled							
☆	Duplicate collected								
	ID = RSJ Site #17								
	Time = 1200								

Note: See additional comments on other side of page or in the field notebook.

INTERA
GEOSCIENCE & ENGINEERING SOLUTIONS

SURFACE WATER SAMPLING DATA

PROJECT NAME: EFCR SAMPLE LOCATION NO. OR BORING/WELL NO.: RSJ Site #5
PROJECT NO.: TECHNICAL CREW: UP/BW
DATE: 10/8/19 FORM COMPLETED BY: UP
SAMPLING METHOD: Peristaltic Pump

WATER QUALITY INSTRUMENTS

DATE/TIME	INSTRUMENT	SERIAL NO.	CALIBRATION PERFORMED	TECH	COMMENTS
10/8/19	YSI Pro Plus	Geotech Rental	3 pt pH, SpCond, ORP, DO	BW	
10/8/19	HACH 2100Q Turbidity Meter	13020C023547	20 NTU/10 NTU	UP	

SURFACE WATER QUALITY READINGS Turbidity (NTU)

DATE	TIME	Location Name	TEMP ☒ °C ☐ °F	CONDUCTIVITY (µS/cm)	pH	DO%	DO (mg/L)	~~WQ Sample Collected?~~	Comments
10/8/19	1554	Pump on						~~8.65~~ (UP)	
10/8/19	1558	RSJ Site #5	21.1	1318	8.24	89.5	7.88	8.65	clear, collected from stagnant water
	1600	Sampled							

Note: See additional comments on other side of page or in the field notebook.

Appendix E
ACZ Lab Water Sample Results

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

Analytical Report

November 05, 2019

Report to:
Angela Persico
Energy Fuels Resources (USA) Inc.
6000 Uptown Blvd.
Albauerque, NM 87110

Bill to:
Accounts Payable
Energy Fuels Resources (USA) Inc.
225 Union Blvd. ,Suite 600
Lakewood, CO 80228

Project ID: ENRGF.C002.RSJT1
ACZ Project ID: L55123

Angela Persico:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on October 09, 2019. This project has been assigned to ACZ's project number, L55123. 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 L55123. 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 December 05, 2019. 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 Janicek has reviewed and approved this report.

Energy Fuels Resources (USA) Inc. November 05, 2019

Project ID: ENRGF.C002.RSJT1
ACZ Project ID: L55123

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 3 miscellaneous samples from Energy Fuels Resources (USA) Inc. on October 9, 2019. The samples were received in good condition. Upon receipt, the sample custodian removed the samples from the cooler, inspected the contents, and logged the samples into ACZ's computerized Laboratory Information Management System (LIMS). The samples were assigned ACZ LIMS project number L55123. The custodian verified the sample information entered into the computer against the chain of custody (COC) forms and sample bottle labels.

Holding Times

All analyses were performed within EPA recommended holding times.

Sample Analysis

These samples were analyzed for inorganic, organic, radiochemistry parameters. The individual methods are referenced on both the ACZ invoice and the analytical reports. The extended qualifier reports may contain footnotes qualifying specific elements due to QC failures. In addition the following has been noted with this specific project:

The below is from WG484911
Qualifier: N1B
Applies to: L55123-01/THORIUM 230
L55123-02/THORIUM 230
L55123-03/THORIUM 230

MS tracer recovery outside acceptance limits. All batch samples' tracer recoveries was acceptable and sample activity is below detection limit.

The below is from WG484911
Qualifier: N1A
Applies to: L55123-01/THORIUM 230
L55123-02/THORIUM 230
L55123-03/THORIUM 230

DUP tracer recovery outside acceptance limits. All batch samples' tracer recoveries were acceptable and sample activity is below detection levels.

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #5

ACZ Sample ID: ***L55123-01***
Date Sampled: *10/08/19 16:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								10/16/19 3:17	mss2
Total Hot Plate Digestion	M200.2 ICP-MS								10/15/19 17:03	rap
Total Hot Plate Digestion	M200.2 ICP								10/14/19 13:18	aeh

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, dissolved	M200.7 ICP	1		U	*	mg/L	0.05	0.3	10/18/19 13:24	kja
Aluminum, total	M200.7 ICP	1	0.72			mg/L	0.05	0.3	10/17/19 1:22	kja
Arsenic, dissolved	M200.8 ICP-MS	1	0.0036			mg/L	0.0002	0.001	10/18/19 17:08	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0675			mg/L	0.0005	0.003	10/18/19 17:08	bsu
Boron, dissolved	M200.7 ICP	1	0.39			mg/L	0.02	0.1	10/18/19 13:24	kja
Boron, total	M200.7 ICP	1	0.35			mg/L	0.02	0.1	10/17/19 1:22	kja
Cadmium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00005	0.0003	10/18/19 17:08	bsu
Cadmium, total	M200.8 ICP-MS	1		U		mg/L	0.00005	0.0003	10/16/19 14:45	mfm
Calcium, dissolved	M200.7 ICP	1	138		*	mg/L	0.1	0.5	10/18/19 13:24	kja
Cobalt, dissolved	M200.8 ICP-MS	1	0.00067			mg/L	0.00005	0.0003	10/18/19 17:08	bsu
Cobalt, total	M200.8 ICP-MS	1	0.00071			mg/L	0.00005	0.0003	10/16/19 14:45	mfm
Copper, dissolved	M200.8 ICP-MS	1	0.0013	B		mg/L	0.0008	0.002	10/18/19 17:08	bsu
Copper, total	M200.8 ICP-MS	1	0.0019	B		mg/L	0.0008	0.002	10/16/19 14:45	mfm
Magnesium, dissolved	M200.7 ICP	1	45.1			mg/L	0.2	1	10/18/19 13:24	kja
Manganese, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	10/18/19 13:24	kja
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	10/11/19 14:45	slm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.002		*	mg/L	0.0002	0.0005	10/18/19 17:08	bsu
Molybdenum, total	M200.8 ICP-MS	1	0.002			mg/L	0.0002	0.0005	10/16/19 14:45	mfm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	10/18/19 13:24	kja
Potassium, dissolved	M200.7 ICP	1	7.8			mg/L	0.2	1	10/18/19 13:24	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.0062			mg/L	0.0001	0.0003	10/18/19 17:08	bsu
Selenium, total	M200.8 ICP-MS	1	0.0063			mg/L	0.0001	0.0003	10/16/19 14:45	mfm
Silica, dissolved	M200.7 ICP	1	20.5			mg/L	0.2	1	10/18/19 13:24	kja
Sodium, dissolved	M200.7 ICP	1	106			mg/L	0.2	1	10/18/19 13:24	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.0064			mg/L	0.0001	0.0005	10/18/19 17:08	bsu
Uranium, total	M200.8 ICP-MS	1	0.0068			mg/L	0.0001	0.0005	10/16/19 14:45	mfm
Vanadium, dissolved	M200.8 ICP-MS	1	0.0029			mg/L	0.0005	0.002	10/18/19 17:08	bsu
Vanadium, total	M200.8 ICP-MS	1	0.0048			mg/L	0.0005	0.002	10/16/19 14:45	mfm
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	10/18/19 13:24	kja
Zinc, total	M200.7 ICP	1		U		mg/L	0.01	0.05	10/17/19 1:22	kja

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #5

ACZ Sample ID: ***L55123-01***
Date Sampled: *10/08/19 16:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	276			mg/L	2	20	10/11/19 0:00	emk
Carbonate as CaCO3		1	16.9	B		mg/L	2	20	10/11/19 0:00	emk
Hydroxide as CaCO3		1		U		mg/L	2	20	10/11/19 0:00	emk
Total Alkalinity		1	293			mg/L	2	20	10/11/19 0:00	emk
Carbon, total (TC)	SM5310B	1	29.6			mg/L	1	5	10/11/19 13:58	ttg
Carbon, total organic (TOC)	SM5310B	1	6.0			mg/L	1	5	10/11/19 13:58	ttg
Chloride	SM4500Cl-E	1	65.8			mg/L	0.5	2	10/15/19 14:24	rbt
Conductivity @25C	SM2510B	1	1310			umhos/cm	1	10	10/11/19 4:45	emk
Corrosivity (calc.)	SM 2330 - CaCO3 SI		1.6		*	SI Unit			11/05/19 0:00	calc
Dissolved Chromium, Hexavalent	SM3500Cr-B	1		U	*	mg/L	0.005	0.02	10/09/19 14:00	eep
Fluoride	SM4500F-C	1	0.4		*	mg/L	0.1	0.4	10/14/19 17:20	enb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		530			mg/L	0.2	5	11/05/19 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.91			mg/L	0.02	0.1	10/17/19 0:17	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	0.14	B		mg/L	0.05	0.2	10/17/19 16:24	ttg
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	1.2		*	mg/L	0.1	0.5	10/17/19 0:21	pjb
pH (lab)	SM4500H+ B									
pH		1	8.5	H		units	0.1	0.1	10/11/19 0:00	emk
pH measured at		1	23.6			C	0.1	0.1	10/11/19 0:00	emk
Residue, Filterable (TDS) @180C	SM2540C	1	934			mg/L	20	40	10/10/19 9:05	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	32.0		*	mg/L	5	20	10/10/19 11:28	jck
Sulfate	D516-02/-07 - Turbidimetric	10	330		*	mg/L	10	50	10/17/19 10:12	mss2
TDS (calculated)	Calculation		898			mg/L			11/05/19 0:00	calc
Total Nitrogen, calc	Calculation: NO3NO2+TKN		2.1			mg/L	0.1	0.5	11/05/19 0:00	calc

