Energy Fuels Resources (USA) Inc.
225 Union Blvd. Suite 600
Lakewood, CO, US, 80228
303 974 2140
www.energyfuels.com

January 27, 2020

Arizona Department of Environmental Quality
Groundwater Section
Mail Code 5415B-3
1110 W. Washington St.
Phoenix, AZ 85007

Re: Canyon Mine Non-Storm water Impoundment 3.04 General Aquifer Protection Permit No. P-100333 Annual Report for 2019

Dear Sir or Madam:

Enclosed please find Energy Fuels Resources (USA) Inc.'s ("EFRI's") 2019 Annual Report for the Canyon Mine (the "Mine") in accordance with the Mine's Non-storm water Impoundment 3.04 General Aquifer Protection Permit (the "APP") No. P-100333.

Pursuant to the requirements found in the APP and in the Arizona Administrative Code (A.A.C.) R18-9-D304, EFRI agreed to the following voluntary condition:

> **"2. Mine Shaft Sump Monitoring**
>
> i. EFRI agrees to measure the daily volume of water pumped from the underground mining areas, and conduct periodic sampling for the water pumped from the underground mining areas as follows:
>
> EFRI will sample water pumped from the underground mining areas at the point the water discharges to the non-storm water impoundment on a quarterly basis for the parameters set forth in Table 1 of the permit. If there is no water pumped during a particular quarter, then no sample will be required. EFRI will report to the Arizona Department of Environmental Quality ("ADEQ") the results of the daily volume of water pumped and quarterly sampling within 30 days of the end of each of the first two quarters of operation, and on an annual basis thereafter.
>
> ii. If the sampling results suggest that aquifer water quality standards could be exceeded in groundwater beneath the mine given the depth to groundwater at the mine, EFRI will increase the frequency of pumping to mitigate any risk to groundwater."

EFRI began discharging to the Mine's non-storm water impoundment in July of 2013. In accordance with the APP condition 2.i, EFRI submitted two quarterly reports to ADEQ on October 23, 2013 and January 13, 2014. The January 13, 2014 report documented the second quarter of pumping operations, and the second of two required quarterly reports; and therefore, reporting is now required at an annual frequency. Shaft sinking was completed in April of 2018.

The shaft has been sunk to a depth of approximately 1,470 feet. Underground mining operations were suspended in April 2018 due to low uranium prices, at which time EFRI restricted underground access. However, after the suspension of mining activities EFRI did continue to pump water from the shaft into the non-storm water impoundment, and four quarters of sampling were completed in 2019. EFRI has surveyed and performed Klinkenberg testing on the mine sump required by Section 1.ii of the APP, and submitted the report for filing with the Agency on January 27, 2020.

Per Section 2.i of the APP, the attached Table 1 includes the daily volume of water pumped from underground mining areas for 2019. All water pumped from underground mining areas to the non-storm water impoundment was discharged in accordance with the approved storm water Pollution Prevention Plan ("SWPPP"). Monthly SWPPP inspections are conducted to ensure all discharge procedures and best management practices ("BMPs") are in compliance. The attached Table 2 includes a summary of the analytical results for the quarterly water samples, collected when the mine is pumping water into the non-storm water impoundment. The samples are taken from the outfall point where mine water discharges from underground into the non-storm water impoundment.

Please feel free to contact me at 303-389-4134 if you have any questions or concerns.

Sincerely,

Kathy Weinel

ENERGY FUELS RESOURCES (USA) INC.
Kathy Weinel
Quality Assurance Manager

cc: Scott Bakken, Gordon Sobering, Matt Germansen (EFRI)
Vimal Chauhan (ADEQ)

TABLES

TABLE 1

Canyon Mine Daily Volume of Water Pumped from Underground Mining Areas during 2019

Date	Flow Meter Reading	Gallons Pumped (GA/D)	Date	Flow Meter Reading	Gallons Pumped (GA/D)	Date	Flow Meter Reading	Gallons Pumped (GA/D)
First Quarter 2019								
January 2019			**February 2019**			**March 2019**		
1/1/2019	No Operations		2/1/2019	5100200	57,997	3/1/2019	5954000	31,333
1/2/2019	No Operations		2/2/2019	5130000	29,800	3/2/2019	5985400	31,400
1/3/2019	4260700	86,741	2/3/2019	No Operations		3/3/2019	6004800	19,400
1/4/2019	No Operations		2/4/2019	5193200	63,200	3/4/2019	6049000	44,200
1/5/2019	4313334	52,634	2/5/2019	No Operations		3/5/2019	6072700	23,700
1/6/2019	No Operations		2/6/2019	5260336	67,136	3/6/2019	6113305	40,605
1/7/2019	4364900	51,566	2/7/2019	5288291	27,955	3/7/2019	6127298	13,993
1/8/2019	No Operations		2/8/2019	5319880	31,589	3/8/2019	6181081	53,783
1/9/2019	4421000	56,100	2/9/2019	5350377	30,497	3/9/2019	6212700	31,619
1/10/2019	4454299	33,299	2/10/2019	5369527	19,150	3/10/2019	No Operations	
1/11/2019	No Operations		2/11/2019	No Operations		3/11/2019	6269000	56,300
1/12/2019	No Operations		2/12/2019	5426500	56,973	3/12/2019	No Operations	
1/13/2019	4538526	84,227	2/13/2019	5461600	35,100	3/13/2019	No Operations	
1/14/2019	4567200	28,674	2/14/2019	5492522	30,922	3/14/2019	6367100	98,100
1/15/2019	4593850	26,650	2/15/2019	5529027	36,505	3/15/2019	6397700	30,600
1/16/2019	4625700	31,850	2/16/2019	5559360	30,333	3/16/2019	No Operations	
1/17/2019	4657131	31,431	2/17/2019	5584632	25,272	3/17/2019	6455000	57,300
1/18/2019	4690194	33,063	2/18/2019	5610500	25,868	3/18/2019	No Operations	
1/19/2019	4718392	28,198	2/19/2019	5648400	37,900	3/19/2019	6520500	65,500
1/20/2019	4741000	22,608	2/20/2019	5676600	28,200	3/20/2019	6550000	29,500
1/21/2019	4769300	28,300	2/21/2019	5705200	28,600	3/21/2019	6593220	43,220
1/22/2019	No Operations		2/22/2019	No Operations		3/22/2019	No Operations	
1/23/2019	4837100	67,800	2/23/2019	No Operations		3/23/2019	No Operations	
1/24/2019	No Operations		2/24/2019	No Operations		3/24/2019	No Operations	
1/25/2019	4898664	61,564	2/25/2019	5821300	116,100	3/25/2019	6718800	125,580
1/26/2019	4928039	29,375	2/26/2019	5848600	27,300	3/26/2019	6740200	21,400
1/27/2019	4956456	28,417	2/27/2019	5880000	31,400	3/27/2019	6771800	31,600
1/28/2019	4986605	30,149	2/28/2019	5922667	42,667	3/28/2019	6802800	31,000
1/29/2019	5018341	31,736				3/29/2019	6840632	37,832
1/30/2019	5042203	23,862				3/30/2019	No Operations	
1/31/2019	No Operations		**Total Gallons Pumped for February**		**880,464**	3/31/2019	No Operations	
Total Gallons Pumped for January		**868,244**				**Total Gallons Pumped for March**		**917,965**
						Total for the Quarter		**2,666,673**

No Operations = The pump was operating, but there were no flow meter readings taken on these days. Gallons pumped for these days are included in the next reading when on-site operations were resumed.

Table 1

Canyon Mine Daily Volume of Water Pumped from Underground Mining Areas during 2019

Date	Flow Meter Reading	Gallons Pumped (GA/D)	Date	Flow Meter Reading	Gallons Pumped (GA/D)	Date	Flow Meter Reading	Gallons Pumped (GA/D)
Second Quarter 2019								
April 2019			**May 2019**			**June 2019**		
4/1/2019	No Operations		5/1/2019	7846500	21,970	6/1/2019	8842000	29593
4/2/2019	6959700	119,068	5/2/2019	No Operations		6/2/2019	No Operations	
4/3/2019	6997700	38,000	5/3/2019	7922340	75,840	6/3/2019	8905000	63,000
4/4/2019	7020700	23,000	5/4/2019	No Operations		6/4/2019	8938700	33,700
4/5/2019	7057600	36,900	5/5/2019	No Operations		6/5/2019	8961100	22,400
4/6/2019	7090000	32,400	5/6/2019	8019900	97,560	6/6/2019	9006550	45,450
4/7/2019	No Operations		5/7/2019	8049356	29,456	6/7/2019	9029700	23,150
4/8/2019	7144768	54,768	5/8/2019	8080000	30,644	6/8/2019	9059200	29,500
4/9/2019	7174989	30,221	5/9/2019	No Operations		6/9/2019	No Operations	
4/10/2019	7203154	28,165	5/10/2019	No Operations		6/10/2019	9123300	64,100
4/11/2019	7237200	34,046	5/11/2019	8166398	86,398	6/11/2019	9158100	34,800
4/12/2019	No Operations		5/12/2019	No Operations		6/12/2019	9190500	32,400
4/13/2019	7298119	60,919	5/13/2019	8237100	70,702	6/13/2019	No Operations	
4/14/2019	No Operations		5/14/2019	8270538	33,438	6/14/2019	No Operations	
4/15/2019	7350528	52,409	5/15/2019	8289000	18,462	6/15/2019	No Operations	
4/16/2019	7381642	31,114	5/16/2019	8325600	36,600	6/16/2019	No Operations	
4/17/2019	7417500	35,858	5/17/2019	8358478	32,878	6/17/2019	9360900	170,400
4/18/2019	No Operations		5/18/2019	8393040	34,562	6/18/2019	9391950	31,050
4/19/2019	7484741	67,241	5/19/2019	No Operations		6/19/2019	9425600	33,650
4/20/2019	No Operations		5/20/2019	8456100	63,060	6/20/2019	9459900	34,300
4/21/2019	No Operations		5/21/2019	8489300	33,200	6/21/2019	9492300	32,400
4/22/2019	7567400	82,659	5/22/2019	8520700	31,400	6/22/2019	9526600	34,300
4/23/2019	7597500	30,100	5/23/2019	8547300	26,600	6/23/2019	No Operations	
4/24/2019	7632791	35,291	5/24/2019	No Operations		6/24/2019	9593000	66,400
4/25/2019	7671709	38,918	5/25/2019	8615844	68,544	6/25/2019	9628000	35,000
4/26/2019	7702305	30,596	5/26/2019	No Operations		6/26/2019	9661300	33,300
4/27/2019	7733320	31,015	5/27/2019	No Operations		6/27/2019	9694400	33,100
4/28/2019	No Operations		5/28/2019	8706500	90,656	6/28/2019	9727800	33,400
4/29/2019	7784200	50,880	5/29/2019	8744400	37,900	6/29/2019	9765700	37,900
4/30/2019	7824530	40,330	5/30/2019	No Operations		6/30/2019	No Operations	
			5/31/2019	8812407	68,007			
Total Gallons Pumped for April		**983,898**	**Total Gallons Pumped for May**		**987,877**	**Total Gallons Pumped for June**		**953,293**
						Total for the Quarter		**2,925,068**

No Operations = The pump was operating, but there were no flow meter readings taken on these days. Gallons pumped for these days are included in the next reading when on-site operations were resumed.

Table 1

Canyon Mine Daily Volume of Water Pumped from Underground Mining Areas During 2019

Date	Flow Meter Reading	Gallons Pumped (GA/D)	Date	Flow Meter Reading	Gallons Pumped (GA/D)	Date	Flow Meter Reading	Gallons Pumped (GA/D)
Third Quarter 2019								
July 2019			**August 2019**			**September 2019**		
7/1/2019	9829800	64,100	8/1/2019	No Operations		9/1/2019	11690150	57,450
7/2/2019	9873400	43,600	8/2/2019	10830000	56,700	9/2/2019	11718875	28,725
7/3/2019	9898000	24,600	8/3/2019	10858000	28,000	9/3/2019	11747600	28,725
7/4/2019	9933460	35,460	8/4/2019	10887900	29,900	9/4/2019	11772200	24,600
7/5/2019	9968920	35,460	8/5/2019	10916700	28,800	9/5/2019	11805000	32,800
7/6/2019	10004380	35,460	8/6/2019	10945800	29,100	9/6/2019	11832700	27,700
7/7/2019	10039840	35,460	8/7/2019	10975000	29,200	9/7/2019	11860400	27,700
7/8/2019	10075300	35,460	8/8/2019	11003700	28,700	9/8/2019	11888100	27,700
7/9/2019	10095400	20,100	8/9/2019	No Operations		9/9/2019	11915800	27,700
7/10/2019	10128833	33,433	8/10/2019	No Operations		9/10/2019	11938700	22,900
7/11/2019	10162267	33,433	8/11/2019	No Operations		9/11/2019	11975100	36,400
7/12/2019	10195700	33,433	8/12/2019	11124100	120,400	9/12/2019	11998610	23,510
7/13/2019	10229900	34,200	8/13/2019	11146600	22,500	9/13/2019	12025808	27,198
7/14/2019	10264800	34,900	8/14/2019	11174700	28,100	9/14/2019	12053005	27,198
7/15/2019	10299700	34,900	8/15/2019	No Operations		9/15/2019	12080203	27,198
7/16/2019	10325100	25,400	8/16/2019	11233100	58,400	9/16/2019	12107400	27,198
7/17/2019	10354100	29,000	8/17/2019	11269400	36,300	9/17/2019	12134600	27,200
7/18/2019	10383100	29,000	8/18/2019	No Operations		9/18/2019	12165800	31,200
7/19/2019	10412100	29,000	8/19/2019	11322800	53,400	9/19/2019	12191580	25,780
7/20/2019	10443500	31,400	8/20/2019	No Operations		9/20/2019	12217360	25,780
7/21/2019	10474350	30,850	8/21/2019	11379200	56,400	9/21/2019	12243140	25,780
7/22/2019	10505200	30,850	8/22/2019	No Operations		9/22/2019	12268920	25,780
7/23/2019	10536171	30,971	8/23/2019	11435200	56,000	9/23/2019	12294700	25,780
7/24/2019	10567143	30,971	8/24/2019	11463200	28,000	9/24/2019	12323600	28,900
7/25/2019	10598114	30,971	8/25/2019	No Operations		9/25/2019	12355300	31,700
7/26/2019	10629086	30,971	8/26/2019	11519500	56,300	9/26/2019	12381000	25,700
7/27/2019	10660057	30,971	8/27/2019	11558000	38,500	9/27/2019	12409220	28,220
7/28/2019	10691029	30,971	8/28/2019	11575000	17,000	9/28/2019	12437440	28,220
7/29/2019	10722000	30,971	8/29/2019	11603300	28,300	9/29/2019	12465660	28,220
7/30/2019	10747650	25,650	8/30/2019	11632700	29,400	9/30/2019	12493880	28,220
7/31/2019	10773300	25,650	8/31/2019	No Operations				
Total Gallons Pumped for July		**1,007,600**	**Total Gallons Pumped for August**		**859,400**	**Total Gallons Pumped for September**		**861,180**
						Total for the Quarter		**2,728,180**

No Operations = The pump was operating, but there were no flow meter readings taken on these days. Gallons pumped for these days are included in the next reading when on-site operations were resumed.

Table 1

Canyon Mine Daily Volume of Water Pumped from Underground Mining Areas During 2019

Date	Flow Meter Reading	Gallons Pumped (GA/D)	Date	Flow Meter Reading	Gallons Pumped (GA/D)	Date	Flow Meter Reading	Gallons Pumped (GA/D)
Fourth Quarter 2019								
October 2019			**November 2019**			**December 2019**		
10/1/2019	12522100	28,220	11/1/2019	No Operations		12/1/2019	No Operations	
10/2/2019	12543300	21,200	11/2/2019	No Operations		12/2/2019	No Operations	
10/3/2019	No Operations		11/3/2019	No Operations		12/3/2019	Pump Starter	
10/4/2019	12599700	56,400	11/4/2019	13413800	124,300	12/4/2019	Repairs	
10/5/2019	No Operations		11/5/2019	13439500	25,700	12/5/2019	No Operations	
10/6/2019	No Operations		11/6/2019	13468300	28,800	12/6/2019	No Operations	
10/7/2019	12678400	78,700	11/7/2019	No Operations		12/7/2019	No Operations	
10/8/2019	12707800	29,400	11/8/2019	No Operations		12/8/2019	No Operations	
10/9/2019	No Operations		11/9/2019	No Operations		12/9/2019	14310400	303,100
10/10/2019	No Operations		11/10/2019	No Operations		12/10/2019	14314300	3,900
10/11/2019	No Operations		11/11/2019	No Operations		12/11/2019	No Operations	
10/12/2019	No Operations		11/12/2019	13618800	150,500	12/12/2019	14378500	64,200
10/13/2019	No Operations		11/13/2019	13645600	26,800	12/13/2019	No Operations	
10/14/2019	12867800	160,000	11/14/2019	13678000	32,400	12/14/2019	No Operations	
10/15/2019	12893200	25,400	11/15/2019	No Operations		12/15/2019	No Operations	
10/16/2019	12923000	29,800	11/16/2019	No Operations		12/16/2019	14492400	113,900
10/17/2019	12948800	25,800	11/17/2019	No Operations		12/17/2019	14523900	31,500
10/18/2019	No Operations		11/18/2019	13774800	96,800	12/18/2019	14544300	20,400
10/19/2019	No Operations		11/19/2019	13809200	34,400	12/19/2019	14571000	26,700
10/20/2019	No Operations		11/20/2019	13827900	18,700	12/20/2019	14599170	28,170
10/21/2019	13054300	105,500	11/21/2019	13853400	25,500	12/21/2019	No Operations	
10/22/2019	13073500	19,200	11/22/2019	No Operations		12/22/2019	No Operations	
10/23/2019	13100000	26,500	11/23/2019	No Operations		12/23/2019	14679400	80,230
10/24/2019	13129900	29,900	11/24/2019	No Operations		12/24/2019	No Operations	
10/25/2019	No Operations		11/25/2019	13964000	110,600	12/25/2019	No Operations	
10/26/2019	No Operations		11/26/2019	No Operations		12/26/2019	No Operations	
10/27/2019	No Operations		11/27/2019	14007300	43,300	12/27/2019	14783500	104,100
10/28/2019	13235100	105,200	11/28/2019	Power Outage		12/28/2019	14812200	28,700
10/29/2019	13262300	27,200	11/29/2019	Power Outage		12/29/2019	14841400	29,200
10/30/2019	13289500	27,200	11/30/2019	Power Outage		12/30/2019	No Operations	
10/31/2019	No Operations					12/31/2019	No Operations	
Total Gallons Pumped for October		**795,620**	**Total Gallons Pumped for**		**717,800**	**Total Gallons Pumped for December**		**834,100**
						Total for the Quarter		**2,347,520**
						Total for the Year		**10,667,441**

No Operations = The pump was operating, but there were no flow meter readings taken on these days. Gallons pumped for these days are included in the next reading when on-site operations were resumed.

Table 2

Canyon Mine Non-Stormwater Impoundment Sample Summary

Analytes	Units	Q1 2019	Q2 2019	Q3 2019	Q4 2019
Metals					
Antimony (Total)	mg/L	0.0065	0.0065	0.0055	0.0053
Arsenic (Total)	mg/L	0.220	0.286	0.187	0.182
Barium (Total)	mg/L	0.043	0.038 J	0.040	0.030 J
Beryllium (Total)	mg/L	0.00008 J	<0.00008	<0.00008	<0.00008
Cadmium (Total)	mg/L	0.00063	0.00077	0.0007	0.00042
Chromium III (Total)	mg/L	<0.01	<0.01	<0.01	<0.01
Cobalt (Total)	mg/L	0.101	0.106	0.112	0.104
Copper (Total)	mg/L	0.01 J	0.02 J	0.01 J	<0.01
Iron (Total)	mg/L	0.84	1.05	0.58	0.44
Lead (Total)	mg/L	0.0036	0.0032	0.0021	0.0017
Manganese (Total)	mg/L	0.019 J	0.02 J	0.02 J	<0.01
Mercury (Total)	mg/L	<0.0002	<0.0002	<0.0002	<0.0002
Nickel (Total)	mg/L	0.321	0.354	0.366	0.301
Selenium (Total)	mg/L	0.001	0.0009	0.0006	0.0007
Thallium (Total)	mg/L	0.0017	0.0016	0.0017	0.0015
Uranium (dissolved)	mg/L	0.100	0.132	0.119	0.112
Uranium (total)	mg/L	0.120	0.121	0.118	0.116
Vanadium (Total)	mg/L	<0.005	<0.005	<0.005	<0.005
Zinc (Total)	mg/L	0.78	0.83	1.16	0.50
Radionuclides					
Gross Alpha (dissolved)	pCi/L	150 (±14)	81 (±11)	89 (±11)	140 (±14)
Radium 226 (dissolved)	pCi/L	16 (±0.57)	14 (±0.54)	5.4 (±1.6)	13 (±0.36)
Radium 228 (dissolved)	pCi/L	0.78 (±0.82)	0.78 (±0.98)	0.33 (±0.76)	0.77 (±0.83)
Uranium 234 (dissolved)	pCi/L	91 (±6.6)	93 (±6.4)	84 (±5.8)	82 (±6.2)
Uranium 235 (dissolved)	pCi/L	2.3 (±1.2)	1.9 (±0.99)	1.5 (±0.87)	1.3 (±0.84)
Uranium 238 (dissolved)	pCi/L	42.6 (±4.5)	49 (±4.7)	39.5 (±4)	39.7 (±4.4)
Major Ions					
Bicarbonate as CaCO3	mg/L	208	222	254	215
Carbonate as CaCO3	mg/L	9.4 J	<10	<2	8.0 J
Alkalinity (Total)	mg/L	218	227	<2	223
Calcium	mg/L	91.9	98.0	97.8	90.3
Fluoride	mg/L	0.21 J	<0.25	<0.25	<0.25
Magnesium	mg/L	53.2	54.0	53.6	51.3
Potassium	mg/L	5.0	4.9	4.8	4.6
Sodium	mg/L	18.8	19.1	17.8	16.4
Sulfate	mg/L	245	246	222	211
Physical Properties					
Conductivity	umhos/cm	874 (f =899)	902(f=902)	NM	838 (f =876)
pH (field)	S.U.	7.89	7.78	NM	8.08
Temperature (field)	C	14.77	16.38	NM	16.05
ORP (field)	mV	252.3	229.2	NM	82.8
TDS	mg/L	590	588	588	564
TSS	mg/L	6.0 J	5.0 J	<5	<5

NM = Not measured (Meter malfunctioned during sampling event.)

< - Indicates that the analyte was not dectected above the reporting limit.

( ) - Indicates the error term for the radiological result.

J - Analyte concentration detected at a value between the MDL and PQL. The associated value is an estimated quantity.

ATTACHMENT 1

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

Analytical Report

March 06, 2019

Report to:
Kathy Weinel
Energy Fuels Resources (USA) Inc.
225 Union Blvd. ,Suite 600
Lakewood, CO 80228

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

Project ID:
ACZ Project ID: L49959

Kathy Weinel:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on February 15, 2019. This project has been assigned to ACZ's project number, L49959. 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 L49959. 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 April 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.

