



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

DRC-2020-001382

VIA Express Delivery

Div of Waste Management
and Radiation Control

January 14, 2020

JAN 17 2020

Mr. Ty L. Howard
Director of Division of Waste Management and Radiation Control
Utah Department of Environmental Quality
195 North 1950 West
P.O. Box 144880
Salt Lake City, UT 84116

**Re: Transmittal of Annual Seeps and Springs Monitoring Report
Groundwater Quality Discharge Permit UGW370004 White Mesa Uranium Mill**

Dear Mr. Howard:

Enclosed are two copies of the White Mesa Uranium Mill Annual Seeps and Springs Monitoring Report for 2019 as required by the Groundwater Quality Discharge Permit UGW370004, as well as two CDs that contain a word searchable electronic copy of this report.

If you should have any questions regarding this report please contact me at 303-389-4134.

Yours very truly,

A handwritten signature in black ink, appearing to read 'Kathy Weinel', is written over a solid black line.

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

CC: David Frydenlund
Scott Bakken
Paul Goranson
Terry Slade



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ENERGY FUELS RESOURCES (USA) INC.
Kathy Weinel
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White Mesa Uranium Mill
2019 Annual Seeps and Springs Sampling Report

State of Utah
Groundwater Discharge Permit No. UGW370004

Prepared by:



Energy Fuels Resources (USA) Inc.
225 Union Blvd., Suite 600
Lakewood, CO 80228

January 4, 2020

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ACRONYM LIST

AWAL	American West Analytical Laboratory
DR	Dry Ridge Piezometers
DWMRC	Utah Division of Waste Management and Radiation Control
EFRI	Energy Fuels Resources (USA) Inc.
GEL	GEL Laboratories, Inc.
GWQS	Groundwater Quality Standard
LCS	Laboratory Control Spike
Mill	White Mesa Mill
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Permit	State of Utah Groundwater Discharge Permit No. UGW370004
QA	Quality Assurance
QAP	Groundwater Monitoring Quality Assurance Plan
QC	Quality Control
RPD	Relative Percent Difference
TDS	Total Dissolved Solids
VOCs	Volatile Organic Compounds

ANNUAL SEEPS AND SPRINGS SAMPLING REPORT

1.0 INTRODUCTION

This is the 2019 Annual Seeps and Springs Sampling Report for the Energy Fuels Resources (USA) Inc. (“EFRI”) White Mesa Mill (the “Mill”), as required under Part I.F.7 of the Mill’s State of Utah Groundwater Discharge Permit No. UGW370004 (the “Permit”) and the Mill’s *Sampling and Analysis Plan for Seeps and Springs*, Revision: 2, July 8, 2016 (the “Sampling Plan”).

The *Sampling Plan for Seeps and Springs* was revised in July 2016 to incorporate changes requested by the Division of Waste Management and Radiation Control (“DWMRC”). The *Sampling Plan for Seeps and Springs*, Revision: 2, July 8, 2016 was approved by DWMRC by letter dated August 8, 2016.

2.0 SAMPLING EVENTS

Seeps and springs which were identified near the Mill in the 1978 Environmental Report (Plate 2.6-10, Dames and Moore, January 30, 1978) are to be sampled annually in accordance with the Sampling Plan and Part I.E.6 of the Permit. The Sampling Plan specifies the following sample locations: Corral Canyon Seep, Corral Springs, Ruin Spring, Cottonwood Seep, Westwater Seep and Entrance Spring (also referred to as Entrance Seep).

2.1 March 2019 Sampling

In accordance with the DWMRC-approved Sampling Plan, once per calendar quarter, Westwater Seep, Corral Canyon Seep and Corral Springs are visited to determine if there is any water for sampling. If sufficient water is present, a sample is collected and no further visits are completed for the year. Westwater Seep, Corral Canyon Seep and Corral Springs were visited on March 20, 2019. No water was present for sampling during the March 20, 2019 site visit. On March 27, water was noted at Westwater seep and a sample was collected. Per the DWMRC-approved Sampling Plan, no further visits were made to Westwater seep in 2019.

2.2 June 2019 Sampling

In accordance with the Permit and the Sampling Plan, DWMRC was notified of the sampling. The DWMRC representative was present for this sampling event. On June 11, 2019, EFRI collected seeps and springs samples from Cottonwood Seep, Ruin Spring, Entrance Seep, and Back Spring (duplicate of Ruin Spring). The DWMRC representative collected a “split” sample on June 11, 2019 from the EFRI sampling equipment, using sample containers he provided. Corral Canyon Seep and Corral Springs were dry throughout 2019.