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #7

ACZ Sample ID: ***L55123-02***
Date Sampled: *10/08/19 13:10*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								10/16/19 4:16	mss2
Total Hot Plate Digestion	M200.2 ICP-MS								10/15/19 17:55	rap
Total Hot Plate Digestion	M200.2 ICP								10/14/19 13:30	aeh

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, total	M200.7 ICP	1	1.23			mg/L	0.05	0.3	10/17/19 1:25	kja
Arsenic, dissolved	M200.8 ICP-MS	1	0.004			mg/L	0.0002	0.001	10/18/19 17:09	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0449			mg/L	0.0005	0.003	10/18/19 17:09	bsu
Boron, dissolved	M200.7 ICP	1	1.13			mg/L	0.02	0.1	10/18/19 13:27	kja
Boron, total	M200.7 ICP	1	1.03			mg/L	0.02	0.1	10/17/19 1:25	kja
Cadmium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00005	0.0003	10/18/19 17:09	bsu
Cadmium, total	M200.8 ICP-MS	1	0.00008	B		mg/L	0.00005	0.0003	10/16/19 14:47	mfm
Calcium, dissolved	M200.7 ICP	1	160		*	mg/L	0.1	0.5	10/18/19 13:27	kja
Cobalt, dissolved	M200.8 ICP-MS	1	0.00065			mg/L	0.00005	0.0003	10/18/19 17:09	bsu
Cobalt, total	M200.8 ICP-MS	1	0.00142			mg/L	0.00005	0.0003	10/16/19 14:47	mfm
Copper, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0008	0.002	10/18/19 17:09	bsu
Copper, total	M200.8 ICP-MS	1	0.0008	B		mg/L	0.0008	0.002	10/16/19 14:47	mfm
Magnesium, dissolved	M200.7 ICP	1	78.2			mg/L	0.2	1	10/18/19 13:27	kja
Manganese, dissolved	M200.7 ICP	1	0.02	B		mg/L	0.01	0.05	10/18/19 13:27	kja
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	10/11/19 14:46	slm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.0021		*	mg/L	0.0002	0.0005	10/18/19 17:09	bsu
Molybdenum, total	M200.8 ICP-MS	1	0.0021			mg/L	0.0002	0.0005	10/16/19 14:47	mfm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	10/18/19 13:27	kja
Potassium, dissolved	M200.7 ICP	1	15.5			mg/L	0.2	1	10/18/19 13:27	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0003	10/18/19 17:09	bsu
Selenium, total	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0003	10/16/19 14:47	mfm
Silica, dissolved	M200.7 ICP	1	11.7			mg/L	0.2	1	10/18/19 13:27	kja
Sodium, dissolved	M200.7 ICP	1	341			mg/L	0.2	1	10/18/19 13:27	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.0043			mg/L	0.0001	0.0005	10/18/19 17:09	bsu
Uranium, total	M200.8 ICP-MS	1	0.0051			mg/L	0.0001	0.0005	10/16/19 14:47	mfm
Vanadium, total	M200.8 ICP-MS	1	0.0038			mg/L	0.0005	0.002	10/16/19 14:47	mfm
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	10/18/19 13:27	kja
Zinc, total	M200.7 ICP	1		U		mg/L	0.01	0.05	10/17/19 1:25	kja

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #7

ACZ Sample ID: ***L55123-02***
Date Sampled: *10/08/19 13:10*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	291			mg/L	2	20	10/11/19 0:00	emk
Carbonate as CaCO3		1		U		mg/L	2	20	10/11/19 0:00	emk
Hydroxide as CaCO3		1		U		mg/L	2	20	10/11/19 0:00	emk
Total Alkalinity		1	291			mg/L	2	20	10/11/19 0:00	emk
Carbon, total (TC)	SM5310B	1	29.2			mg/L	1	5	10/11/19 13:58	ttg
Carbon, total organic (TOC)	SM5310B	1	1.4	B		mg/L	1	5	10/11/19 13:58	ttg
Chloride	SM4500Cl-E	10	243			mg/L	5	20	10/15/19 14:32	rbt
Conductivity @25C	SM2510B	1	2580			umhos/cm	1	10	10/11/19 14:36	emk
Corrosivity (calc.)	SM 2330 - CaCO3 SI		1.2		*	SI Unit			11/05/19 0:00	calc
Fluoride	SM4500F-C	1	0.6		*	mg/L	0.1	0.4	10/14/19 17:27	enb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		722			mg/L	0.2	5	11/05/19 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1		U		mg/L	0.02	0.1	10/17/19 0:20	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	0.07	B		mg/L	0.05	0.2	10/17/19 16:28	ttg
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.2	B	*	mg/L	0.1	0.5	10/17/19 0:22	pjb
pH (lab)	SM4500H+ B									
pH		1	8.2	H		units	0.1	0.1	10/11/19 0:00	emk
pH measured at		1	22.4			C	0.1	0.1	10/11/19 0:00	emk
Residue, Filterable (TDS) @180C	SM2540C	1	1880			mg/L	20	40	10/10/19 9:08	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	11.0	B	*	mg/L	5	20	10/10/19 11:31	jck
Sulfate	D516-02/-07 - Turbidimetric	20	776		*	mg/L	20	100	10/17/19 10:10	mss2
TDS (calculated)	Calculation		1810			mg/L			11/05/19 0:00	calc
Total Nitrogen, calc	Calculation: NO3NO2+TKN		0.2	B		mg/L	0.1	0.5	11/05/19 0:00	calc

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #17

ACZ Sample ID: ***L55123-03***
Date Sampled: *10/08/19 12:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								10/16/19 5:14	mss2
Total Hot Plate Digestion	M200.2 ICP-MS								10/15/19 18:47	rap
Total Hot Plate Digestion	M200.2 ICP								10/14/19 13:42	aeh

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, total	M200.7 ICP	1	0.85			mg/L	0.05	0.3	10/17/19 1:29	kja
Arsenic, dissolved	M200.8 ICP-MS	1	0.0039			mg/L	0.0002	0.001	10/18/19 17:11	bsu
Barium, dissolved	M200.8 ICP-MS	1	0.0443			mg/L	0.0005	0.003	10/18/19 17:11	bsu
Boron, dissolved	M200.7 ICP	1	1.11			mg/L	0.02	0.1	10/18/19 13:30	kja
Boron, total	M200.7 ICP	1	1.03			mg/L	0.02	0.1	10/17/19 1:29	kja
Cadmium, dissolved	M200.8 ICP-MS	1		U		mg/L	0.00005	0.0003	10/18/19 17:11	bsu
Cadmium, total	M200.8 ICP-MS	1	0.00009	B		mg/L	0.00005	0.0003	10/16/19 14:49	mfm
Calcium, dissolved	M200.7 ICP	1	161		*	mg/L	0.1	0.5	10/18/19 13:30	kja
Cobalt, dissolved	M200.8 ICP-MS	1	0.00067			mg/L	0.00005	0.0003	10/18/19 17:11	bsu
Cobalt, total	M200.8 ICP-MS	1	0.00178			mg/L	0.00005	0.0003	10/16/19 14:49	mfm
Copper, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0008	0.002	10/18/19 17:11	bsu
Copper, total	M200.8 ICP-MS	1		U		mg/L	0.0008	0.002	10/16/19 14:49	mfm
Magnesium, dissolved	M200.7 ICP	1	78.5			mg/L	0.2	1	10/18/19 13:30	kja
Manganese, dissolved	M200.7 ICP	1	0.02	B		mg/L	0.01	0.05	10/18/19 13:30	kja
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	10/11/19 14:49	slm
Molybdenum, dissolved	M200.8 ICP-MS	1	0.002		*	mg/L	0.0002	0.0005	10/18/19 17:11	bsu
Molybdenum, total	M200.8 ICP-MS	1	0.0019			mg/L	0.0002	0.0005	10/16/19 14:49	mfm
Nickel, dissolved	M200.7 ICP	1		U		mg/L	0.008	0.04	10/18/19 13:30	kja
Potassium, dissolved	M200.7 ICP	1	15.6			mg/L	0.2	1	10/18/19 13:30	kja
Selenium, dissolved	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0003	10/18/19 17:11	bsu
Selenium, total	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0003	10/16/19 14:49	mfm
Silica, dissolved	M200.7 ICP	1	11.8			mg/L	0.2	1	10/18/19 13:30	kja
Sodium, dissolved	M200.7 ICP	1	345			mg/L	0.2	1	10/18/19 13:30	kja
Uranium, dissolved	M200.8 ICP-MS	1	0.0043			mg/L	0.0001	0.0005	10/18/19 17:11	bsu
Uranium, total	M200.8 ICP-MS	1	0.0047			mg/L	0.0001	0.0005	10/16/19 14:49	mfm
Vanadium, total	M200.8 ICP-MS	1	0.004			mg/L	0.0005	0.002	10/16/19 14:49	mfm
Zinc, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	10/18/19 13:30	kja
Zinc, total	M200.7 ICP	1		U		mg/L	0.01	0.05	10/17/19 1:29	kja