Bill Lane has reviewed and approved this report

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1

ACZ Sample ID: ***L49959-01***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								02/19/19 11:55	rbt
Total Recoverable Digestion	M200.2 ICP-MS								02/22/19 9:43	rap
Total Recoverable Digestion	M200.2 ICP								02/22/19 11:48	dcm

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1

ACZ Sample ID: ***L49959-01***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, total recoverable	M200.7 ICP	1	0.17	B		mg/L	0.03	0.2	02/25/19 19:12	dcm
Antimony, total recoverable	M200.8 ICP-MS	1	0.0065			mg/L	0.0004	0.002	02/25/19 20:11	bsu
Arsenic, total recoverable	M200.8 ICP-MS	1	0.220			mg/L	0.0002	0.001	02/25/19 20:11	bsu
Barium, total recoverable	M200.7 ICP	1	0.043			mg/L	0.003	0.02	02/25/19 19:12	dcm
Beryllium, total recoverable	M200.8 ICP-MS	1	0.00008	B		mg/L	0.00008	0.0003	02/25/19 20:11	bsu
Boron, total recoverable	M200.7 ICP	1	0.08			mg/L	0.01	0.05	02/25/19 19:12	dcm
Cadmium, total recoverable	M200.8 ICP-MS	1	0.00063			mg/L	0.00005	0.0003	02/25/19 20:11	bsu
Calcium, total recoverable	M200.7 ICP	1	91.9			mg/L	0.1	0.5	02/25/19 19:12	dcm
Chromium, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	02/25/19 19:12	dcm
Cobalt, total recoverable	M200.8 ICP-MS	1	0.101			mg/L	0.00005	0.0003	02/25/19 20:11	bsu
Copper, dissolved	M200.7 ICP	1	0.01	B		mg/L	0.01	0.05	02/25/19 21:57	dcm
Copper, total recoverable	M200.7 ICP	1	0.01	B		mg/L	0.01	0.05	02/25/19 19:12	dcm
Iron, dissolved	M200.7 ICP	1	0.31			mg/L	0.02	0.05	02/26/19 14:18	aeh
Iron, total recoverable	M200.7 ICP	1	0.84			mg/L	0.02	0.05	02/25/19 19:12	dcm
Lead, dissolved	M200.8 ICP-MS	1	0.0012			mg/L	0.0001	0.0005	02/25/19 15:54	bsu
Lead, total recoverable	M200.8 ICP-MS	1	0.0036			mg/L	0.0001	0.0005	02/25/19 20:11	bsu
Magnesium, total recoverable	M200.7 ICP	1	53.2			mg/L	0.2	1	02/25/19 19:12	dcm
Manganese, total recoverable	M200.7 ICP	1	0.019	B		mg/L	0.005	0.03	02/25/19 19:12	dcm
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	02/28/19 10:03	che
Molybdenum, total recoverable	M200.8 ICP-MS	1	0.0756			mg/L	0.0002	0.0005	02/25/19 20:11	bsu
Nickel, total recoverable	M200.7 ICP	1	0.321			mg/L	0.008	0.04	02/25/19 19:12	dcm
Potassium, total recoverable	M200.7 ICP	1	5.0			mg/L	0.2	1	02/25/19 19:12	dcm
Selenium, total recoverable	M200.8 ICP-MS	1	0.001			mg/L	0.0001	0.0003	02/25/19 20:11	bsu
Silica, total recoverable	M200.7 ICP	1	12.1		*	mg/L	0.2	1	02/25/19 19:12	dcm
Silver, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	02/25/19 15:54	bsu
Silver, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	02/25/19 20:11	bsu
Sodium, total recoverable	M200.7 ICP	1	18.8			mg/L	0.2	1	02/25/19 19:12	dcm
Thallium, total recoverable	M200.8 ICP-MS	1	0.0017			mg/L	0.0001	0.0005	02/25/19 20:11	bsu
Tin, total recoverable	M200.7 ICP	1		U		mg/L	0.04	0.2	02/25/19 19:12	dcm
Uranium, dissolved	M200.8 ICP-MS	1	0.100			mg/L	0.0001	0.0005	02/25/19 15:54	bsu

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1

ACZ Sample ID: ***L49959-01***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Uranium, total recoverable	M200.8 ICP-MS	1	0.120			mg/L	0.0001	0.0005	02/25/19 20:11	bsu
Vanadium, total recoverable	M200.7 ICP	1		U		mg/L	0.005	0.03	02/25/19 19:12	dcm
Zinc, dissolved	M200.7 ICP	1	0.65			mg/L	0.01	0.05	02/26/19 14:18	aeh
Zinc, total recoverable	M200.7 ICP	1	0.78			mg/L	0.01	0.05	02/25/19 19:12	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	208			mg/L	2	20	02/19/19 0:00	emk
Carbonate as CaCO3		1	9.4	B		mg/L	2	20	02/19/19 0:00	emk
Hydroxide as CaCO3		1		U		mg/L	2	20	02/19/19 0:00	emk
Total Alkalinity		1	218			mg/L	2	20	02/19/19 0:00	emk
Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	1		U	*	mg/L	2	2	02/15/19 14:25	mh
Chemical Oxygen Demand	M410.4	1		U	*	mg/L	10	20	02/20/19 10:23	emk
Chloride	M300.0 - Ion Chromatography	1	34.4			mg/L	0.4	2	03/04/19 20:47	mss2
Conductivity @25C	SM2510B	1	874			umhos/cm	1	10	02/19/19 22:04	emk
Fluoride	M300.0 - Ion Chromatography	1	0.21	B	*	mg/L	0.05	0.25	03/04/19 20:47	mss2
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.50			mg/L	0.02	0.1	03/02/19 22:16	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	02/18/19 13:47	ttg
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH3			U		mg/L	0.1	0.5	03/06/19 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1		U	*	mg/L	0.1	0.5	02/20/19 22:44	ttg
Residue, Filterable (TDS) @180C	SM2540C	1	590		*	mg/L	10	20	02/18/19 19:04	nmc
Residue, Non-Filterable (TSS) @105C	SM2540D	1	6.0	B	*	mg/L	5	20	02/19/19 14:19	kja
Sulfate	M300.0 - Ion Chromatography	5	245			mg/L	2	10	03/05/19 16:22	mss2
Sulfide as S	SM4500S2-D	1		U	*	mg/L	0.02	0.1	02/15/19 14:20	emk

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1 DUP

ACZ Sample ID: ***L49959-02***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								02/19/19 12:09	rbt
Total Recoverable Digestion	M200.2 ICP-MS								02/22/19 10:00	rap
Total Recoverable Digestion	M200.2 ICP								02/22/19 12:00	dcm

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1 DUP

ACZ Sample ID: ***L49959-02***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, total recoverable	M200.7 ICP	1	0.17	B		mg/L	0.03	0.2	02/25/19 19:16	dcm
Antimony, total recoverable	M200.8 ICP-MS	1	0.0065			mg/L	0.0004	0.002	02/25/19 20:13	bsu
Arsenic, total recoverable	M200.8 ICP-MS	1	0.220			mg/L	0.0002	0.001	02/25/19 20:13	bsu
Barium, total recoverable	M200.7 ICP	1	0.043			mg/L	0.003	0.02	02/25/19 19:16	dcm
Beryllium, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	02/25/19 20:13	bsu
Boron, total recoverable	M200.7 ICP	1	0.07			mg/L	0.01	0.05	02/25/19 19:16	dcm
Cadmium, total recoverable	M200.8 ICP-MS	1	0.00066			mg/L	0.00005	0.0003	02/25/19 20:13	bsu
Calcium, total recoverable	M200.7 ICP	1	93.7			mg/L	0.1	0.5	02/25/19 19:16	dcm
Chromium, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	02/25/19 19:16	dcm
Cobalt, total recoverable	M200.8 ICP-MS	1	0.101			mg/L	0.00005	0.0003	02/25/19 20:13	bsu
Copper, dissolved	M200.7 ICP	1	0.01	B		mg/L	0.01	0.05	02/25/19 22:00	dcm
Copper, total recoverable	M200.7 ICP	1	0.02	B		mg/L	0.01	0.05	02/25/19 19:16	dcm
Iron, dissolved	M200.7 ICP	1	0.28			mg/L	0.02	0.05	02/26/19 14:21	aeh
Iron, total recoverable	M200.7 ICP	1	0.85			mg/L	0.02	0.05	02/25/19 19:16	dcm
Lead, dissolved	M200.8 ICP-MS	1	0.0012			mg/L	0.0001	0.0005	02/25/19 15:56	bsu
Lead, total recoverable	M200.8 ICP-MS	1	0.0036			mg/L	0.0001	0.0005	02/25/19 20:13	bsu
Magnesium, total recoverable	M200.7 ICP	1	53.9			mg/L	0.2	1	02/25/19 19:16	dcm
Manganese, total recoverable	M200.7 ICP	1	0.017	B		mg/L	0.005	0.03	02/25/19 19:16	dcm
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	02/28/19 10:04	che
Molybdenum, total recoverable	M200.8 ICP-MS	1	0.0762			mg/L	0.0002	0.0005	02/25/19 20:13	bsu
Nickel, total recoverable	M200.7 ICP	1	0.330			mg/L	0.008	0.04	02/25/19 19:16	dcm
Potassium, total recoverable	M200.7 ICP	1	5.1			mg/L	0.2	1	02/25/19 19:16	dcm
Selenium, total recoverable	M200.8 ICP-MS	1	0.001			mg/L	0.0001	0.0003	02/25/19 20:13	bsu
Silica, total recoverable	M200.7 ICP	1	12.2		*	mg/L	0.2	1	02/25/19 19:16	dcm
Silver, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	02/25/19 15:56	bsu
Silver, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	02/25/19 20:13	bsu
Sodium, total recoverable	M200.7 ICP	1	19.0			mg/L	0.2	1	02/25/19 19:16	dcm
Thallium, total recoverable	M200.8 ICP-MS	1	0.0017			mg/L	0.0001	0.0005	02/25/19 20:13	bsu
Tin, total recoverable	M200.7 ICP	1		U		mg/L	0.04	0.2	02/25/19 19:16	dcm
Uranium, dissolved	M200.8 ICP-MS	1	0.101			mg/L	0.0001	0.0005	02/25/19 15:56	bsu

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1 DUP

ACZ Sample ID: ***L49959-02***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Uranium, total recoverable	M200.8 ICP-MS	1	0.120			mg/L	0.0001	0.0005	02/25/19 20:13	bsu
Vanadium, total recoverable	M200.7 ICP	1		U		mg/L	0.005	0.03	02/25/19 19:16	dcm
Zinc, dissolved	M200.7 ICP	1	0.65			mg/L	0.01	0.05	02/26/19 14:21	aeh
Zinc, total recoverable	M200.7 ICP	1	0.79			mg/L	0.01	0.05	02/25/19 19:16	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	222			mg/L	2	20	02/19/19 0:00	emk
Carbonate as CaCO3		1	8.7	B		mg/L	2	20	02/19/19 0:00	emk
Hydroxide as CaCO3		1		U		mg/L	2	20	02/19/19 0:00	emk
Total Alkalinity		1	231			mg/L	2	20	02/19/19 0:00	emk
Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	1		U	*	mg/L	2	2	02/15/19 14:48	mh
Chemical Oxygen Demand	M410.4	1		U	*	mg/L	10	20	02/20/19 10:29	emk
Chloride	M300.0 - Ion Chromatography	1	34.3			mg/L	0.4	2	03/04/19 21:40	mss2
Conductivity @25C	SM2510B	1	872			umhos/cm	1	10	02/19/19 22:49	emk
Fluoride	M300.0 - Ion Chromatography	1	0.21	B	*	mg/L	0.05	0.25	03/04/19 21:40	mss2
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.49			mg/L	0.02	0.1	03/02/19 22:17	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	02/22/19 16:41	ttg
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH3			U		mg/L	0.1	0.5	03/06/19 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1		U	*	mg/L	0.1	0.5	02/20/19 22:45	ttg
Residue, Filterable (TDS) @180C	SM2540C	1	600		*	mg/L	10	20	02/18/19 19:06	nmc
Residue, Non-Filterable (TSS) @105C	SM2540D	1	5.0	B	*	mg/L	5	20	02/19/19 14:20	kja
Sulfate	M300.0 - Ion Chromatography	5	242			mg/L	2	10	03/05/19 16:40	mss2
Sulfide as S	SM4500S2-D	1		U	*	mg/L	0.02	0.1	02/15/19 14:23	emk

Arizona license number: AZ0102

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: http://www.acz.com/public/extquallist.pdf

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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
WG466587													
WG466587PBW1	PBW	02/19/19 18:15				U	mg/L		-20	20			
WG466587LCSW3	LCSW	02/19/19 18:33	WC190206-3	820.0001		802	mg/L	98	90	110			
L49959-01DUP	DUP	02/19/19 22:14			218	219	mg/L				0	20	
WG466587LCSW6	LCSW	02/19/19 22:32	WC190206-3	820.0001		806	mg/L	98	90	110			
WG466587PBW2	PBW	02/19/19 22:38				2.2	mg/L		-20	20			
L49985-01DUP	DUP	02/19/19 23:59			96.1	95.8	mg/L				0	20	
WG466587LCSW9	LCSW	02/20/19 1:51	WC190206-3	820.0001		818	mg/L	100	90	110			
WG466587PBW3	PBW	02/20/19 1:57				2.7	mg/L		-20	20			
WG466587LCSW12	LCSW	02/20/19 5:45	WC190206-3	820.0001		825	mg/L	101	90	110			
WG466587PBW4	PBW	02/20/19 5:52				2.7	mg/L		-20	20			
WG466587LCSW15	LCSW	02/20/19 9:01	WC190206-3	820.0001		813	mg/L	99	90	110			

Aluminum, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		1.978	mg/L	99	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.09	0.09			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.066	0.066			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	1.0006		1.015	mg/L	101	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	1.0006	.17	1.225	mg/L	105	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	1.0006	.17	1.22	mg/L	105	70	130	0	20	

Antimony, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.02		.01936	mg/L	97	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.0012	0.0012			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00088	0.00088			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.01		.01028	mg/L	103	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.01	U	.0103	mg/L	103	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.01	U	.01034	mg/L	103	70	130	0	20	

Arsenic, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.05		.04977	mg/L	100	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.0006	0.0006			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00044	0.00044			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.05005		.04925	mg/L	98	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.05005	.0007	.05036	mg/L	99	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.05005	.0007	.05054	mg/L	100	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		2.0472	mg/L	102	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.009	0.009			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.0066	0.0066			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.4995		.5034	mg/L	101	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.4995	.043	.5455	mg/L	101	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.4995	.043	.5504	mg/L	102	70	130	1	20	

Beryllium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.05		.050049	mg/L	100	90	110			
WG466931ICB	ICB	02/25/19 20:06				.000132	mg/L		-0.00024	0.00024			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.000176	0.000176			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.05005		.048325	mg/L	97	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.05005	U	.049457	mg/L	99	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.05005	U	.049327	mg/L	99	70	130	0	20	

Biochemical Oxygen Demand (5 day) SM5210B/HACH10360

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466392													
WG466392LCSW1	LCSW	02/15/19 14:53	BODLCSW-2	198		184	mg/L	93	84.6	115.4			
WG466392LCSW2	LCSW	02/15/19 14:57	BODLCSW-2	198		187	mg/L	94	84.6	115.4			
WG466392LCSW3	LCSW	02/15/19 15:02	BODLCSW-2	198		185	mg/L	93	84.6	115.4			

Boron, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		2.033	mg/L	102	95	105			
WG466944ICB	ICB	02/25/19 18:46				.016	mg/L		-0.03	0.03			
WG466802LRB	LRB	02/25/19 18:59				.013	mg/L		-0.022	0.022			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.5005		.503	mg/L	100	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.5005	.07	.576	mg/L	101	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.5005	.07	.572	mg/L	100	70	130	1	20	

Cadmium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.05		.049654	mg/L	99	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.00015	0.00015			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00011	0.00011			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.05005		.048937	mg/L	98	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.05005	U	.04748	mg/L	95	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.05005	U	.048096	mg/L	96	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	100		96.69	mg/L	97	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.3	0.3			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.22	0.22			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	68.44277		67.85	mg/L	99	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	68.44277	93.7	159.1	mg/L	96	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	68.44277	93.7	159	mg/L	95	70	130	0	20	

Chemical Oxygen Demand M410.4

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466617													
WG466617ICV	ICV	02/20/19 9:46	WC181022-12	200		195	mg/L	98	90	110			
WG466617ICB	ICB	02/20/19 9:52				U	mg/L		-10	10			
WG466617LRB1	LRB	02/20/19 9:58				U	mg/L		-10	10			
WG466617LFB1	LFB	02/20/19 10:04	WC181022-11	50		51	mg/L	102	90	110			
L49959-02DUP	DUP	02/20/19 10:36			U	U	mg/L				0	20	RA
L49959-02AS	AS	02/20/19 10:42	WC181022-11	50	U	51	mg/L	102	90	110			
WG466617LRB2	LRB	02/20/19 12:16				U	mg/L		-10	10			
WG466617LFB2	LFB	02/20/19 12:22	WC181022-11	50		52	mg/L	104	90	110			

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG458375													
WG458375ICV	ICV	10/11/18 12:48	WI181011-1	19.96		20.1	mg/L	101	90	110			
WG458375ICB	ICB	10/11/18 13:05				U	mg/L		-0.4	0.4			
WG467400													
WG467400LFB1	LFB	03/04/19 18:23	WI181011-3	30		29.8	mg/L	99	90	110			
L49952-03DUP	DUP	03/04/19 18:59			122	122	mg/L				0	20	
L49952-04AS	AS	03/04/19 19:35	WI181011-3	1500	33.1	1510	mg/L	98	90	110			
WG467400LFB2	LFB	03/05/19 3:03	WI181011-3	30		30.2	mg/L	101	90	110			

Chromium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		1.964	mg/L	98	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.03	0.03			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.022	0.022			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.5025		.5	mg/L	100	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.5025	U	.498	mg/L	99	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.5025	U	.5	mg/L	100	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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 recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.05		.050874	mg/L	102	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.00015	0.00015			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00011	0.00011			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.05005		.04938	mg/L	99	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.05005	.00028	.048146	mg/L	96	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.05005	.00028	.048791	mg/L	97	70	130	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466587													
WG466587LCSW2	LCSW	02/19/19 18:20	PCN57524	1410		1460	umhos/cm	104	90	110			
L49959-01DUP	DUP	02/19/19 22:14			874	874	umhos/cm				0	20	
WG466587LCSW5	LCSW	02/19/19 22:20	PCN57524	1410		1450	umhos/cm	103	90	110			
L49985-01DUP	DUP	02/19/19 23:59			2120	2130	umhos/cm				0	20	
WG466587LCSW8	LCSW	02/20/19 1:38	PCN57524	1410		1440	umhos/cm	102	90	110			
WG466587LCSW11	LCSW	02/20/19 5:33	PCN57524	1410		1440	umhos/cm	102	90	110			
WG466587LCSW14	LCSW	02/20/19 8:49	PCN57524	1410		1420	umhos/cm	101	90	110			

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466767													
WG466767ICV	ICV	02/25/19 20:57	II190211-1	2		1.956	mg/L	98	95	105			
WG466767ICB	ICB	02/25/19 21:04				U	mg/L		-0.03	0.03			
WG466767LFB	LFB	02/25/19 21:17	II190214-2	.5015		.541	mg/L	108	85	115			
L49952-03AS	AS	02/25/19 21:30	II190214-2	2.5075	U	2.706	mg/L	108	85	115			
L49952-03ASD	ASD	02/25/19 21:34	II190214-2	2.5075	U	2.703	mg/L	108	85	115	0	20	

Copper, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		1.976	mg/L	99	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.03	0.03			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.022	0.022			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.5015		.502	mg/L	100	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.5015	.02	.518	mg/L	99	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.5015	.02	.518	mg/L	99	70	130	0	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG458375													
WG458375ICV	ICV	10/11/18 12:48	WI181011-1	4.012		4.07	mg/L	101	90	110			
WG458375ICB	ICB	10/11/18 13:05				U	mg/L		-0.05	0.05			
WG467400													
WG467400LFB1	LFB	03/04/19 18:23	WI181011-3	1.5		1.49	mg/L	99	90	110			
L49952-03DUP	DUP	03/04/19 18:59			1.41	1.41	mg/L				0	20	RA
L49952-04AS	AS	03/04/19 19:35	WI181011-3	75	U	75.3	mg/L	100	90	110			
WG467400LFB2	LFB	03/05/19 3:03	WI181011-3	1.5		1.52	mg/L	101	90	110			

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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.

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466990													
WG466990ICV	ICV	02/26/19 13:19	II190211-1	2		1.974	mg/L	99	95	105			
WG466990ICB	ICB	02/26/19 13:26				U	mg/L		-0.06	0.06			
WG466990LFB	LFB	02/26/19 13:39	II190225-2	1.0018		1.098	mg/L	110	85	115			
L49952-03AS	AS	02/26/19 13:52	II190225-2	5.009	U	5.5	mg/L	110	85	115			
L49952-03ASD	ASD	02/26/19 13:55	II190225-2	5.009	U	5.45	mg/L	109	85	115	1	20	

Iron, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		1.955	mg/L	98	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.06	0.06			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.044	0.044			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	1.0018		1.011	mg/L	101	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	1.0018	.85	1.829	mg/L	98	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	1.0018	.85	1.836	mg/L	98	70	130	0	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466917													
WG466917ICV	ICV	02/25/19 15:25	MS190225-2	.05		.05052	mg/L	101	90	110			
WG466917ICB	ICB	02/25/19 15:27				U	mg/L		-0.00022	0.00022			
WG466917LFB	LFB	02/25/19 15:29	MS190208-2	.0496		.05153	mg/L	104	85	115			
L49952-03AS	AS	02/25/19 15:45	MS190208-2	.0496	U	.04455	mg/L	90	70	130			
L49952-03ASD	ASD	02/25/19 15:47	MS190208-2	.0496	U	.04738	mg/L	96	70	130	6	20	
L50019-12AS	AS	02/25/19 16:05	MS190208-2	2.48	U	2.4418	mg/L	98	70	130			
L50019-12ASD	ASD	02/25/19 16:07	MS190208-2	2.48	U	2.4679	mg/L	100	70	130	1	20	

Lead, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.05		.05091	mg/L	102	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.0003	0.0003			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00022	0.00022			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.0496		.05005	mg/L	101	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.0496	.0003	.05076	mg/L	102	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.0496	.0003	.05159	mg/L	103	70	130	2	20	

Magnesium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	100		97.98	mg/L	98	95	105			
WG466944ICB	ICB	02/25/19 18:46				.23	mg/L		-0.6	0.6			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.44	0.44			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	51.06117		50.75	mg/L	99	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	51.06117	53.9	103.5	mg/L	97	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	51.06117	53.9	103.5	mg/L	97	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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.

Manganese, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		1.9935	mg/L	100	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.015	0.015			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.011	0.011			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.4995		.507	mg/L	102	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.4995	.017	.528	mg/L	102	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.4995	.017	.5326	mg/L	103	70	130	1	20	

Mercury, total M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466977													
WG466977ICV	ICV	02/28/19 9:59	HG190214-3	.004995		.00507	mg/L	102	95	105			
WG466977ICB	ICB	02/28/19 10:00				U	mg/L		-0.0002	0.0002			
WG466977LRB	LRB	02/28/19 10:02				U	mg/L		-0.00044	0.00044			
WG466977LFB	LFB	02/28/19 10:03	HG190214-6	.002002		.00184	mg/L	92	85	115			
L50101-04LFM	LFM	02/28/19 10:15	HG190214-6	.002002	U	.0019	mg/L	95	85	115			
L50101-04LFMD	LFMD	02/28/19 10:16	HG190214-6	.002002	U	.00187	mg/L	93	85	115	2	20	

Molybdenum, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.02006		.01942	mg/L	97	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.0006	0.0006			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00044	0.00044			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.0501		.04845	mg/L	97	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.0501	.0019	.05041	mg/L	97	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.0501	.0019	.0513	mg/L	99	70	130	2	20	

Nickel, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2.004		1.9468	mg/L	97	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.024	0.024			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.0176	0.0176			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.5		.509	mg/L	102	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.5	.33	.8098	mg/L	96	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.5	.33	.8194	mg/L	98	70	130	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
WG467325													
WG467325ICV	ICV	03/02/19 22:03	WI190207-3	2.416		2.528	mg/L	105	90	110			
WG467325ICB	ICB	03/02/19 22:05				U	mg/L		-0.02	0.02			
WG467325LFB1	LFB	03/02/19 22:08	WI181204-13	2		1.998	mg/L	100	90	110			
L49953-01AS	AS	03/02/19 22:11	WI181204-13	400	205	621.6	mg/L	104	90	110			
L49953-02DUP	DUP	03/02/19 22:13			.32	.312	mg/L				3	20	
WG467325ICV1	ICV	03/02/19 23:08	WI190207-3	2.416		2.546	mg/L	105	90	110			
WG467325ICB1	ICB	03/02/19 23:09				U	mg/L		-0.02	0.02			
WG467325LFB2	LFB	03/02/19 23:21	WI181204-13	2		2.005	mg/L	100	90	110			

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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
WG466474													
WG466474ICV	ICV	02/18/19 13:16	WI190206-2	12		11.99	mg/L	100	90	110			
WG466474ICB	ICB	02/18/19 13:18				U	mg/L		-0.05	0.05			
WG466474LFB1	LFB	02/18/19 13:19	WI180918-3	10		9.96	mg/L	100	90	110			
L49940-03AS	AS	02/18/19 13:42	WI180918-3	10	.07	10.044	mg/L	100	90	110			
L49940-04DUP	DUP	02/18/19 13:45			U	U	mg/L				0	20	RA
WG466474LFB2	LFB	02/18/19 14:02	WI180918-3	10		9.755	mg/L	98	90	110			
WG466833													
WG466833ICV	ICV	02/22/19 15:28	WI190206-2	12		11.965	mg/L	100	90	110			
WG466833ICB	ICB	02/22/19 15:29				U	mg/L		-0.05	0.05			
WG466833LFB1	LFB	02/22/19 15:31	WI180918-3	10		10.111	mg/L	101	90	110			
WG466833LFB2	LFB	02/22/19 16:13	WI180918-3	10		10.751	mg/L	108	90	110			
L49959-02AS	AS	02/22/19 16:42	WI180918-3	10	U	9.446	mg/L	94	90	110			
L50020-02DUP	DUP	02/22/19 16:45			U	U	mg/L				0	20	RA

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
WG466634													
WG466634ICV	ICV	02/20/19 22:32	WI190214-12	4		3.89	mg/L	97	90	110			
WG466634ICB	ICB	02/20/19 22:34				U	mg/L		-0.1	0.1			
WG466509LRB	LRB	02/20/19 22:35				U	mg/L		-0.1	0.1			
WG466509LFB	LFB	02/20/19 22:36	WI190125-2	2.5		2.31	mg/L	92	90	110			
L49835-02LFM	LFM	02/20/19 22:38	TKN100X	250	190	186	mg/L	-2	90	110			M3
L49953-01DUP	DUP	02/20/19 23:10			2200	2270	mg/L				3	20	

Potassium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	20		19.94	mg/L	100	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.6	0.6			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.44	0.44			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	101.8983		101.5	mg/L	100	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	101.8983	5.1	109	mg/L	102	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	101.8983	5.1	107.7	mg/L	101	70	130	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466505													
WG466505PBW	PBW	02/18/19 18:51				12	mg/L		-20	20			
WG466505LCSW	LCSW	02/18/19 18:53	PCN58071	260		266	mg/L	102	80	120			
L49977-02DUP	DUP	02/18/19 19:17			50	52	mg/L				4	10	RA

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466558													
WG466558PBW	PBW	02/19/19 14:00				U	mg/L		-15	15			
WG466558LCSW	LCSW	02/19/19 14:01	PCN58071	160		154	mg/L	96	80	120			
L50012-01DUP	DUP	02/19/19 14:29			5	U	mg/L				200	10	RA

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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.