2.3 Repeat Visits to Dry Seeps and Springs.

The initial 2019 visit of Corral Canyon Seep and Corral Springs, was conducted in March 2019. Corral Canyon Seep and Corral Springs, were dry during the March 2019 visit, could not be sampled, and did not warrant development attempts with limited hand tool excavation at that

time. During the June 11, 2019 sampling event, Corral Canyon Seep and Corral Springs were dry, could not be sampled, and did not warrant development attempts with limited hand tool excavation at that time. Additional visits were made to Corral Canyon Seep and Corral Springs in August 2019 and October 2019. The additional two visits to Corral Canyon Seep and Corral Springs did not indicate any changes; i.e., there was no indication that development attempts would be successful. As previously noted, a sample was collected from Westwater Seep on March 27, 2019 because water was present. The data from the March and June sampling events are included as Attachment D in this report.

2.4 Sampling Procedures

Samples were collected and analyzed for the parameters listed in Table 2 of the Permit.

Samples were collected from the locations indicated in Table 1. Sampling procedures for each seep or spring are determined by the site location and access.

The DWMRC-approved sampling procedures for seeps and springs at the Mill are contained in the Sampling Plan. Samples collected under this plan were collected either by direct collection which involves collecting the sample directly into the sample container from the surface water feature or from spring out-flow, or by using a stainless steel ladle to collect water until a sufficient volume is contained in the ladle for transfer to the sample bottle. Filtered parameters are pumped through a 0.45 micron filter prior to delivery to the sample bottle.

Ruin Spring

In the case of Ruin Spring, sample bottles for the analytes collected during the June sampling event (except gross alpha and heavy metals) were filled directly from the spring out-flow which is a pipe. Samples for heavy metals and gross alpha were collected by means of a peristaltic pump and delivered directly to the sample containers through a 0.45 micron filter. The appropriate preservatives for the analytical technique were added to the samples.

Westwater Seep

For Westwater Seep, all of the sample containers were filled by means of a peristaltic pump and delivered directly to the sample containers. Samples for heavy metals and gross alpha were collected by means of a peristaltic pump and delivered directly to the sample containers through a 0.45 micron filter. The appropriate preservatives for the analytical technique were added to the samples.

Cottonwood Seep and Entrance Spring

Cottonwood Seep and Entrance Spring were “developed” prior to the sampling event by Field Personnel. Development was completed by removing surrounding vegetation and clearing the sampling location in the spring or seep area. The sample containers were filled by means of a peristaltic pump and delivered directly to the sample containers. In the case of the samples for heavy metals and gross alpha, the samples were delivered by a peristaltic pump directly to the

sample containers through a 0.45 micron filter. The samples were preserved by the addition of the appropriate preservative for the analytical technique.

The tubing on the peristaltic pump that comes into contact with the sample water was disposed of between each sampling. As a result, no equipment required decontamination, and no rinsate samples were collected.

2.5 Field Data

Attached under Tab A are copies of the field data sheets recorded in association with the June and October seeps and springs monitoring events. Photographic documentation of the sampling sites is also included in Tab A. Sampling dates are listed in Table 1 and field parameters collected during the sampling program are included in Tab B.

2.6 Field QC Samples

The field Quality Control (“QC”) samples generated during this sampling event included one duplicate per sampling event and one trip blank per shipment to each laboratory which received samples for VOCs. The duplicate samples (Back Spring) were submitted blind to the analytical laboratory. As previously stated, no rinsate blanks were collected during this sampling event as only disposable equipment was used for sample collection.

3.0 SEEPS AND SPRINGS SURVEY AND CONTOUR MAP

Part I.F.7(c) of the Permit requires that a water table contour map that includes the elevations for each well at the facility and the elevations of the phreatic surfaces observed for each of the seeps and springs sampled be submitted with this annual report. Tab C includes two contour maps. The contour map labeled C-1 shows the water table without the water level data associated with the dry ridge (“DR”) investigation piezometers. The contour map labeled C-2 shows the water table with the water level data associated with the DR investigation piezometers. It is important to note that Cottonwood Seep is not included in any of the perched water level contouring, because there is no evidence to establish a hydraulic connection between Cottonwood Seep and the perched water system. Cottonwood Seep is located near the Brushy Basin Member/Westwater Canyon Member contact, approximately 230 feet below the base of the perched water system defined by the Burro Canyon Formation/Brushy Basin Member contact. The stratigraphic position of Cottonwood Seep indicates that its elevation is not representative of the perched potentiometric surface. Exclusion of the Cottonwood Seep from water level contouring is consistent with previous submissions. The contour map includes the corrected survey data from December 2009 as discussed below.

Part I.F.7 (g) of the Permit requires that survey data for the seeps and springs be collected prior to the collection of samples. DRC previously clarified that the requirement to submit survey data applies only to the first sampling event and not on an annual basis. The December 2009 and July 2010 seeps and springs survey data shown in Tab C will be used for reporting where seeps and springs locations and elevations are relevant.

A full discussion of the survey data and the hydrogeology of seeps and springs at the margins of White Mesa in the vicinity of the Mill and the relationship of these seeps and springs to the hydrogeology of the site, in particular to the occurrence of a relatively shallow perched groundwater zone beneath the site, is contained in *Hydrogeology of the Perched Groundwater Zone and Associated Seeps and Springs Near the White Mesa Uranium Mill Site*, dated November 12, 2010, prepared by Hydro Geo Chem, Inc. and submitted to the Director on November 15, 2010. Additional information is also contained in the *Second Revision Hydrogeology of the Perched Groundwater Zone in the Area Southwest of the Tailings Cells White Mesa Mill Site*, dated November 7, 2012, prepared by Hydro Geo Chem, Inc. and submitted to the Director on November 7, 2012.