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #17

ACZ Sample ID: ***L55123-03***
Date Sampled: *10/08/19 12:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	291			mg/L	2	20	10/11/19 0:00	emk
Carbonate as CaCO3		1		U		mg/L	2	20	10/11/19 0:00	emk
Hydroxide as CaCO3		1		U		mg/L	2	20	10/11/19 0:00	emk
Total Alkalinity		1	291			mg/L	2	20	10/11/19 0:00	emk
Carbon, total (TC)	SM5310B	1	28.2			mg/L	1	5	10/11/19 13:58	ttg
Carbon, total organic (TOC)	SM5310B	1	1.3	B		mg/L	1	5	10/11/19 13:58	ttg
Chloride	SM4500Cl-E	10	245			mg/L	5	20	10/15/19 14:33	rbt
Conductivity @25C	SM2510B	1	2590			umhos/cm	1	10	10/11/19 14:47	emk
Corrosivity (calc.)	SM 2330 - CaCO3 SI		1.3		*	SI Unit			11/05/19 0:00	calc
Fluoride	SM4500F-C	1	0.7		*	mg/L	0.1	0.4	10/14/19 18:02	enb
Hardness as CaCO3 (dissolved)	SM2340B - Calculation		725			mg/L	0.2	5	11/05/19 0:00	calc
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1		U		mg/L	0.02	0.1	10/17/19 0:21	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1	0.05	B		mg/L	0.05	0.2	10/17/19 16:29	ttg
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.2	B	*	mg/L	0.1	0.5	10/17/19 0:23	pjb
pH (lab)	SM4500H+ B									
pH		1	8.3	H		units	0.1	0.1	10/11/19 0:00	emk
pH measured at		1	21.9			C	0.1	0.1	10/11/19 0:00	emk
Residue, Filterable (TDS) @180C	SM2540C	1	1890			mg/L	20	40	10/10/19 9:11	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1	11.0	B	*	mg/L	5	20	10/10/19 11:33	jck
Sulfate	D516-02/-07 - Turbidimetric	20	751		*	mg/L	20	100	10/17/19 10:10	mss2
TDS (calculated)	Calculation		1790			mg/L			11/05/19 0:00	calc
Total Nitrogen, calc	Calculation: NO3NO2+TKN		0.2	B		mg/L	0.1	0.5	11/05/19 0:00	calc

Report Header Explanations

Batch	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 unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

AS	Analytical Spike (Post Digestion)	*LCSWD*	Laboratory Control Sample - Water Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LFB*	Laboratory Fortified Blank
CCB	Continuing Calibration Blank	*LFM*	Laboratory Fortified Matrix
CCV	Continuing Calibration Verification standard	*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 - Soil	*PBW*	Prep Blank - Water
LCSSD	Laboratory Control Sample - Soil Duplicate	*PQV*	Practical Quantitation Verification standard
LCSW	Laboratory Control Sample - Water	*SDL*	Serial Dilution

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.
Standard	Verifies the validity of the calibration.

ACZ Qualifiers (Qual)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1)	EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2)	EPA 600/R-93-100. Methods for the Determination of Inorganic Substances in Environmental Samples, August 1993.
(3)	EPA 600/R-94-111. Methods for the Determination of Metals in Environmental Samples - Supplement I, May 1994.
(4)	EPA SW-846. Test Methods for Evaluating Solid Waste.
(5)	Standard Methods for the Examination of Water and Wastewater.

Comments

(1)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2)	Soil, Sludge, and Plant matrices for Inorganic analyses are reported on a dry weight basis.
(3)	Animal matrices for Inorganic analyses are reported on an "as received" basis.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(5)	If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

REP001.03.15.02

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alkalinity as CaCO3 SM2320B - Titration

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483638													
WG483638PBW1	PBW	10/10/19 16:56				12.9	mg/L		-20	20			
WG483638LCSW3	LCSW	10/10/19 17:14	WC191004-3	820.0001		796	mg/L	97	90	110			
WG483638LCSW6	LCSW	10/10/19 20:03	WC191004-3	820.0001		811	mg/L	99	90	110			
WG483638PBW2	PBW	10/10/19 20:10				U	mg/L		-20	20			
WG483638LCSW9	LCSW	10/10/19 23:03	WC191004-3	820.0001		819	mg/L	100	90	110			
WG483638PBW3	PBW	10/10/19 23:10				U	mg/L		-20	20			
WG483638LCSW12	LCSW	10/11/19 2:11	WC191004-3	820.0001		827	mg/L	101	90	110			
WG483638PBW4	PBW	10/11/19 2:18				2.2	mg/L		-20	20			
L55135-06DUP	DUP	10/11/19 5:49			53	53.2	mg/L				0	20	
WG483638LCSW15	LCSW	10/11/19 6:08	WC191004-3	820.0001		823	mg/L	100	90	110			
WG483740													
WG483740PBW1	PBW	10/11/19 13:58				U	mg/L		-20	20			
WG483740LCSW3	LCSW	10/11/19 14:16	WC191004-3	820.0001		794	mg/L	97	90	110			
L55140-02DUP	DUP	10/11/19 16:15			65	65.7	mg/L				1	20	
WG483740LCSW6	LCSW	10/12/19 9:41	WC191004-3	820.0001		830	mg/L	101	90	110			
WG483740PBW2	PBW	10/12/19 9:48				U	mg/L		-20	20			
WG483740LCSW9	LCSW	10/12/19 13:33	WC191004-3	820.0001		827	mg/L	101	90	110			
WG483740PBW3	PBW	10/12/19 13:40				U	mg/L		-20	20			

Aluminum, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	2		1.973	mg/L	99	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.15	0.15			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	1.0012		1.103	mg/L	110	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	1.0012	U	1.206	mg/L	120	85	115			MA
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	1.0012	U	1.149	mg/L	115	85	115	5	20	

Aluminum, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484084													
WG484084ICV	ICV	10/17/19 0:15	II191004-2	2		2.017	mg/L	101	95	105			
WG484084ICB	ICB	10/17/19 0:21				U	mg/L		-0.15	0.15			
WG483818LRB	LRB	10/17/19 0:33				U	mg/L		-0.11	0.11			
WG483818LFB	LFB	10/17/19 0:36	II191011-4	1.0012		1.051	mg/L	105	85	115			
L55124-03LFM	LFM	10/17/19 1:47	II191011-4	1.0012	.16	1.213	mg/L	105	70	130			
L55124-03LFMD	LFMD	10/17/19 1:50	II191011-4	1.0012	.16	1.218	mg/L	106	70	130	0	20	

Arsenic, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.05		.04877	mg/L	98	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.00044	0.00044			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.05005		.04898	mg/L	98	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.05005	U	.0486	mg/L	97	70	130			
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.05005	U	.05218	mg/L	104	70	130	7	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Barium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.05		.04853	mg/L	97	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.0011	0.0011			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.0501		.04774	mg/L	95	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.0501	.0208	.06822	mg/L	95	70	130			
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.0501	.0208	.07178	mg/L	102	70	130	5	20	

Boron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	2		1.949	mg/L	97	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.06	0.06			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	.5005		.523	mg/L	104	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	.5005	.16	.699	mg/L	108	85	115			
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	.5005	.16	.705	mg/L	109	85	115	1	20	

Boron, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484084													
WG484084ICV	ICV	10/17/19 0:15	II191004-2	2		2.014	mg/L	101	95	105			
WG484084ICB	ICB	10/17/19 0:21				U	mg/L		-0.06	0.06			
WG483818LRB	LRB	10/17/19 0:33				U	mg/L		-0.044	0.044			
WG483818LFB	LFB	10/17/19 0:36	II191011-4	.5005		.493	mg/L	99	85	115			
L55124-03LFM	LFM	10/17/19 1:47	II191011-4	.5005	.03	.525	mg/L	99	70	130			
L55124-03LFMD	LFMD	10/17/19 1:50	II191011-4	.5005	.03	.517	mg/L	97	70	130	2	20	

Cadmium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.05		.049245	mg/L	98	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.00011	0.00011			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.05005		.048042	mg/L	96	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.05005	.00012	.0463	mg/L	92	70	130			
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.05005	.00012	.049324	mg/L	98	70	130	6	20	