Selenium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.05		.05068	mg/L	101	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.0003	0.0003			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00022	0.00022			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.05005		.04929	mg/L	98	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.05005	.0009	.04984	mg/L	98	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.05005	.0009	.05024	mg/L	99	70	130	1	20	

Silica, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	42.8		43.62	mg/L	102	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.6	0.6			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.44	0.44			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	21.415		22.16	mg/L	103	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	21.415	12.2	26.35	mg/L	66	70	130			M2
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	21.415	12.2	26.62	mg/L	67	70	130	1	20	M2

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466917													
WG466917ICV	ICV	02/25/19 15:25	MS190225-2	.02004		.02052	mg/L	102	90	110			
WG466917ICB	ICB	02/25/19 15:27				U	mg/L		-0.00022	0.00022			
WG466917LFB	LFB	02/25/19 15:29	MS190208-2	.01002		.00994	mg/L	99	85	115			
L49952-03AS	AS	02/25/19 15:45	MS190208-2	.01002	U	.00831	mg/L	83	70	130			
L49952-03ASD	ASD	02/25/19 15:47	MS190208-2	.01002	U	.00832	mg/L	83	70	130	0	20	
L50019-12AS	AS	02/25/19 16:05	MS190208-2	.501	.012	.5183	mg/L	101	70	130			
L50019-12ASD	ASD	02/25/19 16:07	MS190208-2	.501	.012	.5191	mg/L	101	70	130	0	20	

Silver, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.02004		.02065	mg/L	103	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.0003	0.0003			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00022	0.00022			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.01002		.01003	mg/L	100	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.01002	U	.00956	mg/L	95	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.01002	U	.00958	mg/L	96	70	130	0	20	

Sodium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	100		98.21	mg/L	98	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.6	0.6			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.44	0.44			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	100.3634		99.39	mg/L	99	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	100.3634	19	119.5	mg/L	100	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	100.3634	19	119	mg/L	100	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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 M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG458375													
WG458375ICV	ICV	10/11/18 12:48	WI181011-1	50		50.8	mg/L	102	90	110			
WG458375ICB	ICB	10/11/18 13:05				U	mg/L		-0.4	0.4			
WG467400													
WG467400LFB1	LFB	03/04/19 18:23	WI181011-3	30		29.5	mg/L	98	90	110			
L49952-03DUP	DUP	03/04/19 18:59			663	664	mg/L				0	20	
L49952-04AS	AS	03/04/19 19:35	WI181011-3	1500	3130	4550	mg/L	95	90	110			
WG467400LFB2	LFB	03/05/19 3:03	WI181011-3	30		31.3	mg/L	104	90	110			

Sulfide as S SM4500S2-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466393													
WG466393ICV	ICV	02/15/19 13:15	WC190214-3	.28266		.265	mg/L	94	90	110			
WG466393ICB	ICB	02/15/19 13:18				U	mg/L		-0.06	0.06			
WG466393LFB	LFB	02/15/19 13:21	WC190214-6	.2071067		.239	mg/L	115	80	120			
L49959-02AS	AS	02/15/19 14:27	WC190214-6	.2071067	U	.255	mg/L	123	75	125			
L49959-02DUP	DUP	02/15/19 14:30			U	U	mg/L				0	20	RA

Thallium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.05		.05161	mg/L	103	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.0003	0.0003			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00022	0.00022			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.0501		.04805	mg/L	96	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.0501	U	.04866	mg/L	97	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.0501	U	.04923	mg/L	98	70	130	1	20	

Tin, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		2.016	mg/L	101	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.12	0.12			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.088	0.088			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.989		.998	mg/L	101	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.989	U	1.012	mg/L	102	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.989	U	1.007	mg/L	102	70	130	0	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466917													
WG466917ICV	ICV	02/25/19 15:25	MS190225-2	.05		.04843	mg/L	97	90	110			
WG466917ICB	ICB	02/25/19 15:27				U	mg/L		-0.00022	0.00022			
WG466917LFB	LFB	02/25/19 15:29	MS190208-2	.05		.04914	mg/L	98	85	115			
L49952-03AS	AS	02/25/19 15:45	MS190208-2	.05	.0139	.05731	mg/L	87	70	130			
L49952-03ASD	ASD	02/25/19 15:47	MS190208-2	.05	.0139	.05982	mg/L	92	70	130	4	20	
L50019-12AS	AS	02/25/19 16:05	MS190208-2	2.5	U	2.2232	mg/L	89	70	130			
L50019-12ASD	ASD	02/25/19 16:07	MS190208-2	2.5	U	2.2412	mg/L	90	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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.

Uranium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466931													
WG466931ICV	ICV	02/25/19 20:04	MS190225-2	.05		.04882	mg/L	98	90	110			
WG466931ICB	ICB	02/25/19 20:06				U	mg/L		-0.0003	0.0003			
WG466793LRB	LRB	02/25/19 20:08				U	mg/L		-0.00022	0.00022			
WG466793LFB	LFB	02/25/19 20:10	MS190208-2	.05		.04767	mg/L	95	85	115			
L50023-08LFM	LFM	02/25/19 20:21	MS190208-2	.05	.0011	.05085	mg/L	100	70	130			
L50023-08LFMD	LFMD	02/25/19 20:26	MS190208-2	.05	.0011	.05136	mg/L	101	70	130	1	20	

Vanadium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		2.0285	mg/L	101	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.015	0.015			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.011	0.011			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.502		.5163	mg/L	103	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.502	U	.5206	mg/L	104	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.502	U	.5194	mg/L	103	70	130	0	20	

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466990													
WG466990ICV	ICV	02/26/19 13:19	II190211-1	2		1.932	mg/L	97	95	105			
WG466990ICB	ICB	02/26/19 13:26				U	mg/L		-0.03	0.03			
WG466990LFB	LFB	02/26/19 13:39	II190225-2	.4942		.523	mg/L	106	85	115			
L49952-03AS	AS	02/26/19 13:52	II190225-2	2.471	U	2.592	mg/L	105	85	115			
L49952-03ASD	ASD	02/26/19 13:55	II190225-2	2.471	U	2.568	mg/L	104	85	115	1	20	

Zinc, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG466944													
WG466944ICV	ICV	02/25/19 18:40	II190211-1	2		1.924	mg/L	96	95	105			
WG466944ICB	ICB	02/25/19 18:46				U	mg/L		-0.03	0.03			
WG466802LRB	LRB	02/25/19 18:59				U	mg/L		-0.022	0.022			
WG466802LFB	LFB	02/25/19 19:03	II190214-2	.4942		.524	mg/L	106	85	115			
L49959-02LFM	LFM	02/25/19 19:19	II190214-2	.4942	.79	1.275	mg/L	98	70	130			
L49959-02LFMD	LFMD	02/25/19 19:22	II190214-2	.4942	.79	1.272	mg/L	98	70	130	0	20	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L49959***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L49959-01	WG466392	Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	K1	The sample dilutions set-up for the BOD/CBOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
	WG466617	Chemical Oxygen Demand	M410.4	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).
	WG467400	Fluoride	M300.0 - Ion Chromatography	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).
	WG466474	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	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).
	WG466634	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	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.
	WG466505	Residue, Filterable (TDS) @180C	SM2540C	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).
	WG466558	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).
	WG466944	Silica, total recoverable	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG466393	Sulfide as S	SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
L49959-02	WG466392	Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	K1	The sample dilutions set-up for the BOD/CBOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
	WG466617	Chemical Oxygen Demand	M410.4	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).
	WG467400	Fluoride	M300.0 - Ion Chromatography	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).
	WG466833	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	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).
	WG466634	Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	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.
	WG466505	Residue, Filterable (TDS) @180C	SM2540C	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).
	WG466558	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).
	WG466944	Silica, total recoverable	M200.7 ICP	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG466393	Sulfide as S	SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1

ACZ Sample ID: ***L49959-01***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**
Extract Method:

Workgroup: WG466789
Analyst: kfm
Extract Date:
Analysis Date: 02/22/19 14:31

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1		mg/L	2	10

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1 DUP

ACZ Sample ID: ***L49959-02***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**
Extract Method:

Workgroup: WG466789
Analyst: kfm
Extract Date:
Analysis Date: 02/22/19 14:33

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1		mg/L	2	10

Arizona license number: AZ0102

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	*LFM*	Laboratory Fortified Matrix
INTS	Internal Standard	*LFMD*	Laboratory Fortified Matrix Duplicate
DUP	Sample Duplicate	*LRB*	Laboratory Reagent Blank
LCSS	Laboratory Control Sample - Soil	*MS/MSD*	Matrix Spike/Matrix Spike Duplicate
LCSW	Laboratory Control Sample - Water	*PBS*	Prep Blank - Soil
LFB	Laboratory Fortified Blank	*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)

B	Analyte concentration detected at a value between MDL and PQL. The associated value is an estimated quantity.
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: http://www.acz.com/public/extquallist.pdf

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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.

Oil & Grease, Total Recoverable

1664A - Gravimetric

WG466789

MS **Sample ID: L50023-01MS** **PCN/SCN: OP181228-2** **Analyzed: 02/22/19 15:00**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40	U	32.4	mg/L	81.0	78	114			

LCSW **Sample ID: WG466789LCSW** **PCN/SCN: OP181228-2** **Analyzed: 02/22/19 15:04**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		34.3	mg/L	86.0	78	114			

LCSWD **Sample ID: WG466789LCSWD** **PCN/SCN: OP181228-2** **Analyzed: 02/22/19 15:06**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		36.9	mg/L	92.0	78	114	7	18	

PBW **Sample ID: WG466789PBW** **Analyzed: 02/22/19 14:30**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE			U	mg/L						

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

Organic Extended Qualifier Report

ACZ Project ID: ***L49959***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION

No extended qualifiers associated with this analysis

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1
Locator:

ACZ Sample ID: ***L49959-01***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Combined Radium (total)
Calculation (RA226 + RA228)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	03/06/19 11:19		16			pCi/L		calc

Gross Alpha & Beta, total
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	02/27/19 0:00		170	15	8.7	pCi/L	*	amk
Gross Beta	02/27/19 0:00		59	5.3	8.4	pCi/L	*	amk

Gross Alpha, dissolved
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha, dissolved	02/26/19 0:00		150	14	6.6	pCi/L		amk

Lead 210, total
EICHROM, OTW01

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Lead 210, total	03/05/19 11:56		10	2.1	3.5	pCi/L	*	jlg

Radium 226, dissolved
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	02/28/19 0:23		14	0.47	0.08	pCi/L		slm

Radium 226, total
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	02/28/19 0:21		16	0.57	0.18	pCi/L		slm

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1
Locator:

ACZ Sample ID: ***L49959-01***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Radium 228
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	02/25/19 15:02		0.78	0.82	0.82	pCi/L		amk

Radium 228, dissolved
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	02/25/19 15:02		0.78	0.82	0.82	pCi/L		amk

Thorium, Isotopic
ESM 4506

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 228	02/27/19 0:10		0.19	0.22	0.25	pCi/L	*	djc
Thorium 230	02/27/19 0:10		0.24	0.27	0.66	pCi/L	*	djc
Thorium 232	02/27/19 0:10		0.02	0.14	0.25	pCi/L	*	djc

Uranium, Isotopic dissolved
Eichrom ACW03

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Uranium 234	02/28/19 0:05		91	6.6	1	pCi/L	*	djc
Uranium 235	02/28/19 0:05		2.3	1.2	1.2	pCi/L	*	djc
Uranium 238	02/28/19 0:05		42.6	4.5	1.5	pCi/L	*	djc

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1 DUP
Locator:

ACZ Sample ID: ***L49959-02***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Combined Radium (total)
Calculation (RA226 + RA228)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	03/06/19 11:19		11			pCi/L		calc

Gross Alpha & Beta, total
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	02/27/19 0:00		140	14	15	pCi/L	*	amk
Gross Beta	02/27/19 0:00		60	5.2	8.6	pCi/L	*	amk

Gross Alpha, dissolved
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha, dissolved	02/26/19 0:00		150	14	8.8	pCi/L		amk

Lead 210, total
EICHROM, OTW01

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Lead 210, total	03/05/19 11:56		15	2.4	3.7	pCi/L	*	jlg

Radium 226, dissolved
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	02/28/19 0:25		13	0.43	0.06	pCi/L		slm

Radium 226, total
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	02/28/19 0:24		11	0.43	0.06	pCi/L		slm

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q1 DUP
Locator:

ACZ Sample ID: ***L49959-02***
Date Sampled: *02/14/19 12:15*
Date Received: *02/15/19*
Sample Matrix: *Groundwater*

Radium 228
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	02/25/19 15:02		0.32	0.72	0.74	pCi/L		amk

Radium 228, dissolved
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	02/25/19 15:02		0.32	0.72	0.74	pCi/L		amk

Thorium, Isotopic
ESM 4506

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 228	02/27/19 0:11		0.04	0.37	0.3	pCi/L	*	djc
Thorium 230	02/27/19 0:11		-0.05	0.19	0.79	pCi/L	*	djc
Thorium 232	02/27/19 0:11		-0.09	0.15	0.3	pCi/L	*	djc

Uranium, Isotopic dissolved
Eichrom ACW03

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Uranium 234	02/28/19 0:07		80	5.8	1.1	pCi/L	*	djc
Uranium 235	02/28/19 0:07		2.1	1.2	0.76	pCi/L	*	djc
Uranium 238	02/28/19 0:07		37.5	4	0.76	pCi/L	*	djc

Arizona license number: AZ0102

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: http://www.acz.com/public/extquallist.pdf

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L49959***

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
WG467197																
L49853-07MSA	MS	02/27/19	PCN57385	66.67	3.4	2	1.5	39	5.8	1.3	53	67	144			M2
L50013-01DUP	DUP-RER	02/27/19			3	1.8	1.4	1.4	1.5	1.5				0.68	2	
WG466726LCSWA	LCSW	02/27/19	PCN57385	100				96	8.2	1.1	96	67	144			
WG466726PBW	PBW	02/27/19						.65	0.61	0.59			1.18			
L49853-05DUP	DUP-RER	02/27/19			2.8	1.7	1.4	2.1	1.7	1.5				0.29	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
WG467197																
L49853-05DUP	DUP-RER	02/27/19			1.7	1.9	2	1.8	1.8	1.8				0.04	2	
L50013-01DUP	DUP-RER	02/27/19			3.2	1.8	1.7	2.9	1.8	1.8				0.12	2	
WG466726LCSWB	LCSW	02/27/19	RC190124-11	8.36				9.3	2.9	2.4	111	82	122			
WG466726PBW	PBW	02/27/19						1.1	1.8	1.8			3.6			
L50013-02MSB	MS	02/27/19	RC190124-11	5.57	0.76	1.8	1.9	8.4	2.3	1.9	137	82	122			M1

Gross Alpha, dissolved 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
WG467136																
WG467134LCSWA	LCSW	02/26/19	PCN57385	100				94	8	1.1	94	67	144			
WG467134PBW	PBW	02/26/19						.3	0.46	0.59			1.18			
L49968-01DUP	DUP-RER	02/26/19			65	9.1	8.7	66	9.2	15				0.08	2	
L49934-02MSA	MS	02/26/19	PCN57385	100	110	12	9.5	190	16	6.8	80	67	144			
L49934-01DUP	DUP-RER	02/26/19			110	12	6.9	110	12	8.7				0	2	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L49959***

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.

Lead 210, total EICHROM, OTW01 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG467476																
WG466629LCSW	LCSW	03/05/19	PCN54280	95.34				98	4.6	4.1	103	55	121			
WG466629PBW	PBW	03/05/19						1.9	1.8	3.6			7.2			
L49959-02DUP	DUP-RER	03/05/19			15	2.4	3.7	18	4.2	7				0.62	2	
L49959-01MS	MS	03/05/19	PCN54280	190.68	10	2.1	3.5	210	8.4	7	105	55	121			

Radium 226, total 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
WG467220																
WG466685PBW	PBW	02/28/19						.11	0.07	0.06			0.12			
WG466685LCSW	LCSW	02/28/19	PCN57865	20				25	0.7	0.07	125	43	148			
L49926-03DUP	DUP-RER	02/28/19			1.2	0.18	0.3	1.1	0.16	0.07				0.41	2	
L49956-02DUP	DUP-RER	02/28/19			0.24	0.09	0.24	.27	0.11	0.06				0.21	2	
L49968-01MS	MS	02/28/19	PCN57865	20	18	0.63	0.08	36	0.76	0.07	90	43	148			

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
WG467027																
WG466619LCSW	LCSW	02/25/19	PCN57186	9.39				10	1.1	0.75	106	47	123			
WG466619PBW	PBW	02/25/19						.44	0.57	0.58			1.16			
L49955-01DUP	DUP-RER	02/25/19			0.55	0.66	0.66	.25	0.72	0.75				0.31	2	
L49926-01DUP	DUP-RER	02/25/19			2.5	0.88	0.81	1.7	0.75	0.7				0.69	2	
L49926-02MS	MS	02/25/19	PCN57186	9.39	5.2	0.83	0.64	14	1.2	0.73	94	47	123			

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L49959***

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.

Thorium 228 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
WG467173																
WG466653PBW	PBW	02/27/19						-.09	0.29	0.25			0.5			
L49959-01DUP	DUP-RER	02/27/19			0.19	0.22	0.25	-.21	0.2	0.25				1.34	2	

Thorium 230 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
WG467173																
WG466653PBW	PBW	02/27/19						.22	0.24	0.65			1.3			
WG466653LCSW	LCSW	02/27/19	PCN57299	200				220	4.6	0.64	110	91	126			
L49959-01DUP	DUP-RER	02/27/19			0.24	0.27	0.66	-.18	0.31	0.65				1.02	2	
L49959-02MS	MS	02/27/19	PCN57299	200	-0.05	0.19	0.79	210	4.6	0.71	105	91	126			

Thorium 232 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
WG467173																
WG466653PBW	PBW	02/27/19						-.02	0.08	0.25			0.5			
L49959-01DUP	DUP-RER	02/27/19			0.02	0.14	0.25	-.02	0.14	0.25				0.2	2	

Uranium 234 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG467348																
WG466664PBW	PBW	02/28/19						.91	0.96	0.81			1.62			
WG466664LCSW	LCSW	02/28/19	RC180718-10	98				93	7.6	1	95	77	122			
L49934-01DUP	DUP-RER	02/28/19			110	7.3	2	110	7.5	0.94				0	2	
L49934-02MS	MS	02/28/19	RC180718-10	98	80	6.1	1.1	160	10	4.1	82	77	122			

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L49959***

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.

Uranium 235 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG467348																
WG466664PBW	PBW	02/28/19						-.1	0.43	0.96			1.92			
WG466664LCSW	LCSW	02/28/19	RC180718-10	4.48				4	1.6	0.41	89	42	136			
L49934-01DUP	DUP-RER	02/28/19			2.2	1.1	0.81	1	0.87	1.5				0.86	2	
L49934-02MS	MS	02/28/19	RC180718-10	4.48	0.58	1.1	2	3.2	1.5	1.3	58	42	136			

Uranium 238 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG467348																
WG466664PBW	PBW	02/28/19						.78	0.81	1.2			2.4			
WG466664LCSW	LCSW	02/28/19	RC180718-10	97.5				92.1	7.6	0.41	94	87	124			
L49934-01DUP	DUP-RER	02/28/19			37.6	4.3	1.5	38.3	4.4	1.5				0.11	2	
L49934-02MS	MS	02/28/19	RC180718-10	97.5	28.6	3.6	1	125	9.1	2.4	99	87	124			

RadChem Extended Qualifier Report

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L49959***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L49959-01	WG467197	Gross Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Gross Beta	M900.0	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.
L49959-02	WG467197	Gross Alpha	M900.0	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
		Gross Beta	M900.0	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

Radiochemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Lead 210, total	EICHROM, OTW01
Thorium 228	ESM 4506
Thorium 230	ESM 4506
Thorium 232	ESM 4506
Uranium 234	Eichrom ACW03
Uranium 235	Eichrom ACW03
Uranium 238	Eichrom ACW03

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.	
Lead 210, total	EICHROM, OTW01
Thorium 228	ESM 4506
Thorium 230	ESM 4506
Thorium 232	ESM 4506
Uranium 234	Eichrom ACW03
Uranium 235	Eichrom ACW03
Uranium 238	Eichrom ACW03

Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Sulfide as S	SM4500S2-D

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

Sample Receipt

Energy Fuels Resources (USA) Inc.

ACZ Project ID: L49959
Date Received: 02/15/2019 11:39
Received By: mjj
Date Printed: 2/18/2019

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 sample ID, date/time, and matrix 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?
4288	2.1	<=6.0	15	Yes
5278	3.7	<=6.0	13	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.

ACZ Project ID:	L49959
Date Received:	02/15/2019 11:39
Received By:	mjj
Date Printed:	2/18/2019

[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. L49959

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

CHAIN of CUSTODY

Report to:

Name: Kathy Weinel
Company: Energy Fuels Resources
E-mail: kweinel@energyfuels.com
Address: 225 Union Blvd, Suite 600
Lakewood, Co 80228
Telephone:

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Same
Company: As
E-mail: Above
Address:
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: Matt Germansen **Sampler's Site Information** State AZ Zip code 86023 Time Zone AZ

***Sampler's Signature:** [signature]

*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 #: Canyon 2016
PO#:
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	See Quote							
[illegible]	[illegible]	[illegible]									
Canyon Sump 2019-Q1	2/14/19: 1215	GW	9	See	Quote						
Canyon Sump 2019-Q1 Dup	2/14/19: 1215	GW	9	See	Quote						

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
Matt Germansen	2/14/19: 1315	MLP	2-15-19 11:39

L49959 Chain of Custod

L49959:1908061159

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

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

Revised Analytical Report

January 13, 2020

Report to:
Kathy Weinel
Energy Fuels Resources (USA) Inc.
225 Union Blvd. ,Suite 600
Lakewood, CO 80228

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

Project ID:
ACZ Project ID: L52163

Kathy Weinel:

Enclosed are revised analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on June 04, 2019 and originally reported on June 27, 2019. Refer to the case narrative for an explanation of the changes. This project was assigned to ACZ's project number, L52163. 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 L52163. 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 July 27, 2019. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than $10/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 reports for five 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.

January 13, 2020

Project ID:
ACZ Project ID: L52163

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 1 groundwater sample from Energy Fuels Resources (USA) Inc. on June 4, 2019. The sample was received in good condition. Upon receipt, the sample custodian removed the sample from the cooler, inspected the contents, and logged the sample into ACZ's computerized Laboratory Information Management System (LIMS). The sample was assigned ACZ LIMS project number L52163. 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

This sample was 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 Oil and Grease results for L52163-01 have been qualified with the RJ flag on the extended qualifier report. The chemist noted that the LCS/LCSD RPD exceeded the method or laboratory control limit. Both the LCSW and LCSWD samples showed an acceptable recovery. No valid RPD assessment in the data set; data qualification and/or comparison to historical results may be necessary.

The Radium-228 results for L52163 have been qualified with the N1A flag on the extended qualifier report. The chemist noted that due to a system nomenclature issue, sample value was reported as Ra228-904 instead of Ra228-D-904. The qualified value reported represents the dissolved parameter for the sample.

The Isotopic Thorium results for L52163-01 have been qualified with the N1 flag on the extended qualifier report. The chemist noted that the Matrix Spike (MS) tracer recovery was outside standard acceptance limits, yielding a LLD greater than 1 pCi/L. Insufficient sample remaining to perform reanalysis; comparison of results to historical levels and/or data qualification may be necessary.

Due to an ACZ database error, the original final report for this project omitted some radiochemistry reports. The report was corrected and the final report was revised and sent to the client on 1/13/20.