4.0 QUALITY ASSURANCE AND QUALITY CONTROL

4.1 Laboratory Results

Analytical results are provided by the Mill's two contract analytical laboratories GEL Laboratories, Inc., ("GEL") and American West Analytical Laboratory ("AWAL").

The laboratories utilized during this investigation were certified under the Environmental Lab Certification Program administered by UDEQ Bureau of Lab Improvement for the analyses they completed.

The analytical data as well as the laboratory Quality Assurance ("QA")/QC summaries are included under Tab D.

4.2 DATA EVALUATION

The Permit requires that the annual seeps and springs sampling program be conducted in compliance with the requirements specified in the Mill's approved White Mesa Uranium Mill Groundwater Monitoring Quality Assurance Plan ("QAP"), the approved Sampling Plan and the Permit. To meet this requirement, the data validation completed for the seeps and springs sampling program verified that the program met the requirements outlined in the QAP, the Permit and the approved Sampling Plan. The Mill QA Manager performed a QA/QC review to confirm compliance of the monitoring program with requirements of the Permit and the QAP. As required in the QAP, data QA includes preparation and analysis of QC samples in the field, review of field procedures, an analyte completeness review, and quality control review of laboratory data methods and data. Identification of field QC samples collected and analyzed is provided in Section 4.5.1. Discussion of adherence to the Sampling Plan is provided in Section 4.3. Analytical completeness review results are provided in Section 4.4. The steps and tests applied to check laboratory data QA/QC are discussed in Sections 4.5.1 through 4.5.9 below.

The analytical laboratories have provided summary reports of the analytical QA/QC measurements necessary to maintain conformance with National Environmental Laboratory Accreditation Conference certification and reporting protocol. The analytical laboratory QA/QC Summary Reports, including copies of the Mill's Chain of Custody and Analytical Request Record forms for each set of analytical results, follow the analytical results under Tab D. Results

of the review of the laboratory QA/QC information are provided under Tab E and discussed in Section 4.5 below.

4.3 Adherence to Sampling Plan and Permit Requirements

On a review of adherence by Mill personnel to the Permit, the QA Manager observed that QA/QC requirements established in the Permit and the QAP were met and that the requirements were implemented as required except, as noted below.

The Permit only requires the measurement of the field parameters pH, conductivity and temperature. Field parameter measurements collected during this sampling event included pH, conductivity, temperature, redox potential, and turbidity.

4.4 Analyte Completeness Review

The analyses required by the Permit Table 2 were completed.

4.5 Data Validation

The QAP and the Permit identify the data validation steps and data quality control checks required for the seeps and springs monitoring program. Consistent with these requirements, the QA Manager performed the following evaluations: a field data QA/QC evaluation, a receipt temperature check, a holding time check, an analytical method check, a reporting limit check, a trip blank check, a QA/QC evaluation of sample duplicates, a gross alpha counting error evaluation and a review of each laboratory's reported QA/QC information. Each evaluation is discussed in the following sections. Data check tables indicating the results of each test are provided under Tab E.

4.5.1 Field Data QA/QC Evaluation

The QA Manager performs a review of field recorded parameters to assess their adherence with QAP and Permit requirements. The assessment involved review of the Field Data sheets. Review of the Field Data Sheets noted that the requirements for field data collection were met.

4.5.2 Holding Time Evaluation

QAP Table 1 identifies the method holding times for each suite of parameters. Sample holding time checks are provided under Tab E. The samples were received and analyzed within the required holding time.

4.5.3 Laboratory Receipt Temperature Check

Chain of Custody sheets were reviewed to confirm compliance with the sample receipt requirements specified in the QAP. Sample receipt temperature checks are provided under Tab E. The samples were received within the QAP required temperature limit.

4.5.4 Analytical Method Check

The analytical methods reported by both laboratories were checked against the required methods specified in Table 1 of the QAP. Analytical method check results are provided in Tab E.

4.5.5 Reporting Limit Evaluation

Reporting limits utilized by the laboratory were required to be equal to or lower than the GWQSS set out in Table 2 of the Permit. For Total Dissolved Solids (“TDS”), sulfate and chloride, for which Ground Water Quality Standards are not set out in Table 2 of the Permit, reporting limits specified in Part 1.E.6.e).(1) were used. Those reporting limits are 10 mg/L for TDS, and 1 mg/L for Sulfate and Chloride. The analytical method reporting limits reported by both laboratories were checked against the reporting limits specified in the Permit. Reporting limit evaluations are provided in Tab E. All analytes were measured and reported to the required reporting limits except the sample results that had the reporting limit raised due to sample dilution necessary to accommodate the analyte concentrations in the samples. In all cases the reported value for the analyte was higher than the increased detection limit.