Cadmium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484098													
WG484098ICV	ICV	10/16/19 14:36	MS191014-8	.05		.051369	mg/L	103	90	110			
WG484098ICB	ICB	10/16/19 14:38				U	mg/L		-0.00015	0.00015			
WG483982LRB	LRB	10/16/19 14:40				U	mg/L		-0.00011	0.00011			
WG483982LFB	LFB	10/16/19 14:42	MS190905-3	.05005		.046812	mg/L	94	85	115			
L55128-02LFM	LFM	10/16/19 14:54	MS190905-3	.05005	U	.04808	mg/L	96	70	130			
L55128-02LFMD	LFMD	10/16/19 14:56	MS190905-3	.05005	U	.048273	mg/L	96	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Calcium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	100		97.7	mg/L	98	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.3	0.3			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	68.01207		69.51	mg/L	102	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	68.01207	260	316.4	mg/L	83	85	115			M3
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	68.01207	260	310.8	mg/L	75	85	115	2	20	M3

Carbon, total (TC) SM5310B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483707													
WG483707LFB	LFB	10/11/19 13:58	WI190710-7	50		52	mg/L	104	90	110			
L55123-01DUP	DUP	10/11/19 13:58			29.6	30.4	mg/L				3	20	
L55123-02AS	AS	10/11/19 13:58	WI190710-7	50	29.2	76.9	mg/L	95	90	110			

Carbon, total organic (TOC) SM5310B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483702													
WG483702LFB	LFB	10/11/19 13:58	WI190710-7	48.26		51.4	mg/L	107	90	110			
L55125-03DUP	DUP	10/11/19 13:58			65.5	65.5	mg/L				0	20	
L55125-04AS	AS	10/11/19 13:58	WI190710-7	48.26	14.8	67.5	mg/L	109	90	110			

Chloride SM4500Cl-E

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483960													
WG483960ICB	ICB	10/15/19 12:56				U	mg/L		-1.5	1.5			
WG483960ICV	ICV	10/15/19 12:56	WI190501-1	54.835		54.89	mg/L	100	90	110			
WG483960LFB1	LFB	10/15/19 14:05	WI190812-3	30		29.89	mg/L	100	90	110			
L55122-05AS	AS	10/15/19 14:24	WI190812-3	30	3.8	33.44	mg/L	99	90	110			
L55122-06DUP	DUP	10/15/19 14:24			53.6	49.92	mg/L				7	20	
WG483960LFB2	LFB	10/15/19 14:24	WI190812-3	30		29.81	mg/L	99	90	110			

Cobalt, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.05		.051379	mg/L	103	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.00011	0.00011			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.05005		.051689	mg/L	103	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.05005	.00085	.050902	mg/L	100	70	130			
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.05005	.00085	.054011	mg/L	106	70	130	6	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Cobalt, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484098													
WG484098ICV	ICV	10/16/19 14:36	MS191014-8	.05		.054599	mg/L	109	90	110			
WG484098ICB	ICB	10/16/19 14:38				U	mg/L		-0.00015	0.00015			
WG483982LRB	LRB	10/16/19 14:40				U	mg/L		-0.00011	0.00011			
WG483982LFB	LFB	10/16/19 14:42	MS190905-3	.05005		.049449	mg/L	99	85	115			
L55128-02LFM	LFM	10/16/19 14:54	MS190905-3	.05005	.00023	.050846	mg/L	101	70	130			
L55128-02LFMD	LFMD	10/16/19 14:56	MS190905-3	.05005	.00023	.051169	mg/L	102	70	130	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483638													
WG483638LCSW2	LCSW	10/10/19 17:01	PCN59515	1408		1430	umhos/cm	102	90	110			
WG483638LCSW5	LCSW	10/10/19 19:50	PCN59515	1408		1410	umhos/cm	100	90	110			
WG483638LCSW8	LCSW	10/10/19 22:50	PCN59515	1408		1410	umhos/cm	100	90	110			
WG483638LCSW11	LCSW	10/11/19 1:58	PCN59515	1408		1400	umhos/cm	99	90	110			
L55135-06DUP	DUP	10/11/19 5:49			1190	1190	umhos/cm				0	20	
WG483638LCSW14	LCSW	10/11/19 5:55	PCN59515	1408		1400	umhos/cm	99	90	110			
WG483740													
WG483740LCSW2	LCSW	10/11/19 14:03	PCN59515	1408		1430	umhos/cm	102	90	110			
L55140-02DUP	DUP	10/11/19 16:15			636	636	umhos/cm				0	20	
WG483740LCSW5	LCSW	10/12/19 9:27	PCN59515	1408		1450	umhos/cm	103	90	110			
WG483740LCSW8	LCSW	10/12/19 13:20	PCN59515	1408		1440	umhos/cm	102	90	110			
WG483740LCSW11	LCSW	10/12/19 21:49	PCN59515	1408		1450	umhos/cm	103	90	110			
WG483740LCSW14	LCSW	10/13/19 2:12	PCN59515	1408		1440	umhos/cm	102	90	110			

Copper, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.05		.04987	mg/L	100	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.00176	0.00176			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.0501		.04952	mg/L	99	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.0501	.001	.04378	mg/L	85	70	130			
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.0501	.001	.04685	mg/L	92	70	130	7	20	

Copper, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484098													
WG484098ICV	ICV	10/16/19 14:36	MS191014-8	.05		.05424	mg/L	108	90	110			
WG484098ICB	ICB	10/16/19 14:38				U	mg/L		-0.0024	0.0024			
WG483982LRB	LRB	10/16/19 14:40				U	mg/L		-0.00176	0.00176			
WG483982LFB	LFB	10/16/19 14:42	MS190905-3	.0501		.04818	mg/L	96	85	115			
L55128-02LFM	LFM	10/16/19 14:54	MS190905-3	.0501	.0098	.05785	mg/L	96	70	130			
L55128-02LFMD	LFMD	10/16/19 14:56	MS190905-3	.0501	.0098	.05752	mg/L	95	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Dissolved Chromium, Hexavalent SM3500Cr-B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483515													
WG483515ICV	ICV	10/09/19 13:45	WC190801-6	.05		.0481	mg/L	96	90	110			
WG483515ICB	ICB	10/09/19 13:50				U	mg/L		-0.005	0.005			
WG483515LFB	LFB	10/09/19 13:55	WC190801-8	.05		.0481	mg/L	96	90	110			
L55123-01AS	AS	10/09/19 14:06	WC190801-8	.05	U	.0504	mg/L	101	90	110			
L55123-01DUP	DUP	10/09/19 14:11			U	U	mg/L				0	20	RA

Fluoride SM4500F-C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483820													
WG483820ICV	ICV	10/14/19 10:06	WC191010-1	2.004		1.96	mg/L	98	90	110			
WG483820ICB	ICB	10/14/19 10:13				U	mg/L		-0.3	0.3			
WG483856													
WG483856ICV	ICV	10/14/19 12:27	WC191010-1	2.004		1.99	mg/L	99	90	110			
WG483856ICB	ICB	10/14/19 12:35				U	mg/L		-0.3	0.3			
WG483856LFB1	LFB	10/14/19 12:45	WC191014-1	5.01		4.77	mg/L	95	90	110			
WG483856LFB2	LFB	10/14/19 15:52	WC191014-1	5.01		4.75	mg/L	95	90	110			
L55066-01AS	AS	10/14/19 16:06	WC191014-1	5.01	.1	4.37	mg/L	85	90	110			M2
L55066-01ASD	ASD	10/14/19 16:11	WC191014-1	5.01	.1	4.43	mg/L	86	90	110	1	20	M2
L55123-02AS	AS	10/14/19 17:33	WC191014-1	5.01	.6	5.07	mg/L	89	90	110			M2
L55123-02ASD	ASD	10/14/19 17:54	WC191014-1	5.01	.6	5.02	mg/L	88	90	110	1	20	M2

Magnesium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	100		95.11	mg/L	95	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.6	0.6			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	49.99809		48.77	mg/L	98	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	49.99809	79.3	126.9	mg/L	95	85	115			
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	49.99809	79.3	123.6	mg/L	89	85	115	3	20	

Manganese, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	2		1.94	mg/L	97	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.03	0.03			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	.5015		.52	mg/L	104	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	.5015	.11	.647	mg/L	107	85	115			
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	.5015	.11	.641	mg/L	106	85	115	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Mercury, total M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483675													
WG483675ICV	ICV	10/11/19 13:43	HG190911-3	.004995		.00496	mg/L	99	90	110			
WG483675ICB	ICB	10/11/19 13:44				U	mg/L		-0.0006	0.0006			
WG483677													
WG483677LRB	LRB	10/11/19 14:38				U	mg/L		-0.00044	0.00044			
WG483677LFB	LFB	10/11/19 14:39	HG191002-3	.002002		.00192	mg/L	96	85	115			
L55136-01LFM	LFM	10/11/19 14:52	HG191002-3	.002002	U	.00192	mg/L	96	85	115			
L55136-01LFMD	LFMD	10/11/19 14:53	HG191002-3	.002002	U	.0019	mg/L	95	85	115	1	20	

Molybdenum, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.0199		.01962	mg/L	99	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.00044	0.00044			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.0501		.04775	mg/L	95	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.0501	1.79	1.81885	mg/L	58	70	130			M3
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.0501	1.79	1.83172	mg/L	83	70	130	1	20	