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q2

ACZ Sample ID: ***L52163-01***
Date Sampled: *06/03/19 12:50*
Date Received: *06/04/19*
Sample Matrix: *Groundwater*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								06/17/19 10:28	mss2
Total Recoverable Digestion	M200.2 ICP-MS								06/18/19 8:34	bsu
Total Recoverable Digestion	M200.2 ICP								06/17/19 14:15	jlw

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q2

ACZ Sample ID: ***L52163-01***
Date Sampled: *06/03/19 12:50*
Date Received: *06/04/19*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, total recoverable	M200.7 ICP	1	0.15	B		mg/L	0.05	0.3	06/20/19 1:30	dcm
Antimony, total recoverable	M200.8 ICP-MS	1	0.0065			mg/L	0.0004	0.002	06/20/19 11:41	bsu
Arsenic, total recoverable	M200.8 ICP-MS	1	0.286			mg/L	0.0002	0.001	06/20/19 11:41	bsu
Barium, total recoverable	M200.7 ICP	1	0.038	B		mg/L	0.007	0.04	06/20/19 1:30	dcm
Beryllium, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	06/20/19 11:41	bsu
Boron, total recoverable	M200.7 ICP	1	0.08	B		mg/L	0.02	0.1	06/20/19 1:30	dcm
Cadmium, total recoverable	M200.8 ICP-MS	1	0.00077			mg/L	0.00005	0.0003	06/20/19 11:41	bsu
Calcium, total recoverable	M200.7 ICP	1	98.0			mg/L	0.1	0.5	06/20/19 1:30	dcm
Chromium, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	06/20/19 1:30	dcm
Cobalt, total recoverable	M200.8 ICP-MS	1	0.106			mg/L	0.00005	0.0003	06/20/19 11:41	bsu
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	06/17/19 17:35	jlw
Copper, total recoverable	M200.7 ICP	1	0.02	B		mg/L	0.01	0.05	06/21/19 23:01	dcm
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.03	0.08	06/17/19 17:35	jlw
Iron, total recoverable	M200.7 ICP	1	1.05			mg/L	0.03	0.08	06/20/19 1:30	dcm
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	06/12/19 16:50	bsu
Lead, total recoverable	M200.8 ICP-MS	1	0.0032			mg/L	0.0001	0.0005	06/20/19 11:41	bsu
Magnesium, total recoverable	M200.7 ICP	1	54.0			mg/L	0.2	1	06/20/19 1:30	dcm
Manganese, total recoverable	M200.7 ICP	1	0.02	B		mg/L	0.01	0.05	06/20/19 1:30	dcm
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	06/17/19 14:50	slm
Molybdenum, total recoverable	M200.8 ICP-MS	1	0.0642			mg/L	0.0002	0.0005	06/20/19 11:41	bsu
Nickel, total recoverable	M200.7 ICP	1	0.354			mg/L	0.008	0.04	06/20/19 1:30	dcm
Potassium, total recoverable	M200.7 ICP	1	4.9			mg/L	0.2	1	06/20/19 1:30	dcm
Selenium, total recoverable	M200.8 ICP-MS	1	0.0009			mg/L	0.0001	0.0003	06/20/19 11:41	bsu
Silica, total recoverable	M200.7 ICP	1	10.2		*	mg/L	0.2	1	06/20/19 1:30	dcm
Silver, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	06/12/19 16:50	bsu
Silver, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	06/20/19 11:41	bsu
Sodium, total recoverable	M200.7 ICP	1	19.1			mg/L	0.2	1	06/20/19 1:30	dcm
Thallium, total recoverable	M200.8 ICP-MS	1	0.0016			mg/L	0.0001	0.0005	06/20/19 11:41	bsu
Tin, total recoverable	M200.7 ICP	1		U		mg/L	0.04	0.2	06/20/19 1:30	dcm
Uranium, dissolved	M200.8 ICP-MS	1	0.132			mg/L	0.0001	0.0005	06/12/19 16:50	bsu

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q2

ACZ Sample ID: ***L52163-01***
Date Sampled: *06/03/19 12:50*
Date Received: *06/04/19*
Sample Matrix: *Groundwater*

Uranium, total recoverable	M200.8 ICP-MS	1	0.121			mg/L	0.0001	0.0005	06/20/19 11:41	bsu
Vanadium, total recoverable	M200.7 ICP	1		U		mg/L	0.005	0.03	06/20/19 1:30	dcm
Zinc, dissolved	M200.7 ICP	1	0.63			mg/L	0.01	0.05	06/17/19 17:35	jlw
Zinc, total recoverable	M200.7 ICP	1	0.83			mg/L	0.01	0.05	06/20/19 1:30	dcm

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	222			mg/L	10	20	06/11/19 0:00	enb
Carbonate as CaCO3		1		U		mg/L	10	20	06/11/19 0:00	enb
Hydroxide as CaCO3		1		U		mg/L	10	20	06/11/19 0:00	enb
Total Alkalinity		1	227			mg/L	10	20	06/11/19 0:00	enb
Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	1		U	*	mg/L	2	2	06/05/19 10:49	enb
Chemical Oxygen Demand	M410.4	1		U	*	mg/L	10	20	06/11/19 11:56	kja
Chloride	M300.0 - Ion Chromatography	5	32.4		*	mg/L	2	10	06/13/19 18:22	mss2
Conductivity @25C	SM2510B	1	902			umhos/cm	1	10	06/11/19 17:40	enb
Fluoride	M300.0 - Ion Chromatography	5		U	*	mg/L	0.25	1.25	06/13/19 18:22	mss2
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.42			mg/L	0.02	0.1	06/20/19 0:59	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	06/18/19 11:09	ttg
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH3		0.1	B		mg/L	0.1	0.5	01/13/20 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1	0.1	B	*	mg/L	0.1	0.5	06/19/19 16:01	mss2
Residue, Filterable (TDS) @180C	SM2540C	1	588			mg/L	20	40	06/07/19 9:10	nmc
Residue, Non-Filterable (TSS) @105C	SM2540D	1	5.0	B	*	mg/L	5	20	06/06/19 16:07	eij
Sulfate	M300.0 - Ion Chromatography	5	246		*	mg/L	2	10	06/13/19 18:22	mss2
Sulfide as S	SM4500S2-D	1		U	*	mg/L	0.02	0.1	06/06/19 12:44	enb

Arizona license number: AZ0102

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

Inorganic Reference

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)

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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
WG474258													
WG474258PBW1	PBW	06/11/19 16:17				U	mg/L		-20	20			
WG474258LCSW3	LCSW	06/11/19 16:36	WC190530-1	820.0001		827	mg/L	101	90	110			
L52169-06DUP	DUP	06/11/19 18:45			210	214	mg/L				2	20	
WG474258LCSW6	LCSW	06/11/19 19:04	WC190530-1	820.0001		833	mg/L	102	90	110			
WG474258PBW2	PBW	06/11/19 19:10				U	mg/L		-20	20			
WG474258LCSW9	LCSW	06/11/19 22:27	WC190530-1	820.0001		828	mg/L	101	90	110			
WG474258PBW3	PBW	06/11/19 22:33				U	mg/L		-20	20			
WG474258LCSW12	LCSW	06/12/19 2:41	WC190530-1	820.0001		843	mg/L	103	90	110			
WG474258PBW4	PBW	06/12/19 2:47				U	mg/L		-20	20			
WG474258LCSW15	LCSW	06/12/19 5:27	WC190530-1	820.0001		838	mg/L	102	90	110			

Aluminum, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		1.94	mg/L	97	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.15	0.15			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.11	0.11			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	1.0006		.963	mg/L	96	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	2.0038	U	1.92	mg/L	96	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	2.0038	U	1.92	mg/L	96	70	130	0	20	

Antimony, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.02		.01954	mg/L	98	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.0012	0.0012			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00088	0.00088			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.01		.01017	mg/L	102	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.01	U	.0106	mg/L	106	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.01	U	.01055	mg/L	106	70	130	0	20	

Arsenic, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.05		.05208	mg/L	104	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.0006	0.0006			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00044	0.00044			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.05005		.0504	mg/L	101	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.05005	.0006	.05042	mg/L	100	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.05005	.0006	.05149	mg/L	102	70	130	2	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		1.994	mg/L	100	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.021	0.021			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.0154	0.0154			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	.4995		.4872	mg/L	98	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	1.003	U	.979	mg/L	98	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	1.003	U	.982	mg/L	98	70	130	0	20	

Beryllium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.05		.046734	mg/L	93	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.00024	0.00024			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.000176	########			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.05005		.044626	mg/L	89	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.05005	U	.04637	mg/L	93	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.05005	U	.04649	mg/L	93	70	130	0	20	

Biochemical Oxygen Demand (5 day) SM5210B/HACH10360

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG473754													
WG473754LCSW1	LCSW	06/05/19 11:24	BODLCSW-2	198		196	mg/L	99	84.6	115.4			
WG473754LCSW2	LCSW	06/05/19 11:27	BODLCSW-2	198		197	mg/L	99	84.6	115.4			
WG473754LCSW3	LCSW	06/05/19 11:30	BODLCSW-2	198		194	mg/L	98	84.6	115.4			

Boron, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		2.084	mg/L	104	95	105			
WG474949ICB	ICB	06/20/19 0:16				.022	mg/L		-0.06	0.06			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.044	0.044			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	.5005		.531	mg/L	106	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	1.001	.06	1.059	mg/L	100	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	1.001	.06	1.061	mg/L	100	70	130	0	20	

Cadmium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.05		.047224	mg/L	94	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.00015	0.00015			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00011	0.00011			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.05005		.044118	mg/L	88	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.05005	U	.04387	mg/L	88	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.05005	U	.04378	mg/L	87	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	100		98.24	mg/L	98	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.3	0.3			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.22	0.22			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	68.11783		67.1	mg/L	99	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	136.0667	18.5	152.38	mg/L	98	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	136.0667	18.5	152.42	mg/L	98	70	130	0	20	

Chemical Oxygen Demand M410.4

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474195													
WG474195ICV	ICV	06/11/19 8:32	WC181022-12	200		206	mg/L	103	90	110			
WG474195ICB	ICB	06/11/19 8:52				U	mg/L		-10	10			
WG474195LRB	LRB	06/11/19 9:12				U	mg/L		-10	10			
WG474195LFB	LFB	06/11/19 9:33	WC190322-3	50		51	mg/L	102	90	110			
L52238-01DUP	DUP	06/11/19 13:59			100	375	mg/L				116	20	RA
L52238-01AS	AS	06/11/19 14:19	WC190322-3	250	100	156	mg/L	22	90	110			M2

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474491													
WG474491LFB	LFB	06/13/19 17:29	WI190520-1	30		30.8	mg/L	103	90	110			
L52135-12DUP	DUP	06/13/19 18:05			U	U	mg/L				0	20	RA
L52163-01AS	AS	06/13/19 18:40	WI190520-1	150	32.4	190	mg/L	105	90	110			

Chromium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		2.007	mg/L	100	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.03	0.03			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.022	0.022			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	.5025		.507	mg/L	101	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	.996	U	1.009	mg/L	101	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	.996	U	1.02	mg/L	102	70	130	1	20	

Cobalt, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.05		.048386	mg/L	97	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.00015	0.00015			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00011	0.00011			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.05005		.045603	mg/L	91	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.05005	.0012	.04628	mg/L	90	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.05005	.0012	.04583	mg/L	89	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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.

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474258													
WG474258LCSW2	LCSW	06/11/19 16:23	PCN58204	1410		1460	umhos/cm	104	90	110			
L52169-06DUP	DUP	06/11/19 18:45			584	587	umhos/cm				1	20	
WG474258LCSW5	LCSW	06/11/19 18:51	PCN58204	1410		1450	umhos/cm	103	90	110			
WG474258LCSW8	LCSW	06/11/19 22:14	PCN58204	1410		1430	umhos/cm	101	90	110			
WG474258LCSW11	LCSW	06/12/19 2:28	PCN58204	1410		1430	umhos/cm	101	90	110			
WG474258LCSW14	LCSW	06/12/19 5:14	PCN58204	1410		1420	umhos/cm	101	90	110			

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474711													
WG474711ICV	ICV	06/17/19 15:51	II190613-1	2		1.939	mg/L	97	95	105			
WG474711ICB	ICB	06/17/19 15:57				U	mg/L		-0.03	0.03			
WG474711LFB	LFB	06/17/19 16:09	II190606-4	.5005		.499	mg/L	100	85	115			
L45967-46AS	AS	06/17/19 17:29	II190606-4	.5005	U	.507	mg/L	101	85	115			
L45967-46ASD	ASD	06/17/19 17:32	II190606-4	.5005	U	.51	mg/L	102	85	115	1	20	

Copper, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG475010													
WG475010ICV	ICV	06/21/19 21:42	II190529-1	2		1.908	mg/L	95	95	105			
WG475010ICB	ICB	06/21/19 21:47				U	mg/L		-0.03	0.03			
WG474638LRB	LRB	06/21/19 22:00				U	mg/L		-0.022	0.022			
WG474638LFB	LFB	06/21/19 22:03	II190606-4	.5005		.495	mg/L	99	85	115			
L52305-01LFM	LFM	06/21/19 23:22	II2XWATER	1	U	.988	mg/L	99	70	130			
L52305-01LFMD	LFMD	06/21/19 23:25	II2XWATER	1	U	.989	mg/L	99	70	130	0	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474491													
WG474491LFB	LFB	06/13/19 17:29	WI190520-1	1.5		1.51	mg/L	101	90	110			
L52135-12DUP	DUP	06/13/19 18:05			U	U	mg/L				0	20	RA
L52163-01AS	AS	06/13/19 18:40	WI190520-1	7.5	U	7.82	mg/L	104	90	110			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474711													
WG474711ICV	ICV	06/17/19 15:51	II190613-1	2		1.904	mg/L	95	95	105			
WG474711ICB	ICB	06/17/19 15:57				U	mg/L		-0.09	0.09			
WG474711LFB	LFB	06/17/19 16:09	II190606-4	1.0018		1.021	mg/L	102	85	115			
L45967-46AS	AS	06/17/19 17:29	II190606-4	1.0018	U	1.026	mg/L	102	85	115			
L45967-46ASD	ASD	06/17/19 17:32	II190606-4	1.0018	U	1.031	mg/L	103	85	115	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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.

Iron, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		1.91	mg/L	96	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.09	0.09			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.066	0.066			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	1.0018		.99	mg/L	99	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	2.0022	U	1.942	mg/L	97	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	2.0022	U	2.07	mg/L	103	70	130	6	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474366													
WG474366ICV	ICV	06/12/19 16:41	MS190513-2	.05		.05158	mg/L	103	90	110			
WG474366ICB	ICB	06/12/19 16:43				U	mg/L		-0.00022	0.00022			
WG474366LFB	LFB	06/12/19 16:44	MS190606-3	.05005		.05017	mg/L	100	85	115			
L52163-01AS	AS	06/12/19 16:52	MS190606-3	.05005	U	.05152	mg/L	103	70	130			
L52163-01ASD	ASD	06/12/19 16:53	MS190606-3	.05005	U	.05175	mg/L	103	70	130	0	20	

Lead, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.05		.0491	mg/L	98	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.0003	0.0003			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00022	0.00022			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.05005		.04549	mg/L	91	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.05005	U	.04693	mg/L	94	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.05005	U	.04712	mg/L	94	70	130	0	20	

Magnesium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	100		96.29	mg/L	96	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.6	0.6			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.44	0.44			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	50.31093		48.35	mg/L	96	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	100.1149	1.8	98.14	mg/L	96	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	100.1149	1.8	98.14	mg/L	96	70	130	0	20	

Manganese, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		1.944	mg/L	97	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.03	0.03			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.022	0.022			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	.4995		.492	mg/L	98	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	1	U	.989	mg/L	99	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	1	U	.986	mg/L	99	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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
WG474526													
WG474526ICV	ICV	06/17/19 14:12	HG190528-3	.004995		.00502	mg/L	101	95	105			
WG474526ICB	ICB	06/17/19 14:13				U	mg/L		-0.0002	0.0002			
WG474525													
WG474525LRB	LRB	06/17/19 14:48				U	mg/L		-0.00044	0.00044			
WG474525LFB	LFB	06/17/19 14:49	HG190611-3	.002002		.00204	mg/L	102	85	115			
L52163-01LFM	LFM	06/17/19 14:51	HG190611-3	.002002	U	.00198	mg/L	99	85	115			
L52163-01LFMD	LFMD	06/17/19 14:52	HG190611-3	.002002	U	.00198	mg/L	99	85	115	0	20	

Molybdenum, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.02006		.01927	mg/L	96	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.0006	0.0006			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00044	0.00044			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.0501		.04495	mg/L	90	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.0501	.0004	.04872	mg/L	96	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.0501	.0004	.04792	mg/L	95	70	130	2	20	

Nickel, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2.004		1.9555	mg/L	98	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.024	0.024			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.0176	0.0176			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	.5		.5008	mg/L	100	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	.999	U	.971	mg/L	97	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	.999	U	.972	mg/L	97	70	130	0	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
WG474963													
WG474963ICV	ICV	06/19/19 21:59	WI190508-3	2.416		2.478	mg/L	103	90	110			
WG474963ICB	ICB	06/19/19 22:00				U	mg/L		-0.02	0.02			
WG474967													
WG474967LFB	LFB	06/20/19 0:57	WI190405-9	2		2.055	mg/L	103	90	110			
L52163-01AS	AS	06/20/19 1:00	WI190405-9	2	.42	2.425	mg/L	100	90	110			
L52180-01DUP	DUP	06/20/19 1:02			.53	.527	mg/L				1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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
WG474757													
WG474757ICV	ICV	06/18/19 11:05	WI190510-1	12		11.351	mg/L	95	90	110			
WG474757ICB	ICB	06/18/19 11:06				U	mg/L		-0.05	0.05			
WG474757LFB1	LFB	06/18/19 11:08	WI180918-3	10		10.199	mg/L	102	90	110			
L52163-01AS	AS	06/18/19 11:11	WI180918-3	10	U	10.311	mg/L	103	90	110			
L52180-01DUP	DUP	06/18/19 11:14			U	U	mg/L				0	20	RA
WG474757LFB2	LFB	06/18/19 11:50	WI180918-3	10		9.941	mg/L	99	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
WG474940													
WG474940ICV	ICV	06/19/19 15:57	WI190530-8	4		4.1	mg/L	103	90	110			
WG474940ICB	ICB	06/19/19 15:58				U	mg/L		-0.1	0.1			
WG474663LFB	LFB	06/19/19 16:00	WI190530-4	2.5		2.74	mg/L	110	90	110			
L52180-01DUP	DUP	06/19/19 16:03			.4	.31	mg/L				25	20	RA
L52180-02LFM	LFM	06/19/19 16:06	WI190530-4	2.5	.4	2.77	mg/L	95	90	110			
WG474663LRB	LRB	06/19/19 16:35				U	mg/L		-0.1	0.1			

Potassium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	20		19.84	mg/L	99	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.6	0.6			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.44	0.44			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	99.96426		98.26	mg/L	98	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	200.0188	2.1	197.74	mg/L	98	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	200.0188	2.1	197.74	mg/L	98	70	130	0	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474000													
WG474000PBW	PBW	06/07/19 9:00				U	mg/L		-40	40			
WG474000LCSW	LCSW	06/07/19 9:02	PCN58481	260		246	mg/L	95	80	120			
L52203-04DUP	DUP	06/07/19 9:31			1600	1600	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
WG473949													
WG473949PBW	PBW	06/06/19 16:00				U	mg/L		-15	15			
WG473949LCSW	LCSW	06/06/19 16:02	PCN58481	160		159	mg/L	99	80	120			
L52203-03DUP	DUP	06/06/19 16:31			U	U	mg/L				0	10	RA

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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.

Selenium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.05		.05067	mg/L	101	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.0003	0.0003			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00022	0.00022			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.05005		.04783	mg/L	96	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.05005	.0008	.05277	mg/L	104	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.05005	.0008	.052	mg/L	102	70	130	1	20	

Silica, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	42.8		42.52	mg/L	99	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.6	0.6			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.44	0.44			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	21.415		21.33	mg/L	100	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	42.83	14.9	57.26	mg/L	99	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	42.83	14.9	56.96	mg/L	98	70	130	1	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474366													
WG474366ICV	ICV	06/12/19 16:41	MS190513-2	.02004		.02043	mg/L	102	90	110			
WG474366ICB	ICB	06/12/19 16:43				U	mg/L		-0.00022	0.00022			
WG474366LFB	LFB	06/12/19 16:44	MS190606-3	.01002		.01012	mg/L	101	85	115			
L52163-01AS	AS	06/12/19 16:52	MS190606-3	.01002	U	.00966	mg/L	96	70	130			
L52163-01ASD	ASD	06/12/19 16:53	MS190606-3	.01002	U	.00917	mg/L	92	70	130	5	20	

Silver, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.02004		.01925	mg/L	96	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.0003	0.0003			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00022	0.00022			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.01002		.0092	mg/L	92	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.01002	U	.00873	mg/L	87	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.01002	U	.00874	mg/L	87	70	130	0	20	

Sodium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	100		99.23	mg/L	99	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.6	0.6			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.44	0.44			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	100.0471		99.03	mg/L	99	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	200.0124	24.4	221.8	mg/L	99	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	200.0124	24.4	221.6	mg/L	99	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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 M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474491													
WG474491LFB	LFB	06/13/19 17:29	WI190520-1	30		30	mg/L	100	90	110			
L52135-12DUP	DUP	06/13/19 18:05			U	U	mg/L				0	20	RA
L52163-01AS	AS	06/13/19 18:40	WI190520-1	150	246	407	mg/L	107	90	110			

Sulfide as S SM4500S2-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG473871													
WG473871ICV	ICV	06/06/19 9:15	WC190605-5	.40934		.448	mg/L	109	90	110			
WG473871ICB	ICB	06/06/19 9:19				U	mg/L		-0.06	0.06			
WG473871LFB1	LFB	06/06/19 9:23	WC190605-8	.2568933		.297	mg/L	116	80	120			
WG473871LFB2	LFB	06/06/19 11:22	WC190605-8	.2568933		.291	mg/L	113	80	120			
L52214-03AS	AS	06/06/19 13:12	WC190605-8	.2568933	.11	.417	mg/L	120	75	125			
L52214-03DUP	DUP	06/06/19 13:16			.11	.102	mg/L				8	20	RA

Thallium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.05		.04857	mg/L	97	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.0003	0.0003			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00022	0.00022			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.0501		.04446	mg/L	89	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.0501	U	.0471	mg/L	94	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.0501	U	.04746	mg/L	95	70	130	1	20	

Tin, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		2.096	mg/L	105	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.12	0.12			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.088	0.088			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	1.002		1.008	mg/L	101	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	1.978	U	2.038	mg/L	103	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	1.978	U	1.99	mg/L	101	70	130	2	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474366													
WG474366ICV	ICV	06/12/19 16:41	MS190513-2	.05		.05158	mg/L	103	90	110			
WG474366ICB	ICB	06/12/19 16:43				U	mg/L		-0.00022	0.00022			
WG474366LFB	LFB	06/12/19 16:44	MS190606-3	.05		.04966	mg/L	99	85	115			
L52163-01AS	AS	06/12/19 16:52	MS190606-3	.05	.1318	.18228	mg/L	101	70	130			
L52163-01ASD	ASD	06/12/19 16:53	MS190606-3	.05	.1318	.18175	mg/L	100	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L52163***

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.

Uranium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474976													
WG474976ICV	ICV	06/20/19 11:34	MS190513-2	.05		.04828	mg/L	97	90	110			
WG474976ICB	ICB	06/20/19 11:36				U	mg/L		-0.0003	0.0003			
WG474746LRB	LRB	06/20/19 11:38				U	mg/L		-0.00022	0.00022			
WG474746LFB	LFB	06/20/19 11:39	MS190606-3	.05		.04444	mg/L	89	85	115			
L52401-01LFM	LFM	06/20/19 11:47	MS190606-3	.05	.007	.05634	mg/L	99	70	130			
L52401-01LFMD	LFMD	06/20/19 11:48	MS190606-3	.05	.007	.05655	mg/L	99	70	130	0	20	

Vanadium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		2.0107	mg/L	101	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.015	0.015			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.011	0.011			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	.5005		.4974	mg/L	99	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	.997	U	.98	mg/L	98	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	.997	U	1.005	mg/L	101	70	130	3	20	

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474711													
WG474711ICV	ICV	06/17/19 15:51	II190613-1	2		1.909	mg/L	95	95	105			
WG474711ICB	ICB	06/17/19 15:57				U	mg/L		-0.03	0.03			
WG474711LFB	LFB	06/17/19 16:09	II190606-4	.50075		.505	mg/L	101	85	115			
L45967-46AS	AS	06/17/19 17:29	II190606-4	.50075	U	.504	mg/L	101	85	115			
L45967-46ASD	ASD	06/17/19 17:32	II190606-4	.50075	U	.509	mg/L	102	85	115	1	20	

Zinc, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG474949													
WG474949ICV	ICV	06/20/19 0:10	II190529-1	2		1.931	mg/L	97	95	105			
WG474949ICB	ICB	06/20/19 0:16				U	mg/L		-0.03	0.03			
WG474638LRB	LRB	06/20/19 0:28				U	mg/L		-0.022	0.022			
WG474638LFB	LFB	06/20/19 0:32	II190606-4	.50075		.503	mg/L	100	85	115			
L52305-01LFM	LFM	06/20/19 1:51	II2XWATER	.9884	.2	1.161	mg/L	97	70	130			
L52305-01LFMD	LFMD	06/20/19 1:54	II2XWATER	.9884	.2	1.163	mg/L	97	70	130	0	20	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L52163***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52163-01	WG473754	Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	K1	The sample dilutions set-up for the BOD/CBOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
	WG474195	Chemical Oxygen Demand	M410.4	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			M410.4	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).
	WG474491	Chloride	M300.0 - Ion Chromatography	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).
		Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	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).
	WG474757	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	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).
	WG474940	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).
	WG473949	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
	WG474949	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG474491	Sulfate	M300.0 - Ion Chromatography	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).
	WG473871	Sulfide as S	SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q2

ACZ Sample ID: ***L52163-01***
Date Sampled: *06/03/19 12:50*
Date Received: *06/04/19*
Sample Matrix: *Groundwater*

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**
Extract Method:

Workgroup: WG474647
Analyst: kfm
Extract Date:
Analysis Date: 06/17/19 14:39

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1	*	mg/L	2	10

Arizona license number: AZ0102

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: ***L52163***

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.

Oil & Grease, Total Recoverable

1664A - Gravimetric

WG474647

MS **Sample ID: L52167-01MS** **PCN/SCN: OP190503-2** **Analyzed: 06/17/19 14:47**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40	U	33.5	mg/L	84.0	78	114			

LCSW **Sample ID: WG474647LCSW** **PCN/SCN: OP190503-2** **Analyzed: 06/17/19 16:08**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		34.3	mg/L	86.0	78	114			

LCSWD **Sample ID: WG474647LCSWD** **PCN/SCN: OP190503-2** **Analyzed: 06/17/19 16:13**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		42.2	mg/L	106.0	78	114	21	18	RJ

PBW **Sample ID: WG474647PBW** **Analyzed: 06/17/19 14:35**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE			U	mg/L						

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

Organic Extended Qualifier Report

ACZ Project ID: ***L52163***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52163-01	WG474647	Oil and Grease	1664A - Gravimetric	RJ	LCS/LCSD RPD or RSD exceeded the method or laboratory control limit. Sample(s) could not be re-prepped. See Case Narrative.