4.5.6 Trip Blank Evaluation

The trip blank results were reviewed to identify any blank contamination. Trip blank evaluation is provided in Tab E. The trip blank results associated with the samples were less than reporting limit for the VOCs.

4.5.7 QA/QC Evaluation for Sample Duplicates

Section 9.1.4 a) of the QAP states that the Relative Percent Difference (“RPD”) will be calculated for the comparison of duplicate and original field samples. The QAP acceptance limits for RPDs between the duplicate and original field sample is less than or equal to 20% unless the measured results (described as activities in the QAP) are less than 5 times the required detection limit. This standard is based on the United States Environmental Protection Agency Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, February 1994, 9240.1-05-01 as cited in the QAP. The RPDs are calculated for duplicate pairs for the analytes regardless of whether or not the reported concentrations are greater than 5 times the required detection limits; however, data will be considered noncompliant only when the results are greater than 5 times the required detection limit and the RPD is greater than 20%. RPDs are also only calculated when both the sample and the duplicate report a detection for any given analyte. If only one of the pair reports a detection, the RPD cannot be calculated. The additional duplicate information is provided for information purposes.

All duplicate results were within 20% RPD except for magnesium in the duplicate pair Ruin Spring/Back Spring. The magnesium RPD was greater than 20%, however the sample and duplicate results reported for Ruin Spring/Back Spring were not five times greater than the RLs, and, as such, the deviation from the 20% RPD requirement is acceptable.

The duplicate evaluation is provided in Tab E.

4.5.8 Radiologics Counting Error

Section 9.14 of the QAP requires that all gross alpha analysis reported with an activity equal to or greater than the Groundwater Compliance Limits set out in the Permit (for the seeps and springs samples the Groundwater Quality Standards ["GWQS"] will be used), shall have a counting variance that is equal to or less than 20% of the reported activity concentration. An error term may be greater than 20% of the reported activity concentration when the sum of the activity concentration and error term is less than or equal to the GWQS.

Section 9.4 of the QAP also requires a comparability check between the sample and field duplicate sample results utilizing the formula provided in the text.

All radiological results were reported were within acceptance limits. Results of routine radiologic sample QC are provided under Tab E.

4.5.9 Laboratory Matrix QC Evaluation

Section 9.2 of the QAP requires that the laboratory's QA/QC Manager check the following items in developing data reports: (1) sample preparation information is correct and complete, (2) analysis information is correct and complete, (3) appropriate analytical laboratory procedures are followed, (4) analytical results are correct and complete, (5) QC samples are within established control limits, (6) blanks are within QC limits, (7) special sample preparation and analytical requirements have been met, and (8) documentation is complete. In addition to other laboratory checks described above, EFRI's QA Manager rechecks QC samples and blanks (items (5) and (6)) to confirm that the percent recovery for spikes and the relative percent difference for spike duplicates are within the method-specific required limits, or that the case narrative sufficiently explains any deviation from these limits. Results of this quantitative check are provided under Tab E. The lab QA/QC results from both GEL and AWAL met these requirements except as described below.

A number of the seeps and springs samples had the reporting limit raised due to matrix interference and/or sample dilution. In all cases where the detection limit was increased, the concentration for the analyte was higher than the increased detection limit.

The check samples included at least the following: a method blank, a laboratory control spike ("LCS"), a matrix spike ("MS") and a matrix spike duplicate ("MSD"), or the equivalent, where applicable. It should be noted that:

- Laboratory fortified blanks are equivalent to LCSs.
- Laboratory reagent blanks are equivalent to method blanks.
- Post digestion spikes are equivalent to MSs.
- Post digestion spike duplicates are equivalent to MSDs.
- For method E900.1, used to determine gross alpha, a sample duplicate was used instead of a MSD.

The qualifiers, and the corresponding explanations reported in the QA/QC Summary Reports for any of the check samples for any of the analytical methods, were reviewed by the QA Manager.

The QAP Section 8.1.2 requires that a MS/MSD pair be analyzed with each analytical batch. The QAP does not specify acceptance limits for the MS/MSD pair, and the QAP does not specify that the MS/MSD pair be prepared on EFRI samples only. Acceptance limits for MS/MSDs are set by the laboratories. The review of the information provided by the laboratories in the data packages verified that the QAP requirement to analyze a MS/MSD pair with each analytical batch was met. While the QAP does not require it, the recoveries were reviewed for compliance with each laboratory's established acceptance limits. The QAP does not require this level of review and the results of this review are provided for information only.

The information from the Laboratory QA/QC Summary Reports indicates that the MS/MSD recoveries and the associated RPDs for the seeps and springs samples were within acceptable laboratory limits except as noted in Tab E. The MS/MSD recoveries that were outside the laboratory established acceptance limits do not affect the quality or usability of the data, because the recoveries and RPDs above or below the acceptance limits are indicative of matrix interference most likely caused by other constituents in the samples. Matrix interferences are applicable to the individual sample results only. The requirement in the QAPs to analyze a MS/MSD pair with each analytical batch was met and as such the data are compliant with the QAP.