Molybdenum, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484098													
WG484098ICV	ICV	10/16/19 14:36	MS191014-8	.0199		.02065	mg/L	104	90	110			
WG484098ICB	ICB	10/16/19 14:38				U	mg/L		-0.0006	0.0006			
WG483982LRB	LRB	10/16/19 14:40				U	mg/L		-0.00044	0.00044			
WG483982LFB	LFB	10/16/19 14:42	MS190905-3	.0501		.04631	mg/L	92	85	115			
L55128-02LFM	LFM	10/16/19 14:54	MS190905-3	.0501	.001	.05137	mg/L	101	70	130			
L55128-02LFMD	LFMD	10/16/19 14:56	MS190905-3	.0501	.001	.05118	mg/L	100	70	130	0	20	

Nickel, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	2.004		1.9232	mg/L	96	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.024	0.024			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	.501		.5098	mg/L	102	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	.501	U	.5117	mg/L	102	85	115			
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	.501	U	.5183	mg/L	103	85	115	1	20	

Nitrate/Nitrite as N M353.2 - H2SO4 preserved

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484155													
WG484155ICV	ICV	10/16/19 22:51	WI190809-1	2.416		2.481	mg/L	103	90	110			
WG484155ICB	ICB	10/16/19 22:52				U	mg/L		-0.02	0.02			
WG484157													
WG484157LFB	LFB	10/17/19 0:13	WI191004-3	2		2.073	mg/L	104	90	110			
L55074-01AS	AS	10/17/19 0:16	WI191004-3	2	.9	2.956	mg/L	103	90	110			
L55123-01DUP	DUP	10/17/19 0:18			.91	.932	mg/L				2	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Nitrogen, ammonia M350.1 Auto Salicylate w/gas diffusion

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484178													
WG484178ICV	ICV	10/17/19 14:57	WI190904-1	12.012		11.963	mg/L	100	90	110			
WG484178ICB	ICB	10/17/19 14:59				U	mg/L		-0.05	0.05			
WG484178LFB1	LFB	10/17/19 15:00	WI180918-3	10		9.513	mg/L	95	90	110			
L55122-07DUP	DUP	10/17/19 16:10			48.4	48.43	mg/L				0	20	
L55122-06AS	AS	10/17/19 16:18	WI180918-3	10	.08	10.511	mg/L	104	90	110			

Nitrogen, total Kjeldahl M351.2 - TKN by Block Digester

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484156													
WG484156ICV	ICV	10/17/19 0:03	WI190923-4	4		4.04	mg/L	101	90	110			
WG484156ICB	ICB	10/17/19 0:04				U	mg/L		-0.1	0.1			
WG483999LRB	LRB	10/17/19 0:05				U	mg/L		-0.1	0.1			
WG483999LFB	LFB	10/17/19 0:06	WI190729-2	2.5		2.44	mg/L	98	90	110			
L50230-32DUP	DUP	10/17/19 0:09			.2	.23	mg/L				14	20	RA
L55090-04LFM	LFM	10/17/19 0:11	WI190729-2	2.5	U	2.52	mg/L	101	90	110			
L55123-03DUP	DUP	10/17/19 0:24			.2	.23	mg/L				14	20	RA
L55131-01LFM	LFM	10/17/19 0:40	WI190729-2	2.5	4.2	6.83	mg/L	105	90	110			

pH (lab) SM4500H+ B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483638													
WG483638LCSW1	LCSW	10/10/19 16:59	PCN58053	6		6	units	100	5.9	6.1			
WG483638LCSW4	LCSW	10/10/19 19:47	PCN58053	6		6	units	100	5.9	6.1			
WG483638LCSW7	LCSW	10/10/19 22:48	PCN58053	6		6	units	100	5.9	6.1			
WG483638LCSW10	LCSW	10/11/19 1:56	PCN58053	6		6	units	100	5.9	6.1			
L55135-06DUP	DUP	10/11/19 5:49			8	8	units				0	20	
WG483638LCSW13	LCSW	10/11/19 5:53	PCN58053	6		6	units	100	5.9	6.1			
WG483740													
WG483740LCSW1	LCSW	10/11/19 14:01	PCN58053	6		6	units	100	5.9	6.1			
L55140-02DUP	DUP	10/11/19 16:15			7.2	7.2	units				0	20	
WG483740LCSW4	LCSW	10/12/19 9:26	PCN58053	6		6	units	100	5.9	6.1			
WG483740LCSW7	LCSW	10/12/19 13:18	PCN58053	6		6	units	100	5.9	6.1			
WG483740LCSW10	LCSW	10/12/19 21:47	PCN58053	6		6	units	100	5.9	6.1			
WG483740LCSW13	LCSW	10/13/19 2:10	PCN58053	6		6	units	100	5.9	6.1			

Potassium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	20		19.64	mg/L	98	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.6	0.6			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	99.95064		101.3	mg/L	101	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	99.95064	12.2	123.4	mg/L	111	85	115			
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	99.95064	12.2	118.1	mg/L	106	85	115	4	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483577													
WG483577PBW	PBW	10/10/19 8:45				U	mg/L		-40	40			
WG483577LCSW	LCSW	10/10/19 8:47	PCN59812	1000		994	mg/L	99	80	120			
L55124-01DUP	DUP	10/10/19 9:16			2130	2140	mg/L				0	10	

Residue, Non-Filterable (TSS) @105C SM2540D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG483612													
WG483612PBW	PBW	10/10/19 11:05				U	mg/L		-15	15			
WG483612LCSW	LCSW	10/10/19 11:07	PCN59812	100		83	mg/L	83	80	120			
L55123-03DUP	DUP	10/10/19 11:36			11	12	mg/L				9	10	RA

Selenium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.05		.04945	mg/L	99	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.00022	0.00022			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.05005		.04912	mg/L	98	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.05005	.0005	.05072	mg/L	100	70	130			
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.05005	.0005	.05312	mg/L	105	70	130	5	20	

Selenium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484098													
WG484098ICV	ICV	10/16/19 14:36	MS191014-8	.05		.05304	mg/L	106	90	110			
WG484098ICB	ICB	10/16/19 14:38				U	mg/L		-0.0003	0.0003			
WG483982LRB	LRB	10/16/19 14:40				U	mg/L		-0.00022	0.00022			
WG483982LFB	LFB	10/16/19 14:42	MS190905-3	.05005		.04957	mg/L	99	85	115			
L55128-02LFM	LFM	10/16/19 14:54	MS190905-3	.05005	.0002	.05053	mg/L	101	70	130			
L55128-02LFMD	LFMD	10/16/19 14:56	MS190905-3	.05005	.0002	.05142	mg/L	102	70	130	2	20	

Silica, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	42.8		42.38	mg/L	99	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.6	0.6			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	21.415		21.93	mg/L	102	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	21.415	54.4	74.02	mg/L	92	85	115			
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	21.415	54.4	73.5	mg/L	89	85	115	1	20	

Sodium, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	100		97.01	mg/L	97	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.6	0.6			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	100.0109		99.79	mg/L	100	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	100.0109	267	357.7	mg/L	91	85	115			
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	100.0109	267	356.8	mg/L	90	85	115	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Sulfate D516-02/-07 - Turbidimetric

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484167													
WG484167ICB	ICB	10/17/19 8:22				U	mg/L		-3	3			
WG484167ICV	ICV	10/17/19 8:22	WI191008-2	20		19	mg/L	95	90	110			
WG484167LFB	LFB	10/17/19 9:51	WI190801-3	10.01		9.5	mg/L	95	90	110			
L55122-07AS	AS	10/17/19 10:01	SO4TURB5X	10	152	159	mg/L	70	90	110			M3
L55122-06DUP	DUP	10/17/19 10:09			237	236	mg/L				0	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.05		.04937	mg/L	99	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.00022	0.00022			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.05		.04828	mg/L	97	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.05	.6719	.7128	mg/L	82	70	130			
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.05	.6719	.71557	mg/L	87	70	130	0	20	

Uranium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484098													
WG484098ICV	ICV	10/16/19 14:36	MS191014-8	.05		.05391	mg/L	108	90	110			
WG484098ICB	ICB	10/16/19 14:38				U	mg/L		-0.0003	0.0003			
WG483982LRB	LRB	10/16/19 14:40				U	mg/L		-0.00022	0.00022			
WG483982LFB	LFB	10/16/19 14:42	MS190905-3	.05		.04681	mg/L	94	85	115			
L55128-02LFM	LFM	10/16/19 14:54	MS190905-3	.05	U	.05037	mg/L	101	70	130			
L55128-02LFMD	LFMD	10/16/19 14:56	MS190905-3	.05	U	.05108	mg/L	102	70	130	1	20	

Vanadium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484320													
WG484320ICV	ICV	10/18/19 17:02	MS191014-8	.05		.04793	mg/L	96	90	110			
WG484320ICB	ICB	10/18/19 17:04				U	mg/L		-0.0011	0.0011			
WG484320LFB	LFB	10/18/19 17:06	MS190905-3	.05		.04811	mg/L	96	85	115			
L55132-02AS	AS	10/18/19 17:17	MS190905-3	.05	U	.04703	mg/L	94	70	130			
L55132-02ASD	ASD	10/18/19 17:19	MS190905-3	.05	U	.05076	mg/L	102	70	130	8	20	