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q2
Locator:

ACZ Sample ID: ***L52163-01***
Date Sampled: *06/03/19 12:50*
Date Received: *06/04/19*
Sample Matrix: *Groundwater*

Combined Radium (total)
Calculation (RA226 + RA228)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	06/27/19 12:02		22			pCi/L		calc

Gross Alpha & Beta, total
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	06/21/19 0:01		81	11	6.8	pCi/L		amk
Gross Beta	06/21/19 0:01		38	4.5	6.8	pCi/L		amk

Gross Alpha, dissolved
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha, dissolved	06/21/19 0:01		81	11	6.8	pCi/L		amk

Lead 210, total
EICHROM, OTW01

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Lead 210, total	06/19/19 11:31		14	1.5	3.8	pCi/L	*	jlg

Radium 226, dissolved
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	06/26/19 0:14		14	0.54	0.19	pCi/L	*	tjr

Radium 226, total
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	06/26/19 0:13		22	0.7	0.14	pCi/L	*	tjr

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q2
Locator:

ACZ Sample ID: ***L52163-01***
Date Sampled: *06/03/19 12:50*
Date Received: *06/04/19*
Sample Matrix: *Groundwater*

Radium 228
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	06/20/19 15:04		0.78	0.98	0.99	pCi/L	*	amk

Radium 228, dissolved
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	06/20/19 15:04		0.78	0.98	0.99	pCi/L	*	amk

Thorium, Isotopic
ESM 4506

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 228	06/20/19 0:02		-0.01	0.49	0.37	pCi/L	*	jlg
Thorium 230	06/20/19 0:02		-0.12	0.27	0.98	pCi/L	*	jlg
Thorium 232	06/20/19 0:02		0.14	0.14	0.37	pCi/L	*	jlg

Uranium, Isotopic dissolved
Eichrom ACW03

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Uranium 234	06/21/19 0:10		93	6.4	0.84	pCi/L	*	djc
Uranium 235	06/21/19 0:10		1.9	0.99	1.3	pCi/L	*	djc
Uranium 238	06/21/19 0:10		49	4.7	1.3	pCi/L	*	djc

Arizona license number: AZ0102

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

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

Radiochemistry QC Summary

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L52163***

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
WG475157																
L52163-01MSA	MS	06/21/19	PCN58725	100	81	11	6.8	190	16	9	109	67	144			
L52175-04DUP	DUP-RER	06/21/19			3.1	2	1.6	1.1	1.5	1.6				0.8	2	
WG474601LCSWA	LCSW	06/21/19	PCN58725	100				110	8.8	1.5	110	67	144			
WG474601PBW	PBW	06/21/19						-.22	0.45	0.83			1.66			
L52135-12DUP	DUP-RER	06/21/19			0.15	0.93	4.7	-.44	0.59	8.1				0.54	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
WG475157																
L52135-12DUP	DUP-RER	06/21/19			0.43	2.5	6.7	-.86	2.4	8.2				0.37	2	
L52175-02MSB	MS	06/21/19	RC190312-11	65.68	0.72	1.8	1.9	70	4.5	2.1	105	82	122			
L52175-04DUP	DUP-RER	06/21/19			3.3	2	1.9	2.7	2	1.9				0.21	2	
WG474601LCSWB	LCSW	06/21/19	RC190312-11	98.52				120	6.7	2.5	122	82	122			
WG474601PBW	PBW	06/21/19						-.01	1.8	1.9			3.8			

Lead 210, total EICHROM, OTW01 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG474938																
L52163-01DUP	DUP-RER	06/19/19			14	1.5	3.8	19	2.4	6.4				1.77	2	
WG474475PBW	PBW	06/19/19						4.9	1.4	4.3			8.6			
L52163-01MS	MS	06/19/19	PCN54279	472.43	14	1.5	3.8	520	14	18	107	55	121			
WG474475LCSW	LCSW	06/19/19	PCN54279	94.49				97	2.8	3.9	103	55	121			

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L52163***

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 226, total 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
WG475618																
WG474721PBW	PBW	06/26/19						.07	0.12	0.26			0.52			
WG474721LCSW	LCSW	06/26/19	PCN57865	20				19	0.59	0.12	95	43	148			
L52136-01DUP	DUP-RER	06/26/19			47	1.1	0.28	39	0.9	0.2				5.63	2	RN
L52136-01DUP	DUP-RPD	06/26/19			47	1.1	0.28	39	0.9	0.2				19	20	
L52136-02DUP	DUP-RER	06/26/19			3.8	0.31	0.11	3.6	0.26	0.1				0.49	2	
L52295-01MS	MS	06/26/19	PCN57865	50	0.1	0.12	0.25	48	1.4	0.35	96	43	148			

Radium 228 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
WG475326																
WG474518PBW	PBW	06/20/19						.01	0.46	0.48			0.96			
WG474518LCSW	LCSW	06/20/19	PCN57186	9.04				11	1.4	1	122	47	123			
L52163-01DUP	DUP-RER	06/20/19			0.78	0.98	0.99	.97	0.97	0.97				0.14	2	
L52135-09MS	MS	06/20/19	PCN57186	9.04	1	0.97	0.97	10	1.3	0.92	100	47	123			
L52135-07DUP	DUP-RER	06/20/19			0.97	1.1	1.1	.84	0.88	0.88				0.09	2	

Thorium 228 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
WG475043																
WG474789PBW	PBW	06/20/19						-.06	0.61	0.47			0.94			
L52163-01DUP	DUP-RER	06/20/19			-0.01	0.49	0.37	.16	0.22	0.3				0.32	2	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L52163***

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.

Thorium 230 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
WG475043																
WG474789PBW	PBW	06/20/19						-.19	0.33	1.2			2.4			
WG474789LCSW	LCSW	06/20/19	PCN57299	200				210	6.2	1.2	105	91	126			
L52163-01DUP	DUP-RER	06/20/19			-0.12	0.27	0.98	.13	0.25	0.8				0.68	2	
L52163-01MS	MS	06/20/19	PCN57299	333.33	-0.12	0.27	0.98	340	12	3	102	91	126			N1

Thorium 232 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
WG475043																
WG474789PBW	PBW	06/20/19						.09	0.12	0.47			0.94			
L52163-01DUP	DUP-RER	06/20/19			0.14	0.14	0.37	.06	0.09	0.3				0.48	2	

Uranium 234 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG475191																
WG474668PBW	PBW	06/21/19						1.6	1.3	2.3			4.6			
WG474668LCSW	LCSW	06/21/19	RC190424-10	98				100	7.2	0.85	102	77	122			
L52134-01DUP	DUP-RER	06/21/19			3.4	1.4	1.1	2.1	1.6	2.3				0.61	2	
L52330-01DUP	DUP-RER	06/21/19			3.4	1.4	1.1	2.5	1.1	1.2				0.51	2	
L52134-02MS	MS	06/21/19	RC190424-10	98	3.8	1.4	0.94	98	7	2.2	96	77	122			

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L52163***

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.

Uranium 235 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG475191																
WG474668PBW	PBW	06/21/19						0	0.57	0.62			1.24			
WG474668LCSW	LCSW	06/21/19	RC190424-10	4.48				3.5	1.4	0.34	78	42	136			
L52134-01DUP	DUP-RER	06/21/19			-0.34	0.64	1.9	.11	0.94	1.2				0.4	2	
L52330-01DUP	DUP-RER	06/21/19			-0.13	0.75	2	-.11	0.37	1.1				0.02	2	
L52134-02MS	MS	06/21/19	RC190424-10	4.48	0.51	0.72	1.1	3.1	1.3	1.8	58	42	136			

Uranium 238 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG475191																
WG474668PBW	PBW	06/21/19						1.58	1.3	2			4			
WG474668LCSW	LCSW	06/21/19	RC190424-10	97.5				94.4	7	0.34	97	87	124			
L52134-01DUP	DUP-RER	06/21/19			3.02	1.3	0.96	2.53	1.7	2.2				0.23	2	
L52330-01DUP	DUP-RER	06/21/19			2.63	1.2	1	1.21	0.99	0.65				0.91	2	
L52134-02MS	MS	06/21/19	RC190424-10	97.5	3.15	1.2	1.3	103	7.2	2.3	102	87	124			

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

RadChem Extended Qualifier Report

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L52163***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L52163-01	WG475618	Radium 226, dissolved	M903.1	RN	Sample concentration is greater than 5x LLD; RPD was used for data validation. Replicate Error Ratio (RER) is greater than 2. Precision judged to be in control.
		Radium 226, total	M903.1	RN	Sample concentration is greater than 5x LLD; RPD was used for data validation. Replicate Error Ratio (RER) is greater than 2. Precision judged to be in control.
	WG475326	Radium 228	M904.0	N1A	See Case Narrative.
		Radium 228, dissolved	M904.0	N1A	See Case Narrative.
	WG475043	Thorium 228	ESM 4506	N1	See Case Narrative.
		Thorium 230	ESM 4506	N1	See Case Narrative.
		Thorium 232	ESM 4506	N1	See Case Narrative.

Radiochemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Lead 210, total	EICHROM, OTW01
Thorium 228	ESM 4506
Thorium 230	ESM 4506
Thorium 232	ESM 4506
Uranium 234	Eichrom ACW03
Uranium 235	Eichrom ACW03
Uranium 238	Eichrom ACW03

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.	
Lead 210, total	EICHROM, OTW01
Thorium 228	ESM 4506
Thorium 230	ESM 4506
Thorium 232	ESM 4506
Uranium 234	Eichrom ACW03
Uranium 235	Eichrom ACW03
Uranium 238	Eichrom ACW03

Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Sulfide as S	SM4500S2-D

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

Sample Receipt

Energy Fuels Resources (USA) Inc.

ACZ Project ID: L52163
Date Received: 06/04/2019 09:54
Received By:
Date Printed: 6/5/2019

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	

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?
6226	2	<=6.0	15	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.

ACZ Project ID:	L52163
Date Received:	06/04/2019 09:54
Received By:	
Date Printed:	6/5/2019

[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. L52163

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

CHAIN of CUSTODY

Report to:

Name: Kathy Weinel

Company: Energy Fuels Resources

E-mail: kweinel@energyfuels.com

Address: 225 Union Blvd, Suite 600 Lakewood, Co 80228

Telephone:

Copy of Report to:

Name:

Company:

E-mail:

Telephone:

Invoice to:

Name: Same

Company: "

E-mail: "

Address:

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 [X] 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 [X]

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

Sampler's Name: Matt Germansen Sampler's Site Information State AZ Zip code 86005 Time Zone AZ

*Sampler's Signature: [signature]

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

Quote #: Canyon 2016

PO#:

Reporting state for compliance testing:

Check box if samples include NRC licensed material?

SAMPLE IDENTIFICATION	DATE:TIME	Matrix	# of Containers	See Quote							
Canyon Sump 2019-Q2	6/3/19: 1250	GW	9	See Quote							

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
[signature] Matt Germansen	6/3/19 : 1400	JJC	6-4-19 09:54

L52163 Chain of Custody

L52163-2001031611:41

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

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

Revised Analytical Report

January 13, 2020

Report to:
Kathy Weinel
Energy Fuels Resources (USA) Inc.
225 Union Blvd. ,Suite 600
Lakewood, CO 80228

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

Project ID: Canyon 2016
ACZ Project ID: L54508

Kathy Weinel:

Enclosed are revised analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on September 12, 2019 and originally reported on October 07, 2019. Refer to the case narrative for an explanation of the changes. This project was assigned to ACZ's project number, L54508. 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 L54508. 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 November 06, 2019. If the samples are determined to be hazardous, additional charges apply for disposal (typically less than $10/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 reports for five 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.

January 13, 2020

Project ID: Canyon 2016
ACZ Project ID: L54508

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 1 groundwater sample from Energy Fuels Resources (USA) Inc. on September 12, 2019. The sample was received in good condition. Upon receipt, the sample custodian removed the sample from the cooler, inspected the contents, and logged the sample into ACZ's computerized Laboratory Information Management System (LIMS). The sample was assigned ACZ LIMS project number L54508. 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

This sample was analyzed for inorganic, organic, radiochemistry parameters. The individual methods are referenced on both the ACZ invoice and the analytical reports.

Due to an ACZ database error, the original final report for this project omitted some radiochemistry reports. The report was corrected and the final report was revised and sent to the client on 1/13/20.

Energy Fuels Resources (USA) Inc.
Project ID: Canyon 2016
Sample ID: CANYON SUMP 2019-Q3

ACZ Sample ID: ***L54508-01***
Date Sampled: *09/11/19 11:45*
Date Received: *09/12/19*
Sample Matrix: *Groundwater*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								09/25/19 10:12	wtc
Total Recoverable Digestion	M200.2 ICP-MS								09/19/19 10:06	rap
Total Recoverable Digestion	M200.2 ICP								09/16/19 10:46	aeh

Energy Fuels Resources (USA) Inc.
Project ID: Canyon 2016
Sample ID: CANYON SUMP 2019-Q3

ACZ Sample ID: ***L54508-01***
Date Sampled: *09/11/19 11:45*
Date Received: *09/12/19*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, total recoverable	M200.7 ICP	1	0.17	B		mg/L	0.05	0.3	09/17/19 14:20	kja/jlw
Antimony, total recoverable	M200.8 ICP-MS	1	0.0055			mg/L	0.0004	0.002	09/20/19 11:22	mfm
Arsenic, total recoverable	M200.8 ICP-MS	1	0.187			mg/L	0.0002	0.001	09/20/19 11:22	mfm
Barium, total recoverable	M200.7 ICP	1	0.040			mg/L	0.007	0.04	09/17/19 14:20	kja/jlw
Beryllium, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	09/20/19 11:22	mfm
Boron, total recoverable	M200.7 ICP	1	0.07	B		mg/L	0.02	0.1	09/17/19 14:20	kja/jlw
Cadmium, total recoverable	M200.8 ICP-MS	1	0.0007			mg/L	0.00005	0.0003	09/20/19 11:22	mfm
Calcium, total recoverable	M200.7 ICP	1	97.8			mg/L	0.1	0.5	09/17/19 14:20	kja/jlw
Chromium, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	09/17/19 14:20	kja/jlw
Cobalt, total recoverable	M200.8 ICP-MS	1	0.112			mg/L	0.00005	0.0003	09/20/19 11:22	mfm
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	09/25/19 11:13	jlw
Copper, total recoverable	M200.7 ICP	1	0.01	B		mg/L	0.01	0.05	09/17/19 14:20	kja/jlw
Iron, dissolved	M200.7 ICP	1	0.05	B		mg/L	0.03	0.08	09/24/19 16:51	kja
Iron, total recoverable	M200.7 ICP	1	0.58			mg/L	0.03	0.08	09/17/19 14:20	kja/jlw
Lead, dissolved	M200.8 ICP-MS	1	0.0002	B		mg/L	0.0001	0.0005	09/19/19 15:26	mfm
Lead, total recoverable	M200.8 ICP-MS	1	0.0021			mg/L	0.0001	0.0005	09/20/19 11:22	mfm
Magnesium, total recoverable	M200.7 ICP	1	53.6			mg/L	0.2	1	09/17/19 14:20	kja/jlw
Manganese, total recoverable	M200.7 ICP	1	0.02	B		mg/L	0.01	0.05	09/17/19 14:20	kja/jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	09/17/19 16:30	slm
Molybdenum, total recoverable	M200.8 ICP-MS	1	0.058			mg/L	0.0002	0.0005	09/20/19 11:22	mfm
Nickel, total recoverable	M200.7 ICP	1	0.366			mg/L	0.008	0.04	09/17/19 14:20	kja/jlw
Potassium, total recoverable	M200.7 ICP	1	4.8			mg/L	0.2	1	09/17/19 14:20	kja/jlw
Selenium, total recoverable	M200.8 ICP-MS	1	0.0006			mg/L	0.0001	0.0003	09/20/19 11:22	mfm
Silica, total recoverable	M200.7 ICP	1	8.2		*	mg/L	0.2	1	09/17/19 14:20	kja/jlw
Silver, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	09/19/19 15:26	mfm
Silver, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	09/23/19 11:27	bsu
Sodium, total recoverable	M200.7 ICP	1	17.8			mg/L	0.2	1	09/17/19 14:20	kja/jlw
Thallium, total recoverable	M200.8 ICP-MS	1	0.0017			mg/L	0.0001	0.0005	09/20/19 11:22	mfm
Tin, total recoverable	M200.7 ICP	1		U		mg/L	0.04	0.2	09/17/19 14:20	kja/jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.119			mg/L	0.0001	0.0005	09/19/19 15:26	mfm

Energy Fuels Resources (USA) Inc.
Project ID: Canyon 2016
Sample ID: CANYON SUMP 2019-Q3

ACZ Sample ID: ***L54508-01***
Date Sampled: *09/11/19 11:45*
Date Received: *09/12/19*
Sample Matrix: *Groundwater*

Uranium, total recoverable	M200.8 ICP-MS	1	0.118			mg/L	0.0001	0.0005	09/20/19 11:22	mfm
Vanadium, total recoverable	M200.7 ICP	1		U		mg/L	0.005	0.03	09/17/19 14:20	kja/jlw
Zinc, dissolved	M200.7 ICP	1	1.08		*	mg/L	0.01	0.05	09/24/19 16:51	kja
Zinc, total recoverable	M200.7 ICP	1	1.16			mg/L	0.01	0.05	09/17/19 14:20	kja/jlw

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	254			mg/L	2	20	09/23/19 0:00	enb
Carbonate as CaCO3		1		U		mg/L	2	20	09/23/19 0:00	enb
Hydroxide as CaCO3		1		U		mg/L	2	20	09/23/19 0:00	enb
Total Alkalinity		1	254		*	mg/L	2	20	09/23/19 0:00	enb
Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	1		U	*	mg/L	2	2	09/12/19 12:22	emk
Chemical Oxygen Demand	M410.4	1	10	B	*	mg/L	10	20	09/14/19 12:35	emk
Chloride	M300.0 - Ion Chromatography	5	26.9			mg/L	2	10	09/18/19 16:41	krh
Conductivity @25C	SM2510B	1	877			umhos/cm	1	10	09/19/19 3:51	enb
Fluoride	M300.0 - Ion Chromatography	5		U	*	mg/L	0.25	1.25	09/18/19 16:41	krh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.33		*	mg/L	0.02	0.1	09/28/19 0:50	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	09/20/19 13:13	mss2
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH3			U		mg/L	0.1	0.5	01/13/20 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1		U	*	mg/L	0.1	0.5	09/26/19 3:09	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	588			mg/L	20	40	09/13/19 16:48	eep
Residue, Non-Filterable (TSS) @105C	SM2540D	1		U	*	mg/L	5	20	09/16/19 14:07	mlh
Sulfate	M300.0 - Ion Chromatography	5	222			mg/L	2	10	09/18/19 16:41	krh
Sulfide as S	SM4500S2-D	1		U	*	mg/L	0.02	0.1	09/15/19 11:41	emk

Arizona license number: AZ0102

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

Inorganic Reference

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)

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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
WG482171													
WG482171PBW	PBW	09/23/19 13:07				U	mg/L		-20	20			
WG482171LCSW1	LCSW	09/23/19 13:19	WC190916-1	820.0001		851	mg/L	104	90	110			
L54592-01DUP	DUP	09/23/19 14:56			121	110	mg/L				10	20	
WG482171LCSW2	LCSW	09/23/19 16:49	WC190916-1	820.0001		828	mg/L	101	90	110			

Aluminum, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.999	mg/L	100	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.15	0.15			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.11	0.11			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	1.0012		1.082	mg/L	108	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	1.0012	.17	1.224	mg/L	105	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	1.0012	.17	1.259	mg/L	109	70	130	3	20	

Antimony, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.02		.01874	mg/L	94	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.0012	0.0012			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00088	0.00088			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.01		.00979	mg/L	98	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.01	U	.00982	mg/L	98	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.01	U	.00973	mg/L	97	70	130	1	20	

Arsenic, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.05		.05002	mg/L	100	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.0006	0.0006			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00044	0.00044			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.05005		.04851	mg/L	97	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.05005	.0004	.04724	mg/L	94	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.05005	.0004	.04614	mg/L	91	70	130	2	20	

Barium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.9295	mg/L	96	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.021	0.021			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.0154	0.0154			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	.4995		.4904	mg/L	98	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	.4995	.04	.5158	mg/L	95	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	.4995	.04	.5302	mg/L	98	70	130	3	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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.

Beryllium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.05		.049608	mg/L	99	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.00024	0.00024			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.000176	########			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.05005		.04877	mg/L	97	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.05005	U	.045942	mg/L	92	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.05005	U	.046184	mg/L	92	70	130	1	20	

Biochemical Oxygen Demand (5 day) SM5210B/HACH10360

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481518													
WG481518LCSW1	LCSW	09/12/19 12:26	BODLCSW-2	198		182	mg/L	92	84.6	115.4			K6
WG481518LCSW2	LCSW	09/12/19 12:30	BODLCSW-2	198		159	mg/L	80	84.6	115.4			K6
WG481518LCSW3	LCSW	09/12/19 12:34	BODLCSW-2	198		158	mg/L	80	84.6	115.4			K6

Boron, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.972	mg/L	99	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.06	0.06			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.044	0.044			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	.5005		.524	mg/L	105	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	.5005	.07	.564	mg/L	99	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	.5005	.07	.591	mg/L	104	70	130	5	20	

Cadmium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.05		.049644	mg/L	99	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.00015	0.00015			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00011	0.00011			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.05005		.047616	mg/L	95	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.05005	U	.047393	mg/L	95	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.05005	U	.046967	mg/L	94	70	130	1	20	

Calcium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	100		99.97	mg/L	100	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.3	0.3			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.22	0.22			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	68.01207		69.71	mg/L	102	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	68.01207	97.8	162.5	mg/L	95	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	68.01207	97.8	165.5	mg/L	100	70	130	2	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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.

Chemical Oxygen Demand M410.4

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481644													
WG481644ICV	ICV	09/14/19 10:55	WC181022-12	200		199	mg/L	100	90	110			
WG481644ICB	ICB	09/14/19 11:15				U	mg/L		-10	10			
WG481644LRB	LRB	09/14/19 11:35				U	mg/L		-10	10			
WG481644LFB	LFB	09/14/19 11:55	WC190829-4	50		50	mg/L	100	90	110			
L54582-04DUP	DUP	09/14/19 14:36			100	103	mg/L				3	20	RA
L54582-04AS	AS	09/14/19 15:36	WC190829-4	100	100	210	mg/L	110	90	110			

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG478241													
WG478241ICV	ICV	07/30/19 12:02	WI190530-11	19.94		19.8	mg/L	99	90	110			
WG478241ICB	ICB	07/30/19 12:20				U	mg/L		-0.4	0.4			
WG481920													
WG481920LFB	LFB	09/18/19 16:23	WI190722-1	30		29.3	mg/L	98	90	110			
L54508-01DUP	DUP	09/18/19 16:59			26.9	26.7	mg/L				1	20	
L54546-01AS	AS	09/18/19 17:35	WI190722-1	300	63	358	mg/L	98	90	110			

Chromium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.972	mg/L	99	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.03	0.03			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.022	0.022			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	.501		.515	mg/L	103	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	.501	U	.492	mg/L	98	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	.501	U	.506	mg/L	101	70	130	3	20	

Cobalt, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.05		.049993	mg/L	100	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.00015	0.00015			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00011	0.00011			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.05005		.04786	mg/L	96	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.05005	.00019	.047487	mg/L	94	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.05005	.00019	.046904	mg/L	93	70	130	1	20	

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481946													
WG481946LCSW2	LCSW	09/18/19 17:26	PCN59147	1408		1440	umhos/cm	102	90	110			
WG481946LCSW5	LCSW	09/18/19 21:23	PCN59147	1408		1420	umhos/cm	101	90	110			
WG481946LCSW8	LCSW	09/19/19 1:54	PCN59147	1408		1420	umhos/cm	101	90	110			
L54524-03DUP	DUP	09/19/19 5:22			143	142	umhos/cm				1	20	
WG481946LCSW11	LCSW	09/19/19 5:28	PCN59147	1408		1410	umhos/cm	100	90	110			
WG481946LCSW14	LCSW	09/19/19 8:58	PCN59147	1408		1400	umhos/cm	99	90	110			

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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.

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482363													
WG482363ICV	ICV	09/25/19 10:51	II190916-3	2		1.892	mg/L	95	95	105			
WG482363ICB	ICB	09/25/19 10:57				U	mg/L		-0.03	0.03			
WG482363LFB	LFB	09/25/19 11:10	II190920-2	.5005		.485	mg/L	97	85	115			
L54508-01AS	AS	09/25/19 11:16	II190920-2	.5005	U	.504	mg/L	101	85	115			

Copper, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.915	mg/L	96	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.03	0.03			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.022	0.022			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	.5005		.488	mg/L	98	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	.5005	.01	.488	mg/L	96	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	.5005	.01	.499	mg/L	98	70	130	2	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG478241													
WG478241ICV	ICV	07/30/19 12:02	WI190530-11	4.008		4.01	mg/L	100	90	110			
WG478241ICB	ICB	07/30/19 12:20				U	mg/L		-0.05	0.05			
WG481920													
WG481920LFB	LFB	09/18/19 16:23	WI190722-1	1.5		1.48	mg/L	99	90	110			
L54508-01DUP	DUP	09/18/19 16:59			U	U	mg/L				0	20	RA
L54546-01AS	AS	09/18/19 17:35	WI190722-1	15	U	15.2	mg/L	101	90	110			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482268													
WG482268ICV	ICV	09/24/19 16:29	II190916-3	2		1.903	mg/L	95	95	105			
WG482268ICB	ICB	09/24/19 16:35				U	mg/L		-0.09	0.09			
WG482268LFB	LFB	09/24/19 16:48	II190920-2	1.0018		1.03	mg/L	103	85	115			
L54508-01AS	AS	09/24/19 16:55	II190920-2	1.0018	.05	1.102	mg/L	105	85	115			
L54508-01ASD	ASD	09/24/19 16:58	II190920-2	1.0018	.05	1.082	mg/L	103	85	115	2	20	

Iron, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.934	mg/L	97	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.09	0.09			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.066	0.066			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	1.0018		1.026	mg/L	102	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	1.0018	.58	1.661	mg/L	108	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	1.0018	.58	1.574	mg/L	99	70	130	5	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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.