The QAP specifies that surrogate compounds shall be employed for all organic analyses, but the QAP does not specify acceptance limits for surrogate recoveries. The analytical data associated with the routine quarterly sampling met the requirement specified in the QAP. The information from the Laboratory QA/QC Summary Reports indicates that the surrogate recoveries for the seeps and springs samples were within acceptable laboratory limits for all surrogate compounds.

The QAP Section 8.1.2 requires that each analytical batch shall be accompanied by a reagent blank. Contamination detected in analysis of reagent blanks/method blanks will be used to evaluate any analytical laboratory contamination of environmental samples. The QAP specified process for evaluation of reagent/method blanks states that nonconformance will exist when blanks are within an order of magnitude of the sample results. The information from the Laboratory QA/QC Summary Reports indicates that the reagent (method) blanks for the seeps and springs samples were non-detect and were therefore within the acceptance criteria specified in the QAP.

Laboratory duplicates are completed by the analytical laboratories as required by the analytical method specifications. Acceptance limits for laboratory duplicates are set by the laboratories. The QAP does not require the completion of laboratory duplicates or the completion of a QA assessment of them. EFRI reviews the QC data provided by the laboratories for completeness and to assess the overall quality of the data provided. Laboratory duplicate results are provided in Tab D.

5.0 EVALUATION OF ANALYTICAL DATA

As previously stated, the samples were analyzed for the groundwater compliance parameters found on Table 2 of the Permit. In addition to these laboratory parameters, the pH, temperature, conductivity, (and although not required, redox and turbidity) were measured and recorded in the field.

5.1 Evaluation of Analytical Results

The results of the March and June sampling events shows no evidence of Mill influence in the water produced by the seeps and springs sampled. The lack of Mill influence on seeps and springs is indicated by the fact that the parameters detected are within the ranges of concentrations for the on-site monitoring wells and for available historic data for the seeps and springs themselves. For those detected analytes, concentrations are shown in Tables 2A, 2B, 2C, and 2D. The data are compared to available historic data for each seep and spring as well as to on-site monitoring well data. Specific discussions about each seep or spring are included below.

5.1.1 Ruin Spring

No VOCs or radiologics were detected. Metals and major ions were the only analytes detected. The metals detections were minimal with only molybdenum, selenium and uranium having positive detections. A comparison of the 2009 through 2018 data to the 2019 data shows that the concentrations of most detected analytes remained approximately the same with only minor changes within the limits of normal analytical deviation. The reported values for calcium, fluoride, magnesium, nitrate, and molybdenum, increased from the 2018 sample results, but they are below the upper range of historic background values (where available) for the on-site monitoring wells. The differences are not significant and are most likely due to normal fluctuations due to flow rates or seasonal variations due to annual precipitation. Overall, the data reported for Ruin Spring are typical for a surface water sample with no indication of Mill influence.

5.1.2 Cottonwood Spring

No VOCs or radiologics were detected. Metals and major ions were the only analytes detected. The metals detections were minimal with only uranium having a positive detection. A comparison of the 2009 through 2018 data to the 2019 data shows that the concentrations of most detected analytes remained approximately the same with only minor changes within the limits of normal analytical deviation. The reported values for bicarbonate, calcium, magnesium, potassium, and sodium increased from the 2018 sample results, but they are below the upper range of historic background values (where available) for the on-site monitoring wells. The differences are not significant and are most likely due to normal fluctuations due to flow rates or seasonal variations due to annual precipitation. Overall, the data reported for Cottonwood Spring are typical for a surface water sample with no indication of Mill influence.

5.1.3 Westwater Seep

No radiologics or VOCs were detected. Metals and major ions were detected. The metals detections were minimal with only manganese, and uranium having positive detections. A comparison of the historic data to the 2019 data shows that the concentrations of most detected

analytes remained approximately the same with only minor changes within the limits of normal analytical deviation. The reported values for bicarbonate, chloride, potassium, and manganese increased from the 2018 sample results, but they are below the upper range of historic background values (where available) for the on-site monitoring wells. The differences are not significant and are most likely due to normal fluctuations due to flow rates or seasonal variations due to annual precipitation. Overall, the data reported for Westwater Seep are typical for a surface water sample with no indication of Mill influence.

5.1.4 Entrance Spring

Gross Alpha, toluene, metals, and major ions were the only analytes detected. The metals detections were minimal with only arsenic, iron, manganese, molybdenum and uranium having positive detections. A comparison of the 2009 through 2018 data to the 2019 data shows that the concentrations of most detected analytes remained approximately the same with only minor changes within the limits of normal analytical deviation. The reported values for bicarbonate, calcium, chloride, fluoride, magnesium, ammonia, potassium, sodium and total dissolved solids (“TDS”) increased from the 2018 sample results. The detected concentrations are below the upper range of historic background values (where available) for the on-site monitoring wells. The differences are not significant and are most likely due to normal fluctuations due to flow rates or seasonal variations due to annual precipitation. In addition, the presence of livestock and livestock feces has likely affected the analytical results. Overall, the data reported for Entrance Spring are typical for a surface water sample with no indication of Mill influence.