Vanadium, total M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484098													
WG484098ICV	ICV	10/16/19 14:36	MS191014-8	.05		.05305	mg/L	106	90	110			
WG484098ICB	ICB	10/16/19 14:38				U	mg/L		-0.0015	0.0015			
WG483982LRB	LRB	10/16/19 14:40				U	mg/L		-0.0011	0.0011			
WG483982LFB	LFB	10/16/19 14:42	MS190905-3	.05		.04771	mg/L	95	85	115			
L55128-02LFM	LFM	10/16/19 14:54	MS190905-3	.05	U	.05043	mg/L	101	70	130			
L55128-02LFMD	LFMD	10/16/19 14:56	MS190905-3	.05	U	.05017	mg/L	100	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484221													
WG484221ICV	ICV	10/18/19 13:02	II191010-1	2		1.914	mg/L	96	95	105			
WG484221ICB	ICB	10/18/19 13:08				U	mg/L		-0.03	0.03			
WG484221LFB	LFB	10/18/19 13:21	II191011-4	.50075		.513	mg/L	102	85	115			
L55132-02AS	AS	10/18/19 13:39	II191011-4	.50075	.07	.606	mg/L	109	85	115			
L55132-02ASD	ASD	10/18/19 13:42	II191011-4	.50075	.07	.583	mg/L	104	85	115	4	20	

Zinc, total M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG484084													
WG484084ICV	ICV	10/17/19 0:15	II191004-2	2		1.951	mg/L	98	95	105			
WG484084ICB	ICB	10/17/19 0:21				U	mg/L		-0.03	0.03			
WG483818LRB	LRB	10/17/19 0:33				U	mg/L		-0.022	0.022			
WG483818LFB	LFB	10/17/19 0:36	II191011-4	.50075		.492	mg/L	98	85	115			
L55124-03LFM	LFM	10/17/19 1:47	II191011-4	.50075	.06	.536	mg/L	95	70	130			
L55124-03LFMD	LFMD	10/17/19 1:50	II191011-4	.50075	.06	.543	mg/L	96	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L55123-01	WG484221	Aluminum, dissolved	M200.7 ICP	MA	Recovery for either the spike or spike duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.
		Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	RG693458	Corrosivity (calc.)	SM 2330 - CaCO3 SI	ZZ	Laboratory measured pH and temperature were used in this calculation. Sampler did not report either field pH, field temperature, or both.
	WG483515	Dissolved Chromium, Hexavalent	SM3500Cr-B	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).
	WG483856	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG484320	Molybdenum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG484156	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	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).
	WG483612	Residue, Non-Filterable (TSS) @105C	SM2540D	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).
	WG484167	Sulfate	D516-02/-07 - Turbidimetric	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
L55123-02	WG484221	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	RG693459	Corrosivity (calc.)	SM 2330 - CaCO3 SI	ZZ	Laboratory measured pH and temperature were used in this calculation. Sampler did not report either field pH, field temperature, or both.
	WG483856	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG484320	Molybdenum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG484156	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	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).
	WG483612	Residue, Non-Filterable (TSS) @105C	SM2540D	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).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG484167	Sulfate	D516-02/-07 - Turbidimetric	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Inorganic Extended Qualifier Report

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L55123-03	WG484221	Calcium, dissolved	M200.7 ICP	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	RG693457	Corrosivity (calc.)	SM 2330 - CaCO3 SI	ZZ	Laboratory measured pH and temperature were used in this calculation. Sampler did not report either field pH, field temperature, or both.
	WG483856	Fluoride	SM4500F-C	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
	WG484320	Molybdenum, dissolved	M200.8 ICP-MS	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.
	WG484156	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	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).
	WG483612	Residue, Non-Filterable (TSS) @105C	SM2540D	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).
			SM2540D	Z3	Sample volume yielded a residue less than 2.5 mg
	WG484167	Sulfate	D516-02/-07 - Turbidimetric	M3	The spike recovery value is unusable since the analyte concentration in the sample is disproportionate to the spike level. The recovery of the associated control sample (LCS or LFB) was acceptable.

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #7

ACZ Sample ID: ***L55123-02***
Date Sampled: *10/08/19 13:10*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Base Neutral Acid Extractables by GC/MS

Analysis Method: **M625.1**
Extract Method: **M625**

Workgroup: WG484230
Analyst: rgt
Extract Date: 10/10/19 19:15
Analysis Date: 10/16/19 19:08

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bis(2-chloroethyl) ether	111-44-4		U	1	*	ug/L	2	10
Surrogate Recoveries	**CAS**	**% Recovery**		**Dilution**	**XQ**	**Units**	**LCL**	**UCL**
2,4,6-Tribromophenol	118-79-6	81.1		1		%	40	125
2-Fluorobiphenyl	321-60-8	66.7		1		%	50	110
2-Fluorophenol	367-12-4	61.6		1		%	54	100
Nitrobenzene-d5	4165-60-0	66.4		1		%	40	110
Phenol-d6	13127-88-3	65.8		1		%	47	113
Terphenyl-d14	1718-51-0	71.3		1		%	50	135

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #17

ACZ Sample ID: ***L55123-03***
Date Sampled: *10/08/19 12:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Base Neutral Acid Extractables by GC/MS

Analysis Method: **M625.1**
Extract Method: **M625**

Workgroup: WG484230
Analyst: rgt
Extract Date: 10/10/19 21:05
Analysis Date: 10/16/19 20:14

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Bis(2-chloroethyl) ether	111-44-4		U	1	*	ug/L	2	10
Surrogate Recoveries	**CAS**	**% Recovery**		**Dilution**	**XQ**	**Units**	**LCL**	**UCL**
2,4,6-Tribromophenol	118-79-6	93.1		1		%	40	125
2-Fluorobiphenyl	321-60-8	85.4		1		%	50	110
2-Fluorophenol	367-12-4	74.7		1		%	54	100
Nitrobenzene-d5	4165-60-0	86.3		1		%	40	110
Phenol-d6	13127-88-3	78.4		1		%	47	113
Terphenyl-d14	1718-51-0	75.1		1		%	50	135

Report Header Explanations

Batch	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)
LCL	Lower Control Limit
MDL	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #4) Allows for instrument and annual fluctuations.
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
Upper	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
UCL	Upper Control Limit
Sample	Value of the Sample of interest

QC Sample Types

SURR	Surrogate	*LFB*	Laboratory Fortified Blank
INTS	Internal Standard	*LFM*	Laboratory Fortified Matrix
AS	Analytical Spike (Post Digestion)	*LFMD*	Laboratory Fortified Matrix Duplicate
ASD	Analytical Spike (Post Digestion) Duplicate	*LRB*	Laboratory Reagent Blank
DUP	Sample Duplicate	*MS/MSD*	Matrix Spike/Matrix Spike Duplicate
LCSS	Laboratory Control Sample - Soil	*PBS*	Prep Blank - Soil
LCSW	Laboratory Control Sample - Water	*PBW*	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method or calibration procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Spikes/Fortified Matrix	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

O	Analyte concentration is estimated due to result exceeding calibration range.
H	Analysis exceeded method hold time. pH is a field test with an immediate hold time.
J	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
L	Target analyte response was below the laboratory defined negative threshold.
U	The material was analyzed for, but was not detected above the level of the associated value. The associated value is either the sample quantitation limit or the sample detection limit.

Method References

(1) EPA 600/4-83-020. Methods for Chemical Analysis of Water and Wastes, March 1983.
(2) EPA 600/4-90/020. Methods for the Determination of Organic Compounds in Drinking Water (I), July 1990.
(3) EPA 600/R-92/129. Methods for the Determination of Organic Compounds in Drinking Water (II), July 1990.
(4) EPA SW-846. Test Methods for Evaluating Solid Waste.
(5) Standard Methods for the Examination of Water and Wastewater.