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482017													
WG482017ICV	ICV	09/19/19 15:08	MS190806-2	.05		.04939	mg/L	99	90	110			
WG482017ICB	ICB	09/19/19 15:10				U	mg/L		-0.00022	0.00022			
WG482017LFB	LFB	09/19/19 15:12	MS190905-3	.05005		.04919	mg/L	98	85	115			
L54410-01AS	AS	09/19/19 15:15	MS190905-3	.05005	.001	.05131	mg/L	101	70	130			
L54410-01ASD	ASD	09/19/19 15:17	MS190905-3	.05005	.001	.04869	mg/L	95	70	130	5	20	

Lead, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.05		.05037	mg/L	101	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.0003	0.0003			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00022	0.00022			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.05005		.0475	mg/L	95	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.05005	.0002	.04747	mg/L	94	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.05005	.0002	.04746	mg/L	94	70	130	0	20	

Magnesium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	100		99.72	mg/L	100	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.6	0.6			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.44	0.44			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	49.99809		49.89	mg/L	100	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	49.99809	53.6	100.9	mg/L	95	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	49.99809	53.6	103	mg/L	99	70	130	2	20	

Manganese, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.922	mg/L	96	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.03	0.03			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.022	0.022			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	.5015		.506	mg/L	101	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	.5015	.02	.508	mg/L	97	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	.5015	.02	.52	mg/L	100	70	130	2	20	

Mercury, total M245.1 CVAA

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481697													
WG481697ICV	ICV	09/17/19 15:43	HG190911-3	.004995		.00508	mg/L	102	95	105			
WG481697ICB	ICB	09/17/19 15:44				U	mg/L		-0.0002	0.0002			
WG481698													
WG481698LRB	LRB	09/17/19 16:19				U	mg/L		-0.00044	0.00044			
WG481698LFB	LFB	09/17/19 16:20	HG190911-6	.002002		.00192	mg/L	96	85	115			
L54501-04LFM	LFM	09/17/19 16:23	HG190911-6	.002002	U	.00187	mg/L	93	85	115			
L54501-04LFMD	LFMD	09/17/19 16:24	HG190911-6	.002002	U	.00184	mg/L	92	85	115	2	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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.

Molybdenum, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.0199		.02046	mg/L	103	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.0006	0.0006			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00044	0.00044			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.0501		.04639	mg/L	93	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.0501	.0008	.04769	mg/L	94	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.0501	.0008	.04718	mg/L	93	70	130	1	20	

Nickel, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2.004		2.0235	mg/L	101	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.024	0.024			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.0176	0.0176			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	.501		.5199	mg/L	104	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	.501	.366	.8429	mg/L	95	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	.501	.366	.8748	mg/L	102	70	130	4	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
WG482673													
WG482673ICV	ICV	09/28/19 0:44	WI190809-1	2.416		2.44	mg/L	101	90	110			
WG482673ICB	ICB	09/28/19 0:45				U	mg/L		-0.02	0.02			
WG482673LFB1	LFB	09/28/19 0:49	WI190405-9	2		2.04	mg/L	102	90	110			
L54508-01AS	AS	09/28/19 0:51	WI190405-9	2	.33	2.397	mg/L	103	90	110			
L54669-01DUP	DUP	09/28/19 0:54			.14	.14	mg/L				0	20	RA
WG482673LFB2	LFB	09/28/19 1:29	WI190405-9	2		1.959	mg/L	98	90	110			

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
WG482063													
WG482063ICV	ICV	09/20/19 10:34	WI190904-1	12.012		12.241	mg/L	102	90	110			
WG482063ICB	ICB	09/20/19 10:35				U	mg/L		-0.05	0.05			
WG482082													
WG482082LFB	LFB	09/20/19 13:11	WI180918-3	10		9.538	mg/L	95	90	110			
L54508-01DUP	DUP	09/20/19 13:14			U	U	mg/L				0	20	RA
L54595-01AS	AS	09/20/19 13:17	WI180918-3	10	U	9.87	mg/L	99	90	110			

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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, total Kjeldahl M351.2 - TKN by Block Digester

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482468													
WG482468ICV	ICV	09/26/19 2:13	WI190923-4	4		3.9	mg/L	98	90	110			
WG482468ICB	ICB	09/26/19 2:14				U	mg/L		-0.1	0.1			
WG482357LRB1	LRB	09/26/19 2:15				U	mg/L		-0.1	0.1			
WG482357LFB1	LFB	09/26/19 2:16	WI190729-2	2.5		2.45	mg/L	98	90	110			
L54577-12LFM	LFM	09/26/19 2:21	10XTKN	25	U	26.5	mg/L	106	90	110			
WG482357LRB2	LRB	09/26/19 2:49				U	mg/L		-0.1	0.1			
WG482357LFB2	LFB	09/26/19 2:50	WI190729-2	2.5		2.44	mg/L	98	90	110			
L54508-01DUP	DUP	09/26/19 3:10			U	U	mg/L				0	20	RA

Potassium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	20		19.97	mg/L	100	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.6	0.6			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.44	0.44			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	99.95064		101.1	mg/L	101	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	99.95064	4.8	105.4	mg/L	101	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	99.95064	4.8	107.9	mg/L	103	70	130	2	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481629													
WG481629PBW	PBW	09/13/19 16:45				U	mg/L		-40	40			
WG481629LCSW	LCSW	09/13/19 16:46	PCN59640	1000		982	mg/L	98	80	120			
L54577-14DUP	DUP	09/13/19 17:08			450	448	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
WG481722													
WG481722PBW	PBW	09/16/19 13:39				U	mg/L		-15	15			
WG481722LCSW	LCSW	09/16/19 13:41	PCN59811	100		83	mg/L	83	80	120			
L54508-01DUP	DUP	09/16/19 14:10			U	5	mg/L				200	10	RA

Selenium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.05		.05132	mg/L	103	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.0003	0.0003			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00022	0.00022			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.05005		.04887	mg/L	98	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.05005	U	.04805	mg/L	96	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.05005	U	.04674	mg/L	93	70	130	3	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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.

Silica, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	42.8		42.23	mg/L	99	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.6	0.6			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.44	0.44			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	21.415		21.11	mg/L	99	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	21.415	8.2	26.65	mg/L	86	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	21.415	8.2	28.26	mg/L	94	70	130	6	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482017													
WG482017ICV	ICV	09/19/19 15:08	MS190806-2	.02004		.02083	mg/L	104	90	110			
WG482017ICB	ICB	09/19/19 15:10				U	mg/L		-0.00022	0.00022			
WG482017LFB	LFB	09/19/19 15:12	MS190905-3	.01002		.00998	mg/L	100	85	115			
L54410-01AS	AS	09/19/19 15:15	MS190905-3	.01002	U	.01018	mg/L	102	70	130			
L54410-01ASD	ASD	09/19/19 15:17	MS190905-3	.01002	U	.00986	mg/L	98	70	130	3	20	

Silver, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482144													
WG482144ICV	ICV	09/23/19 11:20	MS190806-2	.02004		.02029	mg/L	101	90	110			
WG482144ICB	ICB	09/23/19 11:22				U	mg/L		-0.0003	0.0003			
WG481949LRB	LRB	09/23/19 11:24				U	mg/L		-0.00022	0.00022			
WG481949LFB	LFB	09/23/19 11:25	MS190905-3	.01002		.01037	mg/L	103	85	115			
L54578-03LFM	LFM	09/23/19 11:31	MS190905-3	.01002	U	.01024	mg/L	102	70	130			
L54578-03LFMD	LFMD	09/23/19 11:33	MS190905-3	.01002	U	.01023	mg/L	102	70	130	0	20	

Sodium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	100		102.48	mg/L	102	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.6	0.6			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.44	0.44			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	100.0109		102.4	mg/L	102	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	100.0109	17.8	119.6	mg/L	102	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	100.0109	17.8	122.7	mg/L	105	70	130	3	20	

Sulfate M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG478241													
WG478241ICV	ICV	07/30/19 12:02	WI190530-11	50		49.9	mg/L	100	90	110			
WG478241ICB	ICB	07/30/19 12:20				U	mg/L		-0.4	0.4			
WG481920													
WG481920LFB	LFB	09/18/19 16:23	WI190722-1	30		29.3	mg/L	98	90	110			
L54508-01DUP	DUP	09/18/19 16:59			222	222	mg/L				0	20	
L54546-01AS	AS	09/18/19 17:35	WI190722-1	300	680	960	mg/L	93	90	110			

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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.

Sulfide as S SM4500S2-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481650													
WG481650ICV	ICV	09/15/19 11:30	WC190914-3	.34666		.351	mg/L	101	90	110			
WG481650ICB	ICB	09/15/19 11:32				U	mg/L		-0.06	0.06			
WG481650LFB1	LFB	09/15/19 11:34	WC190914-6	.22844		.252	mg/L	110	80	120			
L54545-02AS	AS	09/15/19 12:05	WC190914-6	.22844	U	.075	mg/L	33	75	125			M2
L54545-02DUP	DUP	09/15/19 12:07			U	U	mg/L				0	20	RA
WG481650LFB2	LFB	09/15/19 12:43	WC190914-6	.22844		.248	mg/L	109	80	120			
WG481650LFB3	LFB	09/15/19 13:56	WC190914-6	.22844		.245	mg/L	107	80	120			
WG481650LFB4	LFB	09/15/19 15:05	WC190914-6	.22844		.246	mg/L	108	80	120			

Thallium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.05		.05182	mg/L	104	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.0003	0.0003			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00022	0.00022			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.0501		.04758	mg/L	95	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.0501	U	.0476	mg/L	95	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.0501	U	.04768	mg/L	95	70	130	0	20	

Tin, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		2.015	mg/L	101	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.12	0.12			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.088	0.088			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	1.002		1.026	mg/L	102	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	1.002	U	.962	mg/L	96	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	1.002	U	1.003	mg/L	100	70	130	4	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482017													
WG482017ICV	ICV	09/19/19 15:08	MS190806-2	.05		.0505	mg/L	101	90	110			
WG482017ICB	ICB	09/19/19 15:10				U	mg/L		-0.00022	0.00022			
WG482017LFB	LFB	09/19/19 15:12	MS190905-3	.05		.04897	mg/L	98	85	115			
L54410-01AS	AS	09/19/19 15:15	MS190905-3	.05	.0023	.05466	mg/L	105	70	130			
L54410-01ASD	ASD	09/19/19 15:17	MS190905-3	.05	.0023	.05201	mg/L	99	70	130	5	20	

Uranium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482066													
WG482066ICV	ICV	09/20/19 11:13	MS190806-2	.05		.05076	mg/L	102	90	110			
WG482066ICB	ICB	09/20/19 11:14				U	mg/L		-0.0003	0.0003			
WG481949LRB	LRB	09/20/19 11:16				U	mg/L		-0.00022	0.00022			
WG481949LFB	LFB	09/20/19 11:18	MS190905-3	.05		.04754	mg/L	95	85	115			
L54578-03LFM	LFM	09/20/19 11:40	MS190905-3	.05	.0013	.05056	mg/L	99	70	130			
L54578-03LFMD	LFMD	09/20/19 11:42	MS190905-3	.05	.0013	.05069	mg/L	99	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L54508***

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.

Vanadium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.9388	mg/L	97	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.015	0.015			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.011	0.011			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	.5005		.4901	mg/L	98	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	.5005	U	.4734	mg/L	95	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	.5005	U	.4832	mg/L	97	70	130	2	20	

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG482268													
WG482268ICV	ICV	09/24/19 16:29	II190916-3	2		1.892	mg/L	95	95	105			
WG482268ICB	ICB	09/24/19 16:35				U	mg/L		-0.03	0.03			
WG482268LFB	LFB	09/24/19 16:48	II190920-2	.50075		.514	mg/L	103	85	115			
L54508-01AS	AS	09/24/19 16:55	II190920-2	.50075	1.08	1.505	mg/L	85	85	115			
L54508-01ASD	ASD	09/24/19 16:58	II190920-2	.50075	1.08	1.494	mg/L	83	85	115	1	20	MA

Zinc, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG481801													
WG481801ICV	ICV	09/17/19 13:56	II190916-3	2		1.937	mg/L	97	95	105			
WG481801ICB	ICB	09/17/19 14:02				U	mg/L		-0.03	0.03			
WG481661LRB	LRB	09/17/19 14:14				U	mg/L		-0.022	0.022			
WG481661LFB	LFB	09/17/19 14:17	II190827-2	.50075		.509	mg/L	102	85	115			
L54508-01LFM	LFM	09/17/19 14:23	II190827-2	.50075	1.16	1.606	mg/L	89	70	130			
L54508-01LFMD	LFMD	09/17/19 14:26	II190827-2	.50075	1.16	1.651	mg/L	98	70	130	3	20	

Inorganic Extended Qualifier Report

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L54508***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L54508-01	WG481518	Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	K1	The sample dilutions set-up for the BOD/CBOD analysis did not meet the oxygen depletion criteria of at least 2 mg/L. Any reported result is an estimated value.
			SM5210B/HACH10360	K6	Glucose/glutamic acid BOD/CBOD was below method acceptance criteria.
			SM5210B/HACH10360	KA	The seed depletion was outside the method acceptance limits, the DO-axis intercept is > 0.2 mg/L. The reported result is an estimated value.
	WG481644	Chemical Oxygen Demand	M410.4	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).
	WG481920	Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
			M300.0 - Ion Chromatography	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).
	WG482673	Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	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).
	WG482082	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	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).
	WG482468	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).
	WG481722	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
	WG481801	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG481650	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG482171	Total Alkalinity	SM2320B - Titration	Q12	A filtered sample was used for analysis because an unfiltered sample was not available.
	WG482268	Zinc, 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.

Energy Fuels Resources (USA) Inc.
Project ID: Canyon 2016
Sample ID: CANYON SUMP 2019-Q3

ACZ Sample ID: ***L54508-01***
Date Sampled: *09/11/19 11:45*
Date Received: *09/12/19*
Sample Matrix: *Groundwater*

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**
Extract Method:

Workgroup: WG482236
Analyst: QHS
Extract Date:
Analysis Date: 09/24/19 9:20

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1.1	*	mg/L	2.2	11

Arizona license number: AZ0102

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: ***L54508***

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.

Oil & Grease, Total Recoverable

1664A - Gravimetric

WG482236

MS **Sample ID: L54706-01MS** **PCN/SCN: OP190923-2** **Analyzed: 09/24/19 11:05**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40	62	94.7	mg/L	82.0	78	114			

LCSW **Sample ID: WG482236LCSW** **PCN/SCN: OP190923-2** **Analyzed: 09/24/19 16:39**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		30.5	mg/L	76.0	78	114			RL

LCSWD **Sample ID: WG482236LCSWD** **PCN/SCN: OP190923-2** **Analyzed: 09/24/19 16:59**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		33.3	mg/L	83.0	78	114	9	18	

PBW **Sample ID: WG482236PBW** **Analyzed: 09/24/19 9:00**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE			U	mg/L						

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

Organic Extended Qualifier Report

ACZ Project ID: ***L54508***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L54508-01	WG482236	Oil and Grease	1664A - Gravimetric	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
			1664A - Gravimetric	RL	Recovery for either the LCS or LCS duplicate was outside of the acceptance limits; the RPD was within the acceptance limits.

Energy Fuels Resources (USA) Inc.
Project ID: Canyon 2016
Sample ID: CANYON SUMP 2019-Q3
Locator:

ACZ Sample ID: ***L54508-01***
Date Sampled: *09/11/19 11:45*
Date Received: *09/12/19*
Sample Matrix: *Groundwater*

Combined Radium (total)
Calculation (RA226 + RA228)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	10/07/19 11:02		16			pCi/L		calc

Gross Alpha & Beta, total
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	09/24/19 0:01		89	11	9.2	pCi/L		amk
Gross Beta	09/24/19 0:01		34	4.5	8.6	pCi/L		amk

Gross Alpha, dissolved
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha, dissolved	09/24/19 0:01		89	11	9.2	pCi/L		amk

Lead 210, total
EICHROM, OTW01

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Lead 210, total	09/27/19 13:02		5.4	1.6	3.9	pCi/L	*	jlg

Radium 226, dissolved
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	09/26/19 0:07		17	0.59	0.22	pCi/L		djc

Radium 226, total
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	09/26/19 0:05		16	0.5	0.09	pCi/L		djc

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID: Canyon 2016
Sample ID: CANYON SUMP 2019-Q3
Locator:

ACZ Sample ID: ***L54508-01***
Date Sampled: *09/11/19 11:45*
Date Received: *09/12/19*
Sample Matrix: *Groundwater*

Radium 228
M904.0
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	10/02/19 13:37		0.56	0.83	0.85	pCi/L		amk

Radium 228, dissolved
M904.0
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	10/02/19 13:38		0.33	0.76	0.78	pCi/L		amk

Thorium, Isotopic
ESM 4506
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 228	10/02/19 0:02		-0.27	0.29	0.23	pCi/L	*	djc
Thorium 230	10/02/19 0:02		0.15	0.28	0.61	pCi/L	*	djc
Thorium 232	10/02/19 0:02		-0.02	0.13	0.23	pCi/L	*	djc

Uranium, Isotopic dissolved
Eichrom ACW03
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Uranium 234	10/03/19 0:02		84	5.8	0.74	pCi/L	*	djc
Uranium 235	10/03/19 0:02		1.5	0.87	1.2	pCi/L	*	djc
Uranium 238	10/03/19 0:02		39.5	4	1.2	pCi/L	*	djc

Arizona license number: AZ0102

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: ***L54508***

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.

Gross Alpha, dissolved 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
WG482323																
L54539-02DUP	DUP-RER	09/24/19			15	4.9	9.8	31	7	7.9				1.87	2	
L54539-02MSA	MS	09/24/19	PCN58725	107.53	15	4.9	9.8	95	12	9.8	74	67	144			
WG481903LCSWA	LCSW	09/24/19	PCN58725	100				120	9.2	3.6	120	67	144			
WG481903PBW	PBW	09/24/19						-.44	0.76	5.4			10.8			
L54538-03DUP	DUP-RER	09/24/19			16	4.3	12	16	4	11				0	2	

Lead 210, total EICHROM, OTW01 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG482712																
WG482000PBW	PBW	09/27/19						-.56	1.3	3.6			7.2			
L54508-01DUP	DUP-RER	09/27/19			5.4	1.6	3.9	11	2.9	7				1.69	2	
L54525-01MS	MS	09/27/19	PCN54278	156.14	0.38	2.8	7.5	170	6.2	7.2	109	55	121			
WG482000LCSW	LCSW	09/27/19	PCN54278	93.68				94	3.2	3.4	100	55	121			

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
WG482700																
WG481984PBW	PBW	09/26/19						0	0.08	0.22			0.44			
WG481984LCSW	LCSW	09/26/19	PCN57865	20				19	0.55	0.11	95	43	148			
L54538-11DUP	DUP-RER	09/26/19			0.47	0.15	0.15	.22	0.09	0.15				1.43	2	
L54539-05DUP	DUP-RER	09/26/19			0.23	0.09	0.08	.15	0.09	0.09				0.63	2	
L54538-12MS	MS	09/26/19	PCN57865	20	0.06	0.11	0.13	18	0.53	0.14	90	43	148			

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L54508***

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
WG483047																
WG482387PBW	PBW	10/02/19						-.15	0.4	0.43			0.86			
WG482387LCSW	LCSW	10/02/19	PCN57186	8.74				9.2	1.1	0.77	105	47	123			
L54512-01DUP	DUP-RER	10/02/19			-0.13	0.71	0.76	-.44	0.85	0.91				0.28	2	
L54539-02DUP	DUP-RER	10/02/19			0.05	0.72	0.75	.61	0.79	0.8				0.52	2	
L54539-02MS	MS	10/02/19	PCN57186	8.74	0.05	0.72	0.75	8.8	1.4	1.1	100	47	123			

Thorium 228 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
WG483023																
WG482733PBW	PBW	10/02/19						.27	0.32	0.26			0.52			
L54508-01DUP	DUP-RER	10/02/19			-0.27	0.29	0.23	.14	0.3	0.25				0.98	2	

Thorium 230 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
WG483023																
WG482733PBW	PBW	10/02/19						.19	0.23	0.69			1.38			
WG482733LCSW	LCSW	10/02/19	PCN58726	200				200	4.3	0.61	100	91	126			
L54508-01DUP	DUP-RER	10/02/19			0.15	0.28	0.61	.21	0.25	0.64				0.16	2	
L54508-01MS	MS	10/02/19	PCN58726	400	0.15	0.28	0.61	420	9.5	1.6	105	91	126			

Thorium 232 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
WG483023																
WG482733PBW	PBW	10/02/19						.02	0.05	0.26			0.52			
L54508-01DUP	DUP-RER	10/02/19			-0.02	0.13	0.23	-.1	0.13	0.25				0.43	2	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L54508***

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.

Uranium 234 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG483106																
WG482711PBW	PBW	10/03/19						1	0.76	1			2			
WG482711LCSW	LCSW	10/03/19	RC190819-10	98				98	6.7	2.3	100	77	122			
L54508-01DUP	DUP-RER	10/03/19			84	5.8	0.74	83	5.8	0.77				0.12	2	
L54829-01MS	MS	10/03/19	RC190819-10	98	1.5	1	0.96	95	6.9	4.1	95	77	122			

Uranium 235 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG483106																
WG482711PBW	PBW	10/03/19						-.21	0.41	0.66			1.32			
WG482711LCSW	LCSW	10/03/19	RC190819-10	4.48				4.5	1.5	0.62	100	42	136			
L54508-01DUP	DUP-RER	10/03/19			1.5	0.87	1.2	1.4	0.85	1.2				0.08	2	
L54829-01MS	MS	10/03/19	RC190819-10	4.48	0	0.55	0.63	4.7	1.6	2.1	105	42	136			

Uranium 238 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG483106																
WG482711PBW	PBW	10/03/19						.53	0.69	0.81			1.62			
WG482711LCSW	LCSW	10/03/19	RC190819-10	97.5				101	6.9	2	104	87	124			
L54508-01DUP	DUP-RER	10/03/19			39.5	4	1.2	38.5	4	1.2				0.18	2	
L54829-01MS	MS	10/03/19	RC190819-10	97.5	1.52	0.87	0.72	93.3	6.9	4.5	94	87	124			

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

RadChem Extended Qualifier Report

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L54508***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION

No extended qualifiers associated with this analysis

Radiochemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Lead 210, total	EICHROM, OTW01
Thorium 228	ESM 4506
Thorium 230	ESM 4506
Thorium 232	ESM 4506
Uranium 234	Eichrom ACW03
Uranium 235	Eichrom ACW03
Uranium 238	Eichrom ACW03

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.	
Lead 210, total	EICHROM, OTW01
Thorium 228	ESM 4506
Thorium 230	ESM 4506
Thorium 232	ESM 4506
Uranium 234	Eichrom ACW03
Uranium 235	Eichrom ACW03
Uranium 238	Eichrom ACW03

Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Sulfide as S	SM4500S2-D

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

Sample Receipt

Energy Fuels Resources (USA) Inc.
Canyon 2016

ACZ Project ID: L54508
Date Received: 09/12/2019 10:25
Received By:
Date Printed: 9/13/2019

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 Sample Identification # of Containers 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?
4649	4.1	<=6.0	18	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.
Canyon 2016

ACZ Project ID: L54508
Date Received: 09/12/2019 10:25
Received By:
Date Printed: 9/13/2019

[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. L54508

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

CHAIN of CUSTODY

Report to:

Name: Kathy Weinel
Company: Energy Fuels Resources
E-mail: kweinel@EnergyFuels.com
Address: 225 Union Blvd, Suite 600
Lakewood, Co 80228
Telephone:

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Kathy Weinel
Company: EFR
E-mail: SAA
Address: SAA
Telephone: SAA

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 [X] 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 [X]

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

Sampler's Name: Matt Germansen Sampler's Site Information State AZ Zip code 86001 Time Zone AZ

*Sampler's Signature: [signature]

*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 #: Canyon -2016
PO#:
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	ANALYSES REQUESTED
Canyon Sump 2019-Q3	9/11/19 : 1145	GW	9	See Quote

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
Matt Germansen	9/11/19:1420	JSC	9.12.19 10:25

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

L54508-2001131641

L54508 Chain of Custod

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

Analytical Report

January 23, 2020

Report to:
Kathy Weinel
Energy Fuels Resources (USA) Inc.
225 Union Blvd. ,Suite 600
Lakewood, CO 80228

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

Project ID:
ACZ Project ID: L56373

Kathy Weinel:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on December 12, 2019. This project has been assigned to ACZ's project number, L56373. 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 L56373. 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 February 22, 2020. 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.

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

Case Narrative

Energy Fuels Resources (USA) Inc.