6.0 CORRECTIVE ACTION REPORT

No corrective action reports are required for the 2019 annual sampling event.

6.1 Assessment of Corrective Actions from Previous Period

No corrective action reports were required for the 2018 annual sampling event.

7.0 ELECTRONIC DATA FILES AND FORMAT

EFRI has provided to the Director electronic copies of the laboratory results as part of the annual seeps and springs monitoring in Comma Separated Values, from the laboratory. A copy of the transmittal e-mail is included under Tab F.

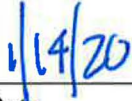
8.0 SIGNATURE AND CERTIFICATION

This document was prepared by Energy Fuels Resources (USA) Inc.
Energy Fuels Resources (USA) Inc.

By:



Scott A. Bakken
Senior Director Regulatory Affairs



Date

Certification

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.



Scott A. Bakken
Senior Director, Regulatory Affairs
Energy Fuels Resources (USA) Inc.

Tables

Table 1: Summary of Seeps and Springs Sampling

Location	Sample Date	Work Order No./Lab Set ID	Date of Lab Report
Cottonwood Spring	6/11/2019	AWAL = 1906343 GEL = 481772	AWAL = 7/05/2019 GEL = 7/10/2019
Entrance Seep	6/11/2019	AWAL = 1906343 GEL = 481772	AWAL = 7/05/2019 GEL = 7/10/2019
Back Spring (Duplicate of Ruin Spring)	6/11/2019	AWAL = 1906343 GEL = 481772	AWAL = 7/05/2019 GEL = 7/10/2019
Ruin Spring	6/11/2019	AWAL = 1906343 GEL = 481772	AWAL = 7/05/2019 GEL = 7/10/2019
Corral Spring	Not Sampled - Dry	Not Sampled - Dry	Not Sampled - Dry
Corral Canyon Seep	Not Sampled - Dry	Not Sampled - Dry	Not Sampled - Dry
Westwater Seep	3/27/2019	AWAL = 1903737 GEL = 475027	AWAL = 04/11/2019 GEL = 04/26/2019

Notes: Multiple dates shown for a single laboratory depict resubmission dates for the data. Resubmissions were required to correct reporting errors. When multiple dates are shown for a single laboratory, the final submission date is shown in *italics*.

Table 2A Detected Constituents and Comparison to Historic Values and Mill Site Monitoring Wells

Ruin Spring														
Constituent	2009	2010	2011 May	2011 July	2012	2013	2014	2015	2016	2017	2018	2019	Range of Average Historic Values for Monitoring Wells ^{1*}	Avg 2003 2004 ²
Major Ions (mg/l)														
Carbonate	<1	<1	<1	1	<1	<1	<1	<1	<1	<1	<1	<1	--	--
Bicarbonate	233	254	241	239	237	208	204	200	193	208	202	202	--	--
Calcium	151	136	145	148	147	149	150	162	138	145	158	165	--	--
Chloride	28	23	25	44	28	26.3	27.1	27.4	24.4	27.4	29.9	23.9	ND - 213	27
Fluoride	0.5	0.53	0.45	0.5	0.52	0.538	<1	0.445	0.541	0.5	0.414	0.505	ND - 1.3	0.6
Magnesium	32.3	29.7	30.6	31.1	31.9	32.1	35.4	31.8	31.1	30.2	33.9	45.6	--	--
Nitrogen-Ammonia	0.09	<0.05	ND	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	--	--
Nitrogen-Nitrate	1.4	1.7	1.7	1.6	1.6	1.56	1.54	1.31	1.64	1.55	1.35	1.56	--	--
Potassium	3.3	3.07	3.2	3.3	3.5	3.46	3.24	3.14	3.18	3.07	3.58	3.31	--	--
Sodium	104	93.4	110	111	115	118	119	126	105	113	128	128	--	--
Sulfate	528	447	486	484	464	553	553	528	490	476	547	474	ND - 3455	521
TDS	1010	903	942	905	1000	952	984	1000	916	972	1000	900	1019 - 5548	1053
Metals (ug/l)														
Arsenic	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	--	--
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND - 4.78	0.01
Chromium	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	--	--
Cobalt	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Copper	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Iron	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	<30	ND - 7942	25
Lead	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Manganese	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND - 34,550	5
Mercury	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
Molybdenum	17	17	16	17	16	16.1	16.0	18.3	17.8	17.2	18	20.2	--	--
Nickel	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	ND - 61	0.05

Table 2A Detected Constituents and Comparison to Historic Values and Mill Site Monitoring Wells