Comments

(1) QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(2) Excluding Oil & Grease, solid & biological matrices for organic analyses are reported on a wet weight basis.
(3) An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.
(4) If the MDL equals the PQL or the MDL column is omitted, the PQL is the reporting limit.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Base Neutral Acid Extractables by GC/MS

M625.1

WG484230

MS **Sample ID: L55123-02MS** **PCN/SCN: OPMBNA191010-** **Analyzed: 10/16/19 19:41**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
BIS(2-CHLOROETHYL) ETHER	50265	U	32	ug/L	64.0	12	158			
2,4,6-TRIBROMOPHENOL (surr)				%	81.7	40	125			
2-FLUOROBIPHENYL (surr)				%	68.8	50	110			
2-FLUOROPHENOL (surr)				%	56.5	54	100			
NITROBENZENE-D5 (surr)				%	64.4	40	110			
PHENOL-D6 (surr)				%	62.0	47	113			
TERPHENYL-D14 (surr)				%	72.6	50	135			

DUP **Sample ID: L55123-03DUP** **Analyzed: 10/16/19 20:48**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
BIS(2-CHLOROETHYL) ETHER		U	U	ug/ml				0	108	RA
2,4,6-TRIBROMOPHENOL (surr)				%	84.3	40	125			
2-FLUOROBIPHENYL (surr)				%	78.8	50	110			
2-FLUOROPHENOL (surr)				%	74.2	54	100			
NITROBENZENE-D5 (surr)				%	80.5	40	110			
PHENOL-D6 (surr)				%	77.2	47	113			
TERPHENYL-D14 (surr)				%	71.7	50	135			

LCSW **Sample ID: WG483657LCSW** **PCN/SCN: OPMBNA191010-** **Analyzed: 10/16/19 16:54**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
BIS(2-CHLOROETHYL) ETHER	50265		36	ug/L	72.0	12	158			
2,4,6-TRIBROMOPHENOL (surr)				%	81.4	40	125			
2-FLUOROBIPHENYL (surr)				%	73.4	50	110			
2-FLUOROPHENOL (surr)				%	66.3	54	100			
NITROBENZENE-D5 (surr)				%	73.4	40	110			
PHENOL-D6 (surr)				%	72.0	47	113			
TERPHENYL-D14 (surr)				%	78.8	50	135			

LCSWD **Sample ID: WG483657LCSWD** **PCN/SCN: OPMBNA191010-** **Analyzed: 10/16/19 17:27**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
BIS(2-CHLOROETHYL) ETHER	50265		38	ug/L	76.0	12	158	5	108	
2,4,6-TRIBROMOPHENOL (surr)				%	83.5	40	125			
2-FLUOROBIPHENYL (surr)				%	75.5	50	110			
2-FLUOROPHENOL (surr)				%	65.0	54	100			
NITROBENZENE-D5 (surr)				%	75.3	40	110			
PHENOL-D6 (surr)				%	63.6	47	113			
TERPHENYL-D14 (surr)				%	83.4	50	135			

PBW **Sample ID: WG483657PBW** **Analyzed: 10/16/19 18:01**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
BIS(2-CHLOROETHYL) ETHER			U	ug/L		-10	10			
2,4,6-TRIBROMOPHENOL (surr)				%	80.9	40	125			
2-FLUOROBIPHENYL (surr)				%	76.3	50	110			
2-FLUOROPHENOL (surr)				%	78.0	54	100			

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

NITROBENZENE-D5 (surr)	%	81.0	40	110
PHENOL-D6 (surr)	%	77.9	47	113
TERPHENYL-D14 (surr)	%	85.7	50	135

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

Organic Extended Qualifier Report

ACZ Project ID: ***L55123***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L55123-02	WG484230	Bis(2-chloroethyl) ether	M625.1	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).
L55123-03	WG484230	Bis(2-chloroethyl) ether	M625.1	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).

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #5
Locator:

ACZ Sample ID: ***L55123-01***
Date Sampled: *10/08/19 16:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Combined Radium (dissolved) Prep Method:
Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (dissolved)	11/05/19 10:41		0.36			pCi/L		calc

Combined Radium (total) Prep Method:
Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	11/05/19 10:41		0.32			pCi/L		calc

Gross Alpha & Beta, dissolved Prep Method:
M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	10/22/19 0:00		6.7	3.7	13	pCi/L		jlg
Gross Beta	10/22/19 0:00		7.5	3.5	8.3	pCi/L	*	jlg

Radium 226, dissolved Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	10/22/19 0:23		0.36	0.11	0.13	pCi/L	*	jlg

Radium 226, total Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	10/22/19 0:21		0.32	0.1	0.11	pCi/L	*	jlg

Radium 228, dissolved Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	10/21/19 16:34		-0.02	0.86	0.91	pCi/L	*	isn

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #5
Locator:

ACZ Sample ID: ***L55123-01***
Date Sampled: *10/08/19 16:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Radium 228, total
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	10/21/19 16:35		0.29	0.8	0.83	pCi/L	*	isn

Thorium 230, dissolved
ESM 4506

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 230, dissolved	10/30/19 0:02		0.2	0.33	0.72	pCi/L	*	jlg

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #7
Locator:

ACZ Sample ID: ***L55123-02***
Date Sampled: *10/08/19 13:10*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Combined Radium (dissolved) Prep Method:
Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (dissolved)	11/05/19 10:41		2.6			pCi/L		calc

Combined Radium (total) Prep Method:
Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	11/05/19 10:41		3.3			pCi/L		calc

Gross Alpha & Beta, dissolved Prep Method:
M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	10/22/19 0:00		14	7.3	19	pCi/L		jlg
Gross Beta	10/22/19 0:00		12	6.7	12	pCi/L	*	jlg

Radium 226, dissolved Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	10/22/19 0:25		2.6	0.23	0.21	pCi/L	*	jlg

Radium 226, total Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	10/22/19 0:24		2.3	0.2	0.1	pCi/L	*	jlg

Radium 228, dissolved Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	10/21/19 16:34		0.02	0.82	0.86	pCi/L	*	isn

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #7
Locator:

ACZ Sample ID: ***L55123-02***
Date Sampled: *10/08/19 13:10*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Radium 228, total — Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	10/21/19 16:35		1	0.87	0.86	pCi/L	*	isn

Thorium 230, dissolved — Prep Method:
ESM 4506

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 230, dissolved	10/30/19 0:04		0.42	0.38	1.1	pCi/L	*	jlg

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #17
Locator:

ACZ Sample ID: ***L55123-03***
Date Sampled: *10/08/19 12:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Combined Radium (dissolved) Prep Method:
Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (dissolved)	11/05/19 10:41		2.9			pCi/L		calc

Combined Radium (total) Prep Method:
Calculation (RA226 + RA228)

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	11/05/19 10:41		3.7			pCi/L		calc

Gross Alpha & Beta, dissolved Prep Method:
M900.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	10/22/19 0:00		18	8.4	17	pCi/L		jlg
Gross Beta	10/22/19 0:00		12	7.4	21	pCi/L	*	jlg

Radium 226, dissolved Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	10/22/19 0:28		2.9	0.3	0.17	pCi/L	*	jlg

Radium 226, total Prep Method:
M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	10/22/19 0:27		2.4	0.2	0.06	pCi/L	*	jlg

Radium 228, dissolved Prep Method:
M904.0

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	10/21/19 16:34		0.27	0.83	0.86	pCi/L	*	isn

Energy Fuels Resources (USA) Inc.
Project ID: ENRGF.C002.RSJT1
Sample ID: RSJ SITE #17
Locator:

ACZ Sample ID: ***L55123-03***
Date Sampled: *10/08/19 12:00*
Date Received: *10/09/19*
Sample Matrix: *Surface Water*

Radium 228, total
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, total	10/21/19 16:35		1.3	0.79	0.76	pCi/L	*	isn

Thorium 230, dissolved
ESM 4506

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 230, dissolved	10/30/19 0:05		0.07	0.31	0.99	pCi/L	*	jlg

Report Header Explanations

Batch	A distinct set of samples analyzed at a specific time
Error(+/-)	Calculated sample specific uncertainty
Found	Value of the QC Type of interest
Limit	Upper limit for RPD, in %.
LCL	Lower Control Limit, in % (except for LCSS, mg/Kg)
LLD	Calculated sample specific Lower Limit of Detection
PCN/SCN	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
PQL	Practical Quantitation Limit
QC	True Value of the Control Sample or the amount added to the Spike
Rec	Amount of the true value or spike added recovered, in % (except for LCSS, mg/Kg)
RER	Relative Error Ratio, calculation used for Dup. QC taking into account the error factor.
RPD	Relative Percent Difference, calculation used for Duplicate QC Types
UCL	Upper Control Limit, in % (except for LCSS, mg/Kg)
Sample	Value of the Sample of interest

QC Sample Types

DUP	Sample Duplicate	*MS/MSD*	Matrix Spike/Matrix Spike Duplicate
LCSS	Laboratory Control Sample - Soil	*PBS*	Prep Blank - Soil
LCSW	Laboratory Control Sample - Water	*PBW*	Prep Blank - Water

QC Sample Type Explanations

Blanks	Verifies that there is no or minimal contamination in the prep method procedure.
Control Samples	Verifies the accuracy of the method, including the prep procedure.
Duplicates	Verifies the precision of the instrument and/or method.
Matrix Spikes	Determines sample matrix interferences, if any.

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.

Method Prefix Reference

M	EPA methodology, including those under SDWA, CWA, and RCRA
SM	Standard Methods for the Examination of Water and Wastewater.
D	ASTM
RP	DOE
ESM	DOE/ESM

Comments

(1)	Solid matrices are reported on a dry weight basis.
(2)	Preparation method: "Method" indicates preparation defined in analytical method.
(3)	QC results calculated from raw data. Results may vary slightly if the rounded values are used in the calculations.
(4)	An asterisk in the "XQ" column indicates there is an extended qualifier and/or certification qualifier associated with the result.