January 23, 2020

Project ID:
ACZ Project ID: L56373

Sample Receipt

ACZ Laboratories, Inc. (ACZ) received 2 groundwater samples from Energy Fuels Resources (USA) Inc. on December 12, 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 L56373. 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 WG488069
Qualifier: N1
Applies to:
L56373-01/TOTAL DISSOLVED SOLIDS
L56373-02/TOTAL DISSOLVED SOLIDS

Yamato drying oven came above temp limit over the initial evaporation, 12/13/19-12/16/19, with a high of 92.5 degrees C. there is no observed splattering of the samples and the oven was back in range when the samples were removed

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4

ACZ Sample ID: ***L56373-01***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								12/17/19 12:18	rbt
Total Recoverable Digestion	M200.2 ICP-MS								12/30/19 13:45	mfm
Total Recoverable Digestion	M200.2 ICP								12/13/19 14:05	jlw

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4

ACZ Sample ID: ***L56373-01***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, total recoverable	M200.7 ICP	1		U		mg/L	0.05	0.3	12/16/19 11:22	jlw
Antimony, total recoverable	M200.8 ICP-MS	1	0.0053			mg/L	0.0004	0.002	01/02/20 14:04	mfm
Arsenic, total recoverable	M200.8 ICP-MS	1	0.182			mg/L	0.0002	0.001	01/02/20 14:04	mfm
Barium, total recoverable	M200.7 ICP	1	0.030	B		mg/L	0.007	0.04	12/16/19 11:22	jlw
Beryllium, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	01/02/20 14:04	mfm
Boron, total recoverable	M200.7 ICP	1	0.06	B		mg/L	0.02	0.1	12/16/19 11:22	jlw
Cadmium, total recoverable	M200.8 ICP-MS	1	0.00042			mg/L	0.00005	0.0003	01/02/20 14:04	mfm
Calcium, total recoverable	M200.7 ICP	1	90.3			mg/L	0.1	0.5	12/16/19 11:22	jlw
Chromium, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	12/16/19 11:22	jlw
Cobalt, total recoverable	M200.8 ICP-MS	1	0.104			mg/L	0.00005	0.0003	01/02/20 14:04	mfm
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	12/17/19 18:54	jlw
Copper, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	12/16/19 11:22	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.03	0.08	12/17/19 18:54	jlw
Iron, total recoverable	M200.7 ICP	1	0.44			mg/L	0.03	0.08	12/16/19 14:47	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	12/20/19 11:54	mfm
Lead, total recoverable	M200.8 ICP-MS	1	0.0017			mg/L	0.0001	0.0005	01/02/20 14:04	mfm
Magnesium, total recoverable	M200.7 ICP	1	51.3			mg/L	0.2	1	12/16/19 11:22	jlw
Manganese, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	12/16/19 11:22	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	12/22/19 9:59	slm
Molybdenum, total recoverable	M200.8 ICP-MS	1	0.053			mg/L	0.0002	0.0005	01/02/20 14:04	mfm
Nickel, total recoverable	M200.7 ICP	1	0.301			mg/L	0.008	0.04	12/16/19 11:22	jlw
Potassium, total recoverable	M200.7 ICP	1	4.6			mg/L	0.2	1	12/16/19 11:22	jlw
Selenium, total recoverable	M200.8 ICP-MS	1	0.0007			mg/L	0.0001	0.0003	01/02/20 14:04	mfm
Silica, total recoverable	M200.7 ICP	1	10.5		*	mg/L	0.2	1	12/16/19 11:22	jlw
Silver, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	12/20/19 11:54	mfm
Silver, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	01/07/20 11:27	enb
Sodium, total recoverable	M200.7 ICP	1	16.4			mg/L	0.2	1	12/16/19 11:22	jlw
Thallium, total recoverable	M200.8 ICP-MS	1	0.0015			mg/L	0.0001	0.0005	01/02/20 14:04	mfm
Tin, total recoverable	M200.7 ICP	1		U		mg/L	0.04	0.2	12/16/19 11:22	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.112		*	mg/L	0.0001	0.0005	12/20/19 11:54	mfm

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4

ACZ Sample ID: ***L56373-01***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Uranium, total recoverable	M200.8 ICP-MS	1	0.116			mg/L	0.0001	0.0005	01/02/20 14:04	mfm
Vanadium, total recoverable	M200.7 ICP	1		U		mg/L	0.005	0.03	12/16/19 11:22	jlw
Zinc, dissolved	M200.7 ICP	1	0.41			mg/L	0.01	0.05	12/16/19 23:37	jlw
Zinc, total recoverable	M200.7 ICP	1	0.50			mg/L	0.01	0.05	12/16/19 11:22	jlw

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	215			mg/L	2	20	12/13/19 0:00	eep
Carbonate as CaCO3		1	8.0	B		mg/L	2	20	12/13/19 0:00	eep
Hydroxide as CaCO3		1		U		mg/L	2	20	12/13/19 0:00	eep
Total Alkalinity		1	223			mg/L	2	20	12/13/19 0:00	eep
Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	1		U	*	mg/L	2	2	12/13/19 11:15	eep
Chemical Oxygen Demand	M410.4	1		U	*	mg/L	10	20	12/26/19 12:23	eep
Chloride	M300.0 - Ion Chromatography	5	26.8		*	mg/L	2	10	12/17/19 18:16	krh
Conductivity @25C	SM2510B	1	838			umhos/cm	1	10	12/13/19 20:05	eep
Fluoride	M300.0 - Ion Chromatography	5		U	*	mg/L	0.25	1.25	12/17/19 18:16	krh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.29			mg/L	0.02	0.1	12/28/19 2:00	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	12/26/19 14:46	wtc
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH3			U		mg/L	0.1	0.5	01/23/20 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1		U		mg/L	0.1	0.5	12/18/19 1:46	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	564		*	mg/L	20	40	12/13/19 10:15	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1		U	*	mg/L	5	20	12/12/19 15:29	jck
Sulfate	M300.0 - Ion Chromatography	5	211			mg/L	2	10	12/17/19 18:16	krh
Sulfide as S	SM4500S2-D	1		U	*	mg/L	0.02	0.1	12/13/19 14:56	enb

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4-DUP

ACZ Sample ID: ***L56373-02***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Inorganic Prep

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Nitrogen, total Kjeldahl	M351.2 - Block Digestor								12/17/19 12:27	rbt
Total Recoverable Digestion	M200.2 ICP-MS								12/30/19 13:55	mfm
Total Recoverable Digestion	M200.2 ICP								12/13/19 15:15	jlw

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4-DUP

ACZ Sample ID: ***L56373-02***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Aluminum, total recoverable	M200.7 ICP	1		U		mg/L	0.05	0.3	12/16/19 11:31	jlw
Antimony, total recoverable	M200.8 ICP-MS	1	0.0053			mg/L	0.0004	0.002	01/02/20 14:05	mfm
Arsenic, total recoverable	M200.8 ICP-MS	1	0.186			mg/L	0.0002	0.001	01/02/20 14:05	mfm
Barium, total recoverable	M200.7 ICP	1	0.030	B		mg/L	0.007	0.04	12/16/19 11:31	jlw
Beryllium, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.00008	0.0003	01/02/20 14:05	mfm
Boron, total recoverable	M200.7 ICP	1	0.06	B		mg/L	0.02	0.1	12/16/19 11:31	jlw
Cadmium, total recoverable	M200.8 ICP-MS	1	0.00043			mg/L	0.00005	0.0003	01/02/20 14:05	mfm
Calcium, total recoverable	M200.7 ICP	1	92.4			mg/L	0.1	0.5	12/16/19 11:31	jlw
Chromium, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	12/16/19 11:31	jlw
Cobalt, total recoverable	M200.8 ICP-MS	1	0.106			mg/L	0.00005	0.0003	01/02/20 14:05	mfm
Copper, dissolved	M200.7 ICP	1		U		mg/L	0.01	0.05	12/17/19 18:57	jlw
Copper, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	12/16/19 11:31	jlw
Iron, dissolved	M200.7 ICP	1		U		mg/L	0.03	0.08	12/17/19 18:57	jlw
Iron, total recoverable	M200.7 ICP	1	0.45			mg/L	0.03	0.08	12/16/19 15:02	jlw
Lead, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	12/20/19 11:59	mfm
Lead, total recoverable	M200.8 ICP-MS	1	0.0017			mg/L	0.0001	0.0005	01/02/20 14:05	mfm
Magnesium, total recoverable	M200.7 ICP	1	52.6			mg/L	0.2	1	12/16/19 11:31	jlw
Manganese, total recoverable	M200.7 ICP	1		U		mg/L	0.01	0.05	12/16/19 11:31	jlw
Mercury, total	M245.1 CVAA	1		U		mg/L	0.0002	0.001	12/22/19 10:00	slm
Molybdenum, total recoverable	M200.8 ICP-MS	1	0.0537			mg/L	0.0002	0.0005	01/02/20 14:05	mfm
Nickel, total recoverable	M200.7 ICP	1	0.306			mg/L	0.008	0.04	12/16/19 11:31	jlw
Potassium, total recoverable	M200.7 ICP	1	4.7			mg/L	0.2	1	12/16/19 11:31	jlw
Selenium, total recoverable	M200.8 ICP-MS	1	0.0007			mg/L	0.0001	0.0003	01/02/20 14:05	mfm
Silica, total recoverable	M200.7 ICP	1	10.6		*	mg/L	0.2	1	12/16/19 11:31	jlw
Silver, dissolved	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	12/20/19 11:59	mfm
Silver, total recoverable	M200.8 ICP-MS	1		U		mg/L	0.0001	0.0005	01/07/20 11:30	enb
Sodium, total recoverable	M200.7 ICP	1	16.6			mg/L	0.2	1	12/16/19 11:31	jlw
Thallium, total recoverable	M200.8 ICP-MS	1	0.0015			mg/L	0.0001	0.0005	01/02/20 14:05	mfm
Tin, total recoverable	M200.7 ICP	1		U		mg/L	0.04	0.2	12/16/19 11:31	jlw
Uranium, dissolved	M200.8 ICP-MS	1	0.129		*	mg/L	0.0001	0.0005	12/20/19 11:59	mfm

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4-DUP

ACZ Sample ID: ***L56373-02***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Uranium, total recoverable	M200.8 ICP-MS	1	0.119			mg/L	0.0001	0.0005	01/02/20 14:05	mfm
Vanadium, total recoverable	M200.7 ICP	1		U		mg/L	0.005	0.03	12/16/19 11:31	jlw
Zinc, dissolved	M200.7 ICP	1	0.41			mg/L	0.01	0.05	12/16/19 23:40	jlw
Zinc, total recoverable	M200.7 ICP	1	0.51			mg/L	0.01	0.05	12/16/19 11:31	jlw

Wet Chemistry

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Alkalinity as CaCO3	SM2320B - Titration									
Bicarbonate as CaCO3		1	204			mg/L	2	20	12/13/19 0:00	eep
Carbonate as CaCO3		1	8.0	B		mg/L	2	20	12/13/19 0:00	eep
Hydroxide as CaCO3		1		U		mg/L	2	20	12/13/19 0:00	eep
Total Alkalinity		1	212			mg/L	2	20	12/13/19 0:00	eep
Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	1		U	*	mg/L	2	2	12/13/19 11:43	eep
Chemical Oxygen Demand	M410.4	1		U	*	mg/L	10	20	12/26/19 12:40	eep
Chloride	M300.0 - Ion Chromatography	5	27.6		*	mg/L	2	10	12/17/19 18:34	krh
Conductivity @25C	SM2510B	1	835			umhos/cm	1	10	12/13/19 20:15	eep
Fluoride	M300.0 - Ion Chromatography	5		U	*	mg/L	0.25	1.25	12/17/19 18:34	krh
Nitrate/Nitrite as N	M353.2 - H2SO4 preserved	1	0.30			mg/L	0.02	0.1	12/28/19 2:02	pjb
Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	1		U	*	mg/L	0.05	0.2	12/26/19 14:49	wtc
Nitrogen, organic	M351.2 & M350.1 - TKN minus NH3			U		mg/L	0.1	0.5	01/23/20 0:00	calc
Nitrogen, total Kjeldahl	M351.2 - TKN by Block Digester	1		U		mg/L	0.1	0.5	12/18/19 1:47	pjb
Residue, Filterable (TDS) @180C	SM2540C	1	566		*	mg/L	20	40	12/13/19 10:17	jck
Residue, Non-Filterable (TSS) @105C	SM2540D	1		U	*	mg/L	5	20	12/13/19 15:34	mlh
Sulfate	M300.0 - Ion Chromatography	5	213			mg/L	2	10	12/17/19 18:34	krh
Sulfide as S	SM4500S2-D	1		U	*	mg/L	0.02	0.1	12/13/19 14:58	enb

Arizona license number: AZ0102

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

Inorganic Reference

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)

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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
WG488120													
WG488120PBW1	PBW	12/13/19 17:05				13	mg/L		-20	20			
WG488120LCSW3	LCSW	12/13/19 17:24	WC191203-1	820		797	mg/L	97	90	110			
L56373-02DUP	DUP	12/13/19 20:25			212	212	mg/L				0	20	
WG488120LCSW6	LCSW	12/13/19 20:44	WC191203-1	820		802	mg/L	98	90	110			
WG488120PBW2	PBW	12/13/19 20:51				U	mg/L		-20	20			
WG488120LCSW9	LCSW	12/14/19 1:07	WC191203-1	820		807	mg/L	98	90	110			
WG488120PBW3	PBW	12/14/19 1:13				U	mg/L		-20	20			
WG488120LCSW12	LCSW	12/14/19 5:37	WC191203-1	820		813	mg/L	99	90	110			
WG488120PBW4	PBW	12/14/19 5:44				3.1	mg/L		-20	20			
WG488120LCSW15	LCSW	12/14/19 9:19	WC191203-1	820		827	mg/L	101	90	110			

Aluminum, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		1.947	mg/L	97	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.15	0.15			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.11	0.11			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	1.0012		.919	mg/L	92	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	1.0012	U	.992	mg/L	99	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	1.0012	U	1.016	mg/L	101	70	130	2	20	

Antimony, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.02004		.02091	mg/L	104	90	110			
WG489207ICB	ICB	01/02/20 13:58				.00048	mg/L		-0.0012	0.0012			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00088	0.00088			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.01		.01053	mg/L	105	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.01	U	.0109	mg/L	109	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.01	U	.01073	mg/L	107	70	130	2	20	

Arsenic, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.05		.05071	mg/L	101	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.0006	0.0006			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00044	0.00044			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.05005		.04782	mg/L	96	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.05005	.0003	.04327	mg/L	86	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.05005	.0003	.0439	mg/L	87	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		2.0102	mg/L	101	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.021	0.021			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.0154	0.0154			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	.5005		.4762	mg/L	95	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	.5005	.03	.5103	mg/L	96	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	.5005	.03	.5128	mg/L	96	70	130	0	20	

Beryllium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.05		.049285	mg/L	99	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.00024	0.00024			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.000176	0.000176			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.05005		.048359	mg/L	97	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.05005	U	.04043	mg/L	81	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.05005	U	.040213	mg/L	80	70	130	1	20	

Biochemical Oxygen Demand (5 day) SM5210B/HACH10360

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488055													
WG488055LCSW1	LCSW	12/13/19 11:49	BODLCSW-2	198		145	mg/L	73	84.6	115.4			K6
WG488055LCSW2	LCSW	12/13/19 11:54	BODLCSW-2	198		141	mg/L	71	84.6	115.4			K6
WG488055LCSW3	LCSW	12/13/19 12:00	BODLCSW-2	198		142	mg/L	72	84.6	115.4			K6

Boron, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		2.024	mg/L	101	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.06	0.06			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.044	0.044			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	.5005		.501	mg/L	100	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	.5005	.06	.565	mg/L	101	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	.5005	.06	.572	mg/L	102	70	130	1	20	

Cadmium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.05		.050387	mg/L	101	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.00015	0.00015			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00011	0.00011			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.05005		.048027	mg/L	96	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.05005	.00007	.045305	mg/L	90	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.05005	.00007	.045051	mg/L	90	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	100		101.65	mg/L	102	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.3	0.3			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.22	0.22			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	68.00334		68.5	mg/L	101	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	68.00334	90.3	157.8	mg/L	99	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	68.00334	90.3	160.7	mg/L	104	70	130	2	20	

Chemical Oxygen Demand M410.4

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488822													
WG488822ICV	ICV	12/26/19 11:16	WC191025-4	200		199	mg/L	100	90	110			
WG488822ICB	ICB	12/26/19 11:32				U	mg/L		-10	10			
WG488822LRB	LRB	12/26/19 11:49				U	mg/L		-10	10			
WG488822LFB	LFB	12/26/19 12:06	WC190829-4	50		52	mg/L	104	90	110			
L56605-02DUP	DUP	12/26/19 15:30			U	U	mg/L				0	20	RA
L56605-02AS	AS	12/26/19 15:47	WC190829-4	50	U	45	mg/L	90	90	110			

Chloride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG487727													
WG487727ICV	ICV	12/06/19 17:01	WI191002-3	19.94		19.7	mg/L	99	90	110			
WG487727ICB	ICB	12/06/19 17:19				U	mg/L		-0.4	0.4			
WG488312													
WG488312LFB	LFB	12/17/19 16:11	WI190722-1	30		30	mg/L	100	90	110			
L56359-01DUP	DUP	12/17/19 17:05			8.7	8.32	mg/L				4	20	RA
L56360-06AS	AS	12/17/19 17:41	WI190722-1	60	60.9	120	mg/L	99	90	110			

Chromium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		1.996	mg/L	100	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.03	0.03			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.022	0.022			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	.501		.488	mg/L	97	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	.501	U	.49	mg/L	98	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	.501	U	.493	mg/L	98	70	130	1	20	

Cobalt, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.05		.05376	mg/L	108	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.00015	0.00015			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00011	0.00011			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.05005		.049538	mg/L	99	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.05005	.00094	.047407	mg/L	93	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.05005	.00094	.047632	mg/L	93	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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.

Conductivity @25C SM2510B

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488120													
WG488120LCSW2	LCSW	12/13/19 17:11	PCN59697	1408		1430	umhos/cm	102	90	110			
L56373-02DUP	DUP	12/13/19 20:25			835	834	umhos/cm				0	20	
WG488120LCSW5	LCSW	12/13/19 20:31	PCN59697	1408		1420	umhos/cm	101	90	110			
WG488120LCSW8	LCSW	12/14/19 0:54	PCN59697	1408		1410	umhos/cm	100	90	110			
WG488120LCSW11	LCSW	12/14/19 5:25	PCN59697	1408		1410	umhos/cm	100	90	110			
WG488120LCSW14	LCSW	12/14/19 9:06	PCN59697	1408		1400	umhos/cm	99	90	110			

Copper, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488317													
WG488317ICV	ICV	12/17/19 18:29	II191210-1	2		1.95	mg/L	98	95	105			
WG488317ICB	ICB	12/17/19 18:35				U	mg/L		-0.03	0.03			
WG488317LFB	LFB	12/17/19 18:48	II191204-3	.5005		.512	mg/L	102	85	115			
L56426-03AS	AS	12/17/19 19:09	II191204-3	.5005	U	.509	mg/L	102	85	115			
L56426-03ASD	ASD	12/17/19 19:12	II191204-3	.5005	U	.527	mg/L	105	85	115	3	20	

Copper, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		1.926	mg/L	96	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.03	0.03			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.022	0.022			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	.5005		.467	mg/L	93	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	.5005	U	.479	mg/L	96	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	.5005	U	.482	mg/L	96	70	130	1	20	

Fluoride M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG487727													
WG487727ICV	ICV	12/06/19 17:01	WI191002-3	4.008		4.23	mg/L	106	90	110			
WG487727ICB	ICB	12/06/19 17:19				U	mg/L		-0.05	0.05			
WG488312													
WG488312LFB	LFB	12/17/19 16:11	WI190722-1	1.5		1.49	mg/L	99	90	110			
L56359-01DUP	DUP	12/17/19 17:05			7.38	6.98	mg/L				6	20	
L56360-06AS	AS	12/17/19 17:41	WI190722-1	3	.55	3.65	mg/L	103	90	110			

Iron, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488317													
WG488317ICV	ICV	12/17/19 18:29	II191210-1	2		1.899	mg/L	95	95	105			
WG488317ICB	ICB	12/17/19 18:35				U	mg/L		-0.09	0.09			
WG488317LFB	LFB	12/17/19 18:48	II191204-3	1.0018		1.09	mg/L	109	85	115			
L56426-03AS	AS	12/17/19 19:09	II191204-3	1.0018	U	1.022	mg/L	102	85	115			
L56426-03ASD	ASD	12/17/19 19:12	II191204-3	1.0018	U	1.021	mg/L	102	85	115	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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.

Iron, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488204													
WG488204ICV	ICV	12/16/19 14:07	II191210-1	2		1.932	mg/L	97	95	105			
WG488204ICB	ICB	12/16/19 14:13				U	mg/L		-0.09	0.09			
WG488054LRB	LRB	12/16/19 14:25				U	mg/L		-0.066	0.066			
WG488054LFB	LFB	12/16/19 14:28	II191204-3	1.0018		1.002	mg/L	100	85	115			
L56373-01LFM	LFM	12/16/19 14:50	II191204-3	1.0018	.44	1.433	mg/L	99	70	130			
L56373-01LFMD	LFMD	12/16/19 14:53	II191204-3	1.0018	.44	1.437	mg/L	100	70	130	0	20	

Lead, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488633													
WG488633ICV	ICV	12/20/19 11:49	MS191014-8	.05		.05115	mg/L	102	90	110			
WG488633ICB	ICB	12/20/19 11:50				U	mg/L		-0.00022	0.00022			
WG488633LFB	LFB	12/20/19 11:52	MS191119-5	.05005		.0525	mg/L	105	85	115			
L56373-01AS	AS	12/20/19 11:56	MS191119-5	.05005	U	.05713	mg/L	114	70	130			
L56373-01ASD	ASD	12/20/19 11:57	MS191119-5	.05005	U	.05875	mg/L	117	70	130	3	20	

Lead, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.05		.05147	mg/L	103	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.0003	0.0003			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00022	0.00022			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.05005		.04829	mg/L	96	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.05005	.0002	.05186	mg/L	103	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.05005	.0002	.0516	mg/L	103	70	130	1	20	

Magnesium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	100		98.98	mg/L	99	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.6	0.6			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.44	0.44			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	49.99771		48.59	mg/L	97	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	49.99771	51.3	98.39	mg/L	94	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	49.99771	51.3	100.3	mg/L	98	70	130	2	20	

Manganese, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		1.963	mg/L	98	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.03	0.03			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.022	0.022			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	.5015		.476	mg/L	95	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	.5015	U	.489	mg/L	98	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	.5015	U	.491	mg/L	98	70	130	0	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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
WG488588													
WG488588ICV	ICV	12/22/19 9:55	HG191211-3	.004995		.00509	mg/L	102	95	105			
WG488588ICB	ICB	12/22/19 9:56				U	mg/L		-0.0002	0.0002			
WG488588LRB	LRB	12/22/19 9:58				U	mg/L		-0.00044	0.00044			
WG488588LFB	LFB	12/22/19 9:59	HG191211-6	.002002		.00201	mg/L	100	85	115			
L56374-01LFM	LFM	12/22/19 10:02	HG191211-6	.002002	U	.00194	mg/L	97	85	115			
L56374-01LFMD	LFMD	12/22/19 10:03	HG191211-6	.002002	U	.00195	mg/L	97	85	115	1	20	

Molybdenum, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.0199		.01996	mg/L	100	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.0006	0.0006			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00044	0.00044			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.0501		.04705	mg/L	94	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.0501	.007	.05838	mg/L	103	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.0501	.007	.05799	mg/L	102	70	130	1	20	

Nickel, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		2.0205	mg/L	101	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.024	0.024			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.0176	0.0176			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	.501		.5057	mg/L	101	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	.501	.301	.7901	mg/L	98	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	.501	.301	.797	mg/L	99	70	130	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
WG488945													
WG488945ICV	ICV	12/27/19 22:34	WI191112-1	2.416		2.354	mg/L	97	90	110			
WG488945ICB	ICB	12/27/19 22:35				U	mg/L		-0.02	0.02			
WG488951													
WG488951LFB	LFB	12/28/19 1:56	WI191004-3	2		2.045	mg/L	102	90	110			
L56325-01AS	AS	12/28/19 1:58	WI191004-3	2	1.62	3.58	mg/L	98	90	110			
L56373-01DUP	DUP	12/28/19 2:01			.29	.287	mg/L				1	20	

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
WG488843													
WG488843ICV	ICV	12/26/19 14:42	WI190904-1	12.012		12.544	mg/L	104	90	110			
WG488843ICB	ICB	12/26/19 14:43				U	mg/L		-0.05	0.05			
WG488843LFB1	LFB	12/26/19 14:45	WI191111-3	10		9.973	mg/L	100	90	110			
L56373-01DUP	DUP	12/26/19 14:48			U	U	mg/L				0	20	RA
L56373-02AS	AS	12/26/19 14:51	WI191111-3	10	U	9.83	mg/L	98	90	110			
WG488843LFB2	LFB	12/26/19 15:27	WI191111-3	10		9.897	mg/L	99	90	110			

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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, total Kjeldahl M351.2 - TKN by Block Digester

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488374													
WG488374ICV	ICV	12/18/19 1:08	WI191122-6	4		4.07	mg/L	102	90	110			
WG488374ICB	ICB	12/18/19 1:09				U	mg/L		-0.1	0.1			
WG488230LRB1	LRB	12/18/19 1:10				U	mg/L		-0.1	0.1			
WG488230LFB1	LFB	12/18/19 1:11	WI191023-2	2.5		2.46	mg/L	98	90	110			
WG488230LRB2	LRB	12/18/19 1:44				U	mg/L		-0.1	0.1			
WG488230LFB2	LFB	12/18/19 1:45	WI191023-2	2.5		2.43	mg/L	97	90	110			
L56393-02LFM	LFM	12/18/19 2:18	WI191023-2	2.5	4.8	7.05	mg/L	90	90	110			
L56393-04DUP	DUP	12/18/19 2:20			10.3	10.43	mg/L				1	20	

Potassium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	20		20.06	mg/L	100	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.6	0.6			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.44	0.44			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	99.95798		97.47	mg/L	98	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	99.95798	4.6	101.6	mg/L	97	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	99.95798	4.6	102.7	mg/L	98	70	130	1	20	

Residue, Filterable (TDS) @180C SM2540C

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488069													
WG488069PBW	PBW	12/13/19 10:10				U	mg/L		-40	40			
WG488069LCSW	LCSW	12/13/19 10:12	PCN59815	1000		996	mg/L	100	80	120			
L56381-01DUP	DUP	12/13/19 10:41			2530	2510	mg/L				1	10	

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

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488020													
WG488020PBW	PBW	12/12/19 14:40				U	mg/L		-15	15			
WG488020LCSW	LCSW	12/12/19 14:42	PCN59815	100		91	mg/L	91	80	120			
L56393-08DUP	DUP	12/12/19 15:40			10	9	mg/L				11	10	RA
WG488124													
WG488124PBW	PBW	12/13/19 15:29				U	mg/L		-15	15			
WG488124LCSW	LCSW	12/13/19 15:31	PCN59815	100		93	mg/L	93	80	120			
L56386-03DUP	DUP	12/13/19 15:59			U	U	mg/L				0	10	RA

Selenium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.05		.05204	mg/L	104	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.0003	0.0003			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00022	0.00022			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.05005		.04887	mg/L	98	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.05005	.0078	.05664	mg/L	98	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.05005	.0078	.0575	mg/L	99	70	130	2	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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.