Ruin Spring														
Constituent	2009	2010	2011 May	2011 July	2012	2013	2014	2015	2016	2017	2018	2019	Range of Average Historic Values for Monitoring Wells ^{1*}	Avg 2003-2004 ²
Selenium	12.2	10	11.8	10.2	10.8	10.2	12	10	10	10.5	12.2	10.8	ND - 106.5	12.1
Silver	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Thallium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
Tin	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	--	--
Uranium	9.11	8.47	9.35	8.63	8.68	9.12	9.61	9.03	8.38	8.49	9.35	9.02	ND - 59.8	10
Vanadium	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	--	--
Zinc	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Radiologics (pCi/l)														
Gross Alpha	<0.2	<0.2	<0.3	<0.05	<0.09	<1.0	<1	<1.0	<1.0	<1.0	<1.57	<1.0	ND - 36	0.28
VOCS (ug/L)														
Acetone	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	--	--
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
MEK	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	--	--
Methylene Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Naphthalene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Tetrahydrofuran	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Xylenes	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--

¹ From Figure 3, Table 10 and Appendix B of the *Revised Addendum, Background Groundwater Quality Report: New Wells for Denison Mines (USA) Corp's White Mesa Mill Site, San Juan County, Utah*, April 30, 2008, prepared by INTERA, Inc. and Table 16 and Appendix D of the *Revised Background Groundwater Quality Report: Existing Wells for Denison Mines (USA) Corp.'s White Mesa Uranium Mill Site, San Juan County, Utah*, October 2007, prepared by INTERA, Inc.

² From Figure 9 of the *Revised Addendum, Evaluation of Available Pre-Operational and Regional Background Data, Background Groundwater Quality Report: Existing Wells for Denison Mines (USA) Corp.'s White Mesa Mill Site, San Juan County, Utah*, November 16, 2007, prepared by INTERA, Inc.

*Range of average historic values for On-Site Monitoring Wells as reported on April 30, 2008 (MW-1, MW-2, MW-3, MW-3A, MW-4, MW-5, MW-11, MW-12, MW-14, MW-15, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-24, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31 and MW-32)²

Table 2B Detected Constituents and Comparison to Historic Values and Mill Site Monitoring Wells

Cottonwood Spring														
Constituent	2009	2010	2011 May	2011 July	2012	2013	2014	2015	2016	2017	2018	2019	Range of Average Historic Values for Monitoring Wells ^{1*}	Avg 1977-1982 ¹
Major Ions (mg/l)														
Carbonate	<1	<1	<1	6	<1	<1	<1	<1	<1	<1	<1	<1	--	--
Bicarbonate	316	340	330	316	326	280	251	271	256	280	283	286	--	--
Calcium	90.3	92.2	95.4	94.2	101	87.9	99.7	111	102	99.6	109	122	--	--
Chloride	124	112	113	134	149	118	128	133	138	129	153	138	ND - 213	31
Fluoride	0.4	0.38	0.34	0.38	0.38	0.417	<1	0.318	0.466	0.344	0.282	0.249	ND - 1.3	0.8
Magnesium	25	24.8	25.2	25.2	27.7	23.6	29.0	27.5	29.5	27.1	30.2	35.3	--	--
Nitrogen-Ammonia	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.0512	<0.05	<0.05	<0.05	<0.05	--	--
Nitrogen-Nitrate	0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.124	0.108	<0.1	--	--
Potassium	5.7	5.77	6	5.9	6.2	5.53	6.18	5.91	6.11	5.72	6.35	6.78	--	--
Sodium	205	214	229	227	247	217	227	251	221	213	234	268	--	--
Sulfate	383	389	394	389	256	403	417	442	443	409	428	423	ND - 3455	230
TDS	1010	900	1030	978	1040	996	968	1020	1070	1080	1080	1010	1019 - 5548	811
Metals (ug/l)														
Arsenic	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	--	--
Beryllium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
Cadmium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ND - 4.78	--
Chromium	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	<25	--	--
Cobalt	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Copper	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Iron	<30	<30	53	<30	<30	<30	<30	<30	<30	<30	<30	<30	ND - 7942	150
Lead	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Manganese	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ND - 34,550	580
Mercury	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	--	--
Molybdenum	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Nickel	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	ND - 61	--
Selenium	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5	<5	<5	<5	<5	ND - 106.5	--

Table 2B Detected Constituents and Comparison to Historic Values and Mill Site Monitoring Wells

Cottonwood Spring														
Constituent	2009	2010	2011 May	2011 July	2012	2013	2014	2015	2016	2017	2018	2019	Range of Average Historic Values for Monitoring Wells ^{1*}	Avg 1977-1982 ¹
Silver	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Thallium	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<5	<5	<0.5	<0.5	<0.5	--	--
Tin	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	--	--
Uranium	8.42	8.24	7.87	8.68	8.17	8.95	9.62	9.12	8.84	9.17	10.3	10.1	ND - 59.8	--
Vanadium	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	<15	--	--
Zinc	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	--	--
Radiologics (pCi/l)														
Gross Alpha	<0.2	<0.2	<0.1	<-0.1	<-0.2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND - 36	7.2
VOCS (ug/L)														
Acetone	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	--	--
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
MEK	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	--	--
Methylene Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Naphthalene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Tetrahydrofuran	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--
Xylenes	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--	--

¹ From Figure 3, Table 10 and Appendix B of the Revised Addendum, Background Groundwater Quality Report: New Wells for Denison Mines (USA) Corp's White Mesa Mill Site, San Juan County, Utah, April 30, 2008, prepared by INTERA, Inc. and Table 16 and Appendix D of the Revised Background Groundwater Quality Report: Existing Wells for Denison Mines (USA) Corp.'s White Mesa Uranium Mill Site, San Juan County, Utah, October 2007, prepared by INTERA, Inc.