For a complete list of ACZ's Extended Qualifiers, please click:
https://acz.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Alpha M900.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG483841																
L54946-02MSA	MS	10/22/19	PCN58725	100	4.7	2.6	17	96	10	7.4	91	67	144			
L55102-01DUP	DUP-RPD	10/22/19			2.2	2	17	2.3	2	5.5				4	20	
L54917-05DUP	DUP-RPD	10/22/19			2.4	1.7	1.5	3.1	1.9	1.5				25	20	RG
WG483841LCSWA	LCSW	10/22/19	PCN58725	100				120	9.1	1.3	120	67	144			
WG483841PBW	PBW	10/22/19						-.16	0.45	0.8			1.6			
L54917-05DUP	DUP-RER	10/22/19			2.4	1.7	1.5	3.1	1.9	1.5				0.27	2	

Beta M900.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG483841																
L55102-01DUP	DUP-RPD	10/22/19			0.7	2.6	19	2	2.8	9.2				96	20	RG
L54917-05DUP	DUP-RPD	10/22/19			0.91	1.8	1.9	2.6	1.9	1.9				96	20	RG
L54917-05DUP	DUP-RER	10/22/19			0.91	1.8	1.9	2.6	1.9	1.9				0.65	2	
L55015-01MSB	MS	10/22/19	RC190918-11	102.6	4.9	3	12	110	6.9	8.5	102	82	122			
L55102-01DUP	DUP-RER	10/22/19			0.7	2.6	19	2	2.8	9.2				0.34	2	
WG483841LCSWB	LCSW	10/22/19	RC190918-11	102.6				97	6.2	2.6	95	82	122			
WG483841PBW	PBW	10/22/19						-1.6	1.7	1.9			3.8			

Radium 226, dissolved M903.1 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG484061																
WG484061PBW	PBW	10/22/19						.31	0.15	0.34			0.68			
WG484061LCSW	LCSW	10/22/19	PCN57865	20				20	0.72	0.18	100	43	148			
L54992-01DUP	DUP-RPD	10/22/19			0.28	0.17	0.28	.25	0.1	0.14				11	20	
L55149-01DUP	DUP-RER	10/22/19			0.16	0.1	0.2	.2	0.08	0.08				0.31	2	
L55149-01DUP	DUP-RPD	10/22/19			0.16	0.1	0.2	.2	0.08	0.08				22	20	RG
L55015-03MS	MS	10/22/19	PCN57865	20	0.18	0.14	0.15	18	0.64	0.21	89	43	148			

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L55123***

NOTE: If the Rec% column is null, the high/low limits are in the same units as the result. If the Rec% column is not null, then the high/low limits are in % Rec.

Radium 228, dissolved M904.0 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG484524																
WG483855LCSW	LCSW	10/21/19	PCN57186	8.68				8.7	1.2	0.85	100	47	123			
WG483855PBW	PBW	10/21/19						-.06	0.45	0.48			0.96			
L55123-01DUP	DUP-RPD	10/21/19			-0.02	0.86	0.91	-.8	0.83	0.9				190	20	RG
L54946-03MS	MS	10/21/19	PCN57186	8.68	0.3	0.91	0.94	9.7	1.2	0.9	108	47	123			
L55123-01DUP	DUP-RER	10/21/19			-0.02	0.86	0.91	-.8	0.83	0.9				0.65	2	
L54946-02DUP	DUP-RPD	10/21/19			-0.02	0.89	0.94	1	0.87	0.86				208	20	RG
L54946-02DUP	DUP-RER	10/21/19			-0.02	0.89	0.94	1	0.87	0.86				0.82	2	

Thorium 230, dissolved ESM 4506 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG484911																
WG484911PBW	PBW	10/30/19						.02	0.32	1			2			
WG484911LCSW	LCSW	10/30/19	PCN58726	200				220	4.8	0.68	110	91	126			
L55123-02DUP	DUP-RER	10/30/19			0.42	0.38	1.1	-.63	0.46	2				1.76	2	N1A
L55356-01MS	MS	10/30/19	PCN58726	200	0	0.33	0.67	190	8.3	2.4	95	91	126			N1B

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L55123***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L55123-01	WG483841	Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484061	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484524	Radium 228, dissolved	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484911	Thorium 230, dissolved	ESM 4506	N1A	See Case Narrative.
			ESM 4506	N1B	See Case Narrative.
L55123-02	WG483841	Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484061	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484524	Radium 228, dissolved	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484911	Thorium 230, dissolved	ESM 4506	N1A	See Case Narrative.
			ESM 4506	N1B	See Case Narrative.
L55123-03	WG483841	Gross Beta	M900.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484061	Radium 226, dissolved	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484524	Radium 228, dissolved	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
		Radium 228, total	M904.0	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
	WG484911	Thorium 230, dissolved	ESM 4506	N1A	See Case Narrative.
			ESM 4506	N1B	See Case Narrative.

Radiochemistry

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

Thorium 230, dissolved	ESM 4506

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

Sample Receipt

Energy Fuels Resources (USA) Inc.
ENRGF.C002.RSJT1

ACZ Project ID: L55123
Date Received: 10/09/2019 10:35
Received By:
Date Printed: 10/9/2019

Receipt Verification

	YES	NO	NA
1) Is a foreign soil permit included for applicable samples?			X
2) Is the Chain of Custody form or other directive shipping papers present?	X		
3) Does this project require special handling procedures such as CLP protocol?		X	
4) Are any samples NRC licensable material?			X
5) If samples are received past hold time, proceed with requested short hold time analyses?	X		
6) Is the Chain of Custody form complete and accurate?	X		
7) Were any changes made to the Chain of Custody form prior to ACZ receiving the samples?	X		

A change was made in the Report to Address section prior to ACZ custody.

Samples/Containers

	YES	NO	NA
8) Are all containers intact and with no leaks?	X		
9) Are all labels on containers and are they intact and legible?	X		
10) Do the sample labels and Chain of Custody form match for Sample ID, Date, and Time?	X		
11) For preserved bottle types, was the pH checked and within limits? [1]	X		
12) Is there sufficient sample volume to perform all requested work?	X		
13) Is the custody seal intact on all containers?			X
14) Are samples that require zero headspace acceptable?			X
15) Are all sample containers appropriate for analytical requirements?	X		
16) Is there an Hg-1631 trip blank present?			X
17) Is there a VOA trip blank present?			X
18) Were all samples received within hold time?	X		

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp(°C)	Temp Criteria(°C)	Rad(µR/Hr)	Custody Seal Intact?
6605	18.8	NA	15	Yes
6196	4.9	<=6.0	17	Yes

Was ice present in the shipment container(s)?

Yes - Wet ice was 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.

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

Sample Receipt

Energy Fuels Resources (USA) Inc.
ENRGF.C002.RSJT1

ACZ Project ID:	L55123
Date Received:	10/09/2019 10:35
Received By:	
Date Printed:	10/9/2019

[1] 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), HCl preserved vial (organics), Na2S2O3 preserved vial (organics), and HG-1631 (total/dissolved mercury by method 1631).

ACZ Laboratories, Inc. L55123

2773 Downhill Drive Steamboat Springs, CO 80487 (800) 334-5493

CHAIN of CUSTODY

Report to:

Name: Angela Persico	Address: 5000 Uptown Blvd, Suite 220
Company: INTERA	Albuquerque, NM, 87110
E-mail: APersico@intera.com	Telephone: 505-246-1600

Copy of Report to:

Name:	E-mail:
Company:	Telephone:

Invoice to:

Name:	Address:
Company:	
E-mail:	Telephone:

If sample(s) received past holding time (HT), or if insufficient HT remains to complete analysis before expiration, shall ACZ proceed with requested short HT analyses? YES ☑ NO ☐

If "NO" then ACZ will contact client for further instruction. If neither "YES" nor "NO" is indicated, ACZ will proceed with the requested analyses, even if HT is expired, and data will be qualified

Are samples for SDWA Compliance Monitoring? Yes ☐ No ☑

If yes, please include state forms. Results will be reported to PQL for Colorado.

Sampler's Name: BGW **Sampler's Site Information** **State** NM **Zip code** _____ **Time Zone** MST

***Sampler's Signature:** B Williamson

*I attest to the authenticity and validity of this sample. I understand that intentionally mislabeling the time/date/location or tampering with the sample in anyway, is considered fraud and punishable by State Law.

PROJECT INFORMATION

Quote #:

PO#: ENRGF.0002.RSJ T1

Reporting state for compliance testing:

Check box if samples include NRC licensed material? ☐

ANALYSES REQUESTED *(attach list or use quote number)*

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	Appendix-4 -Short	Appendix-4 -Short-ACE						
RSJ Site #5	10/8/19 1600	SW	8	X							
RSJ Site #7	10/8/19 1310	SW	10		X						
RSJ Site #17	10/8/19 1200	SW	10		X						

Matrix: SW (Surface Water) · GW (Ground Water) · WW (Waste Water) · DW (Drinking Water) · SL (Sludge) · SO (Soil) · OL (Oil) · Other (Specify)

REMARKS

Please refer to ACZ's terms & conditions located on the reverse side of this COC.

RELINQUISHED BY:	DATE:TIME	RECEIVED BY:	DATE:TIME
B Williamson	10/8/19 1715	JJC	10-9-19 10:35

L55123 Chain of Custod

FRMAD050.06.14.14 White - Return with sample. Yellow - Retain for your records.

L55123-1911051343