Silica, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	42.8		43.48	mg/L	102	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.6	0.6			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.44	0.44			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	21.415		21.52	mg/L	100	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	21.415	10.5	31.86	mg/L	100	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	21.415	10.5	32.39	mg/L	102	70	130	2	20	

Silver, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488633													
WG488633ICV	ICV	12/20/19 11:49	MS191014-8	.02004		.02019	mg/L	101	90	110			
WG488633ICB	ICB	12/20/19 11:50				U	mg/L		-0.00022	0.00022			
WG488633LFB	LFB	12/20/19 11:52	MS191119-5	.01002		.01046	mg/L	104	85	115			
L56373-01AS	AS	12/20/19 11:56	MS191119-5	.01002	U	.01056	mg/L	105	70	130			
L56373-01ASD	ASD	12/20/19 11:57	MS191119-5	.01002	U	.01002	mg/L	100	70	130	5	20	

Silver, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489476													
WG489476ICV	ICV	01/07/20 11:14	MS191231-8	.02004		.0205	mg/L	102	90	110			
WG489476ICB	ICB	01/07/20 11:18				U	mg/L		-0.0003	0.0003			
WG489039LRB	LRB	01/07/20 11:21				U	mg/L		-0.00022	0.00022			
WG489039LFB	LFB	01/07/20 11:24	MS191119-5	.01002		.0104	mg/L	104	85	115			
L56550-01LFM	LFM	01/07/20 11:36	MS191119-5	.01002	U	.00976	mg/L	97	70	130			
L56550-01LFMD	LFMD	01/07/20 11:40	MS191119-5	.01002	U	.00946	mg/L	94	70	130	3	20	
WG489093LRB	LRB	01/07/20 12:01				U	mg/L		-0.00022	0.00022			
WG489093LFB	LFB	01/07/20 12:05	MS191119-5	.01002		.0104	mg/L	104	85	115			
WG489234LRB	LRB	01/07/20 12:36				U	mg/L		-0.00022	0.00022			
WG489234LFB	LFB	01/07/20 12:39	MS191119-5	.01002		.01044	mg/L	104	85	115			

Sodium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	100		100.63	mg/L	101	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.6	0.6			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.44	0.44			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	100.0046		98.65	mg/L	99	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	100.0046	16.4	116	mg/L	100	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	100.0046	16.4	117	mg/L	101	70	130	1	20	

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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 M300.0 - Ion Chromatography

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG487727													
WG487727ICV	ICV	12/06/19 17:01	WI191002-3	50		49.2	mg/L	98	90	110			
WG487727ICB	ICB	12/06/19 17:19				U	mg/L		-0.4	0.4			
WG488312													
WG488312LFB	LFB	12/17/19 16:11	WI190722-1	30		29.9	mg/L	100	90	110			
L56359-01DUP	DUP	12/17/19 17:05			694	693	mg/L				0	20	
L56360-06AS	AS	12/18/19 16:40	WI190722-1	150	270	426	mg/L	104	90	110			

Sulfide as S SM4500S2-D

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488108													
WG488108ICV	ICV	12/13/19 14:45	WC191212-4	.38		.407	mg/L	107	90	110			
WG488108ICB	ICB	12/13/19 14:46				U	mg/L		-0.06	0.06			
WG488108LFB1	LFB	12/13/19 14:48	WC191212-7	.22756		.266	mg/L	117	80	120			
L56382-01AS	AS	12/13/19 15:14	WC191212-7	.22756	U	.133	mg/L	58	75	125			M2
L56382-01DUP	DUP	12/13/19 15:16			U	U	mg/L				0	20	RA
WG488108LFB2	LFB	12/13/19 15:45	WC191212-7	.22756		.262	mg/L	115	80	120			

Thallium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.05		.05173	mg/L	103	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.0003	0.0003			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00022	0.00022			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.0501		.04669	mg/L	93	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.0501	U	.05098	mg/L	102	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.0501	U	.05143	mg/L	103	70	130	1	20	

Tin, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		2.04	mg/L	102	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.12	0.12			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.088	0.088			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	1.002		.996	mg/L	99	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	1.002	U	.968	mg/L	97	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	1.002	U	.997	mg/L	100	70	130	3	20	

Uranium, dissolved M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488633													
WG488633ICV	ICV	12/20/19 11:49	MS191014-8	.05		.0514	mg/L	103	90	110			
WG488633ICB	ICB	12/20/19 11:50				U	mg/L		-0.00022	0.00022			
WG488633LFB	LFB	12/20/19 11:52	MS191119-5	.05		.05169	mg/L	103	85	115			
L56373-01AS	AS	12/20/19 11:56	MS191119-5	.05	.1115	.18512	mg/L	147	70	130			M1
L56373-01ASD	ASD	12/20/19 11:57	MS191119-5	.05	.1115	.18772	mg/L	152	70	130	1	20	M1

Energy Fuels Resources (USA) Inc. ACZ Project ID: ***L56373***

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.

Uranium, total recoverable M200.8 ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG489207													
WG489207ICV	ICV	01/02/20 13:56	MS191231-8	.05		.052	mg/L	104	90	110			
WG489207ICB	ICB	01/02/20 13:58				U	mg/L		-0.0003	0.0003			
WG489039LRB	LRB	01/02/20 14:00				U	mg/L		-0.00022	0.00022			
WG489039LFB	LFB	01/02/20 14:02	MS191119-5	.05		.04744	mg/L	95	85	115			
L56550-01LFM	LFM	01/02/20 14:12	MS191119-5	.05	.0238	.07894	mg/L	110	70	130			
L56550-01LFMD	LFMD	01/02/20 14:14	MS191119-5	.05	.0238	.07879	mg/L	110	70	130	0	20	

Vanadium, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		2.0202	mg/L	101	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.015	0.015			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.011	0.011			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	.4995		.4935	mg/L	99	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	.4995	U	.4914	mg/L	98	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	.4995	U	.496	mg/L	99	70	130	1	20	

Zinc, dissolved M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488232													
WG488232ICV	ICV	12/16/19 23:08	II191210-1	2		1.93	mg/L	97	95	105			
WG488232ICB	ICB	12/16/19 23:15				U	mg/L		-0.03	0.03			
WG488232LFB	LFB	12/16/19 23:28	II191204-3	.50075		.537	mg/L	107	85	115			
L56426-03AS	AS	12/16/19 23:53	II191204-3	.50075	U	.531	mg/L	106	85	115			
L56426-03ASD	ASD	12/16/19 23:56	II191204-3	.50075	U	.543	mg/L	108	85	115	2	20	

Zinc, total recoverable M200.7 ICP

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG488174													
WG488174ICV	ICV	12/16/19 10:24	II191210-1	2		1.994	mg/L	100	95	105			
WG488174ICB	ICB	12/16/19 10:30				U	mg/L		-0.03	0.03			
WG488054LRB	LRB	12/16/19 10:43				U	mg/L		-0.022	0.022			
WG488054LFB	LFB	12/16/19 10:46	II191204-3	.50075		.506	mg/L	101	85	115			
L56373-01LFM	LFM	12/16/19 11:25	II191204-3	.50075	.5	.996	mg/L	99	70	130			
L56373-01LFMD	LFMD	12/16/19 11:28	II191204-3	.50075	.5	1.015	mg/L	103	70	130	2	20	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L56373***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L56373-01	WG488055	Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	K2	The sample dilutions set up for the BOD/CBOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. BOD concentration is greater than the reported result which was derived from the most diluted sample aliquot.
			SM5210B/HACH10360	K6	Glucose/glutamic acid BOD/CBOD was below method acceptance criteria.
	WG488822	Chemical Oxygen Demand	M410.4	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).
	WG488312	Chloride	M300.0 - Ion Chromatography	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).
		Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG488843	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	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).
	WG488069	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG488020	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
	WG488174	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG488108	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG488633	Uranium, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L56373***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L56373-02	WG488055	Biochemical Oxygen Demand (5 day)	SM5210B/HACH10360	K2	The sample dilutions set up for the BOD/CBOD analysis did not meet the criteria of a residual dissolved oxygen of at least 1 mg/L. BOD concentration is greater than the reported result which was derived from the most diluted sample aliquot.
			SM5210B/HACH10360	K6	Glucose/glutamic acid BOD/CBOD was below method acceptance criteria.
	WG488822	Chemical Oxygen Demand	M410.4	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).
	WG488312	Chloride	M300.0 - Ion Chromatography	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).
		Fluoride	M300.0 - Ion Chromatography	DC	Sample required dilution. Non-target analyte exceeded calibration range.
	WG488843	Nitrogen, ammonia	M350.1 Auto Salicylate w/gas diffusion	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).
	WG488069	Residue, Filterable (TDS) @180C	SM2540C	N1	See Case Narrative.
	WG488124	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
	WG488174	Silica, total recoverable	M200.7 ICP	ZS	Digestion procedures have the potential to trigger silica polymerization and precipitation, leading to low biased results. Silica chemistry is complex and polymerization kinetics are unpredictable. Dissolved and/or acid soluble silica analyses may provide more accurate measurements.
	WG488108	Sulfide as S	SM4500S2-D	M2	Matrix spike recovery was low, the recovery of the associated control sample (LCS or LFB) was acceptable.
			SM4500S2-D	RA	Relative Percent Difference (RPD) was not used for data validation because the concentration of the duplicated sample is too low for accurate evaluation (< 10x MDL).
	WG488633	Uranium, dissolved	M200.8 ICP-MS	M1	Matrix spike recovery was high, the recovery of the associated control sample (LCS or LFB) was acceptable.

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4

ACZ Sample ID: ***L56373-01***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**
Extract Method:

Workgroup: WG488076
Analyst: QHS
Extract Date:
Analysis Date: 12/13/19 13:54

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1	*	mg/L	2	10

Arizona license number: AZ0102

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4-DUP

ACZ Sample ID: ***L56373-02***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Oil & Grease, Total Recoverable

Analysis Method: **1664A - Gravimetric**
Extract Method:

Workgroup: WG488076
Analyst: QHS
Extract Date:
Analysis Date: 12/13/19 14:16

Compound	CAS	Result	QUAL	Dilution	XQ	Units	MDL	PQL
Oil and Grease			U	1	*	mg/L	2	10

Arizona license number: AZ0102

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: ***L56373***

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.

Oil & Grease, Total Recoverable

1664A - Gravimetric

WG488076

MS **Sample ID: L56338-01MS** **PCN/SCN: OP191115-2** **Analyzed: 12/13/19 12:05**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40	U	33.9	mg/L	85.0	78	114			

LCSW **Sample ID: WG488076LCSW** **PCN/SCN: OP191115-2** **Analyzed: 12/13/19 14:38**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		36.3	mg/L	91.0	78	114			

LCSWD **Sample ID: WG488076LCSWD** **PCN/SCN: OP191115-2** **Analyzed: 12/13/19 14:59**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE	40		37.9	mg/L	95.0	78	114	4	18	

PBW **Sample ID: WG488076PBW** **Analyzed: 12/13/19 11:00**

Compound	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
OIL AND GREASE			U	mg/L						

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

Organic Extended Qualifier Report

ACZ Project ID: ***L56373***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L56373-01	WG488076	Oil and Grease	1664A - Gravimetric	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.
L56373-02	WG488076	Oil and Grease	1664A - Gravimetric	Q5	Sample received with inadequate chemical preservation. Additional preservation performed by the laboratory.

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4
Locator:

ACZ Sample ID: ***L56373-01***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Combined Radium (total)
Calculation (RA226 + RA228)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	01/23/20 12:56		15			pCi/L		calc

Gross Alpha & Beta, total
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	12/23/19 0:17		140	14	8.3	pCi/L	*	isn
Gross Beta	12/23/19 0:17		46	4.8	5.3	pCi/L	*	isn

Gross Alpha, dissolved
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha, dissolved	12/23/19 0:17		140	14	8.3	pCi/L	*	isn

Lead 210, total
EICHROM, OTW01

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Lead 210, total	12/27/19 11:39		-5.4	1.6	6.8	pCi/L	*	jlg

Radium 226, dissolved
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	12/26/19 0:24		13	0.36	0.17	pCi/L	*	jlg

Radium 226, total
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	12/26/19 0:23		15	0.43	0.13	pCi/L	*	jlg

Arizona license number: AZ0102

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

RadioChemistry Analytical Results

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4
Locator:

ACZ Sample ID: ***L56373-01***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Radium 228
M904.0
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	12/20/19 13:28		1.2	0.94	2.2	pCi/L	*	amk

Radium 228, dissolved
M904.0
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	12/20/19 13:29		0.77	0.83	2	pCi/L	*	amk

Thorium, Isotopic
ESM 4506
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 228	01/14/20 13:38		-0.0285	0.24	0.46	pCi/L	*	djc
Thorium 230	01/14/20 13:38		0.303	0.2	0.27	pCi/L	*	djc
Thorium 232	01/14/20 13:38		-0.0227	0.1	0.22	pCi/L	*	djc

Uranium, Isotopic dissolved
Eichrom ACW03
Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Uranium 234	01/07/20 0:20		82	6.2	2.1	pCi/L	*	jlg
Uranium 235	01/07/20 0:20		1.3	0.84	1.7	pCi/L	*	jlg
Uranium 238	01/07/20 0:20		39.7	4.4	2.1	pCi/L	*	jlg

Arizona license number: AZ0102

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

RadioChemistry Analytical Results

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4-DUP
Locator:

ACZ Sample ID: ***L56373-02***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Combined Radium (total)
Calculation (RA226 + RA228)

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Combined Radium (total)	01/23/20 12:56		15			pCi/L		calc

Gross Alpha & Beta, total
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha	12/23/19 0:20		100	12	14	pCi/L	*	isn
Gross Beta	12/23/19 0:20		41	4.6	12	pCi/L	*	isn

Gross Alpha, dissolved
M900.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Gross Alpha, dissolved	12/23/19 0:20		100	12	14	pCi/L	*	isn

Lead 210, total
EICHROM, OTW01

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Lead 210, total	12/27/19 11:39		-0.92	1.4	5.6	pCi/L	*	jlg

Radium 226, dissolved
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, dissolved	12/26/19 0:27		12	0.38	0.12	pCi/L	*	jlg

Radium 226, total
M903.1

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226, total	12/26/19 0:25		15	0.41	0.09	pCi/L	*	jlg

Arizona license number: AZ0102

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

RadioChemistry Analytical Results

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: CANYON SUMP 2019-Q4-DUP
Locator:

ACZ Sample ID: ***L56373-02***
Date Sampled: *12/11/19 14:15*
Date Received: *12/12/19*
Sample Matrix: *Groundwater*

Radium 228
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228	12/20/19 13:28		0.88	0.85	2	pCi/L	*	amk

Radium 228, dissolved
M904.0

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 228, dissolved	12/20/19 13:29		0.71	0.83	2	pCi/L	*	amk

Thorium, Isotopic
ESM 4506

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Thorium 228	01/14/20 13:38		0.0051	0.27	0.51	pCi/L	*	djc
Thorium 230	01/14/20 13:38		0.364	0.26	0.37	pCi/L	*	djc
Thorium 232	01/14/20 13:38		0.0	0.29	0.31	pCi/L	*	djc

Uranium, Isotopic dissolved
Eichrom ACW03

Prep Method:

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Uranium 234	01/07/20 0:21		85	6.2	0.99	pCi/L	*	jlg
Uranium 235	01/07/20 0:21		1.2	0.91	0.65	pCi/L	*	jlg
Uranium 238	01/07/20 0:21		42.8	4.4	0.74	pCi/L	*	jlg

Arizona license number: AZ0102

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

Radiochemistry QC Summary

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L56373***

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
WG488534																
WG488534PBW	PBW	12/23/19						-.13	1.2	11			22			
WG488534LCSWA	LCSW	12/23/19	PCN58725	100				110	8.8	11	110	67	144			
L56329-02DUP	DUP-RER	12/23/19			0.27	1.8	6.8	-1.3	1.3	5.9				0.71	2	
L56329-02DUP	DUP-RPD	12/23/19			0.27	1.8	6.8	-1.3	1.3	5.9				305	20	RG
L56329-03MSA	MS	12/23/19	PCN58725	100	2.8	2.3	10	92	9.5	5	89	67	144			
L56460-01DUP	DUP-RPD	12/23/19			2.5	2.1	6.6	2.9	2.3	5.9				15	20	

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
WG488534																
WG488534PBW	PBW	12/23/19						1.8	2.7	17			34			
WG488534LCSWB	LCSW	12/23/19	RC190918-11	102.6				110	6.4	6.7	107	82	122			
L56329-02DUP	DUP-RPD	12/23/19			0.76	2.5	5.2	3.9	3	9				135	20	RG
L56329-02DUP	DUP-RER	12/23/19			0.76	2.5	5.2	3.9	3	9				0.8	2	
L56329-04MSB	MS	12/23/19	RC190918-11	102.6	4.5	2.8	6.7	110	6.7	8.3	103	82	122			
L56460-01DUP	DUP-RPD	12/23/19			5.6	2.8	6.7	6.2	3.1	8.2				10	20	

Lead 210, total

EICHROM, OTW01

Units: pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG488697																
L56373-01DUP	DUP-RER	12/27/19			-5.4	1.6	6.8	-3.7	1.5	6.2				0.78	2	
WG488697PBW	PBW	12/27/19						-8.6	1.5	6.7			13.4			
L56373-02MS	MS	12/27/19	PCN54277	92.96	-0.92	1.4	5.6	98	2.7	5.5	106	55	121			
WG488697LCSW	LCSW	12/27/19	PCN54277	92.96				86	2.6	5.5	93	55	121			

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L56373***

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 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
WG488327																
WG488327PBW	PBW	12/26/19						.07	0.06	0.04			0.08			
WG488327LCSW	LCSW	12/26/19	PCN57864	20				16	0.44	0.08	80	43	148			
L56328-01DUP1	DUP-RER	12/26/19			0.33	0.09	0.07	.22	0.07	0.06				0.96	2	
L56328-01DUP1	DUP-RPD	12/26/19			0.33	0.09	0.07	.22	0.07	0.06				40	20	RG
L56329-06DUP2	DUP-RPD	12/26/19			0.16	0.06	0.11	.22	0.06	0.04				32	20	RG
L56329-06DUP2	DUP-RER	12/26/19			0.16	0.06	0.11	.22	0.06	0.04				0.7	2	
L56437-03MS	MS	12/26/19	PCN57864	20	0.51	0.11	0.1	24	0.56	0.04	117	43	148			

Radium 228 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
WG488322																
WG488322LCSW	LCSW	12/20/19	PCN57186	8.51				8	1.2	1.7	94	47	123			
WG488322PBW	PBW	12/20/19						.76	0.69	1.6			3.2			
L56327-01DUP	DUP-RER	12/20/19			0.77	0.68	1.6	1.6	1.6	3.7				0.48	2	
L56327-01DUP	DUP-RPD	12/20/19			0.77	0.68	1.6	1.6	1.6	3.7				70	20	RG
L56363-02DUP	DUP-RER	12/20/19			0.02	0.85	2.1	.47	0.85	2				0.37	2	
L56363-02DUP	DUP-RPD	12/20/19			0.02	0.85	2.1	.47	0.85	2				184	20	RG
L56363-02MS	MS	12/20/19	PCN57186	8.51	0.02	0.85	2.1	4.9	1.3	1.9	57	47	123			

Th-228 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
WG489604																
L56373-01DUP	DUP-RPD	01/14/20			-0.0285	0.24	0.46	.246	0.26	0.42				252	20	RG
L56373-01DUP	DUP-RER	01/14/20			-0.0285	0.24	0.46	.246	0.26	0.42				0.78	2	
WG489604PBW	PBW	01/22/20						0	0.42	0.42			0.84			

Radiochemistry QC Summary

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L56373***

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.

Th-229 ESM 4506 **Units:** %

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG489604																
WG489604LCSW	LCSW	01/14/20	PCN58726					60	130	30						
L56373-01DUP	DUP-RPD	01/14/20			111	130	30							47	20	
L56373-01DUP	DUP-RPD	01/14/20			111	130	30	69	130	30					20	
L56373-01DUP	DUP-RER	01/14/20			111	130	30	69	130	30					20	
L56373-02MS	MS	01/14/20	PCN58726		82	130	30	76	130	30						
WG489604PBW	PBW	01/22/20						70	130	30			60			

Th-230 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
WG489604																
WG489604LCSW	LCSW	01/14/20	PCN58726	200				215	29	0.28	108	91	126			
L56373-01DUP	DUP-RPD	01/14/20			0.303	0.2	0.27	.313	0.4	0.67				3	20	
L56373-02MS	MS	01/14/20	PCN58726	200	0.364	0.26	0.37	220	29	0.37	110	91	126			
WG489604PBW	PBW	01/22/20						.123	0.35	0.63			1.26			

Th-232 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
WG489604																
L56373-01DUP	DUP-RPD	01/14/20			-0.0227	0.1	0.22	.0721	0.22	0.4				384	20	RG
L56373-01DUP	DUP-RER	01/14/20			-0.0227	0.1	0.22	.0721	0.22	0.4				0.39	2	
WG489604PBW	PBW	01/22/20						.0265	0.17	0.35			0.7			

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L56373***

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.

Uranium 234 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG489020																
WG489020PBW	PBW	01/07/20						.87	0.8	0.92			1.84			
WG489020LCSW	LCSW	01/07/20	RC200107-11	98				99	6.4	0.69	101	77	122			
L56329-04MS	MS	01/07/20	RC200107-11	98	1.4	1.7	3.6	98	7	1.2	99	77	122			
L56328-02DUP1	DUP-RER	01/07/20			1.8	0.9	2.6	-.06	0.74	0.82				1.6	2	
L56448-02DUP2	DUP-RER	01/07/20			2.5	1.2	1.7	1.1	1.9	3.8				0.62	2	

Uranium 235 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG489020																
WG489020PBW	PBW	01/07/20						.05	0.54	0.61			1.22			
WG489020LCSW	LCSW	01/07/20	RC200107-11	4.48				4.8	1.5	0.28	107	42	136			
L56329-04MS	MS	01/07/20	RC200107-11	4.48	0	0.43	1.9	3.9	1.5	0.79	87	42	136			
L56328-02DUP1	DUP-RER	01/07/20			0.24	0.33	2.9	0	0.44	1.3				0.44	2	
L56448-02DUP2	DUP-RER	01/07/20			0.01	0.3	0.67	-.15	0.9	1.2				0.17	2	

Uranium 238 Eichrom ACW03 **Units:** pCi/L

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG489020																
WG489020PBW	PBW	01/07/20						.87	0.67	0.69			1.38			
WG489020LCSW	LCSW	01/07/20	RC200107-11	97.5				100	6.5	0.28	103	87	124			
L56329-04MS	MS	01/07/20	RC200107-11	97.5	0.72	1.6	4	103	7.1	0.97	105	87	124			
L56328-02DUP1	DUP-RER	01/07/20			0.83	0.7	2.1	.78	0.85	1.3				0.05	2	
L56448-02DUP2	DUP-RER	01/07/20			1.14	1.1	1.3	.3	2	2.2				0.37	2	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: ***L56373***

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L56373-01	WG488534	Gross Alpha	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.
		Gross Alpha, dissolved	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.
		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.
	WG488327	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.
	WG488322	Radium 228	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, 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.
	WG489604	Thorium 228	ESM 4506	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.
		Thorium 232	ESM 4506	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.
L56373-02	WG488534	Gross Alpha	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.
		Gross Alpha, dissolved	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.
		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.
	WG488327	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.
	WG488322	Radium 228	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, 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.
	WG489604	Thorium 228	ESM 4506	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.
		Thorium 232	ESM 4506	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.

Radiochemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Lead 210, total	EICHROM, OTW01
Thorium 228	ESM 4506
Thorium 230	ESM 4506
Thorium 232	ESM 4506
Uranium 234	Eichrom ACW03
Uranium 235	Eichrom ACW03
Uranium 238	Eichrom ACW03

The following parameters are not offered for certification or are not covered by NELAC certificate #ACZ.	
Lead 210, total	EICHROM, OTW01
Thorium 228	ESM 4506
Thorium 230	ESM 4506
Thorium 232	ESM 4506
Uranium 234	Eichrom ACW03
Uranium 235	Eichrom ACW03
Uranium 238	Eichrom ACW03

Wet Chemistry

The following parameters are not offered for certification or are not covered by AZ certificate #AZ0102.	
Sulfide as S	SM4500S2-D

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

Sample Receipt

Energy Fuels Resources (USA) Inc.

ACZ Project ID: L56373
Date Received: 12/12/2019 10:57
Received By:
Date Printed: 12/12/2019

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 Quote # 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?
6311	5	<=6.0	13	N/A

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.

ACZ Project ID:	L56373
Date Received:	12/12/2019 10:57
Received By:	
Date Printed:	12/12/2019

[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. L56373

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

CHAIN of CUSTODY

Report to:

Name: Kathy Weinel
Company: Energy Fuels Resources
E-mail: kweinel@energyfuels.com
Address: 225 Union Blvd, Suite 600
Lakewood, Co 80228
Telephone:

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Kathy Weinel
Company:
E-mail: SAA
Address: SAA
Telephone: SAA

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 [X] 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 [X]

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

Sampler's Name: Matt Germansen **Sampler's Site Information** State AZ Zip code 86001 Time Zone AZ

***Sampler's Signature:** [signature]

*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 #: Canyon-tha 2016
PO#:
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	See quote
Canyon Sump 2019-Q4	12/11/19:1415	GW	9	See Quote
Canyon Sump 2019-Q4-Dup	12/11/19:1415	GW	9	See Quote

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
Matt Germansen	12/11/19:1509	[signature]	12/12/19 10:57

L56373 Chain of Custody

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

ACZ Laboratories, Inc.

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

CHAIN of CUSTODY

Report to:

Name: Kathy Weinel
Company: Energy Fuels Resources
E-mail: kweinel@energyfuels.com
Address: 225 Union Blvd, Suite 600
Lakewood, Co 80228
Telephone:

Copy of Report to:

Name:
Company:
E-mail:
Telephone:

Invoice to:

Name: Kathy Weinel
Company:
E-mail: SAA
Address: SAA
Telephone: SAA

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 [X] 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 [X]

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

Sampler's Name: Matt Germansen Sampler's Site Information State AZ Zip code 86001 Time Zone AZ

*Sampler's Signature:

*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 #: Canyon-Sm 2016
PO#:
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	See Quote								
Canyon Sump 2019-Q4	12/11/19:1415	GW	9	See	Quote							
Canyon Sump 2019-Q4-Dup	12/11/19:1415	GW	9	See	Quote							

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
Matt Germansen	12/11/19:1509		