*Range of average historic values for On-Site Monitoring Wells as reported on April 30, 2008 (MW-1, MW-2, MW-3, MW-3A, MW-4, MW-5, MW-11, MW-12, MW-14, MW-15, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-24, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31 and MW-32)

Table 2C Detected Constituents and Comparison to Historic Values and Mill Site Monitoring Wells

Westwater Seep													
Constituent	2009	2010	2011 May	2011 July	2012	2013	2014	2015	2016	2017	2018	2019	Range of Average Historic Values for Monitoring Wells ¹ *
Major Ions (mg/l)													
Carbonate	<1	<1	<1	Not Sampled Dry	Not Sampled Dry	Not Sampled Dry	Not Sampled Dry	<1	<1	<1	<1	<1	--
Bicarbonate	465	450	371					359	399	369	444	450	--
Calcium	191	179	247					150	176	125	204	185	--
Chloride	41	40	21					32.6	38.0	27.5	36.2	41.6	ND - 213
Fluoride	0.7	0.6	0.54					0.424	0.618	0.574	0.659	0.505	ND - 1.3
Magnesium	45.9	44.7	34.7					34	47.3	31.7	56.6	43.7	--
Nitrogen-Ammonia	<0.05	0.5	0.06					0.123	<0.05	<0.05	0.0832	<0.05	--
Nitrogen-Nitrate	0.8	<0.1	<0.1					<0.1	<0.1	<0.1	<0.1	<0.1	--
Potassium	1.19	6.57	3.9					1.98	2.32	2.33	2.94	3.99	--
Sodium	196	160	112					139	185	133	218	152	--
Sulfate	646	607	354					392	573	318	580	436	ND - 3455
TDS	1370	1270	853					896	1060	820	1220	1110	1019 - 5548
Metals (ug/l)													
Arsenic	<5	<5	12.3	Not Sampled Dry	Not Sampled Dry	Not Sampled Dry	Not Sampled Dry	<5.0	<5.0	<5.0	<5.0	<5.0	--
Beryllium	<0.5	<0.5	0.91					<0.5	<0.5	<0.5	<0.5	<0.5	--
Cadmium	<0.5	<0.5	0.9					<0.5	<0.5	<0.5	<0.5	<0.5	ND - 4.78
Chromium	<25	<25	<25					<25	<25	<25	<25	<25	--
Cobalt	<10	<10	<10					<10	<10	<10	<10	<10	--
Copper	<10	<10	16					<10	<10	<10	<10	<10	--
Iron	89	56	4540					<30	40.1	181	575	1.20	ND - 7942
Lead	<1.0	<1.0	41.4					<1.0	<1.0	<1.0	<1.0	<1.0	--
Manganese	37	87	268					171	55.5	144	312	528	ND - 34,550
Mercury	<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	--
Molybdenum	29	29	<10					<10	<10	<10	<10	<10	--
Nickel	<20	<20	29					<20	<20	<20	<20	<20	ND - 61
Selenium	<5.0	<5.0	<5.0					<5.0	<5.0	<5.0	<5.0	<5.0	ND - 106.5
Silver	<10	<10	<10					<10	<10	<10	<10	<10	--
Thallium	<0.5	<0.5	<0.5					<0.5	<0.5	<0.5	<0.5	<0.5	--
Tin	<100	<100	<100					<100	<100	<100	<100	<100	--
Uranium	15.1	46.6	6.64					2.1	19.0	5.17	13.2	4.92	ND - 59.8
Vanadium	<15	<15	34					<15	<15	<15	<15	<15	--
Zinc	<10	<10	28					<10	<10	<10	<10	<10	--

Table 2C Detected Constituents and Comparison to Historic Values and Mill Site Monitoring Wells

Westwater Seep																
Constituent	2009	2010	2011 May	2011 July	2012	2013	2014	2015	2016	2017	2018	2019	Range of Average Historic Values for Monitoring Wells ¹ *			
Radiologics (pCi/l)																
Gross Alpha	< 0.1	<0.3	0.5	Not Sampled Dry	Not Sampled Dry	Not Sampled Dry	Not Sampled Dry	<1.0	<1.0	<1.0	<1.0	<1.0	ND - 36			
VOCS (ug/L)																
Acetone	<20	<20	<20	Not Sampled Dry	Not Sampled Dry	Not Sampled Dry	Not Sampled Dry	<20	<20	23.1	<20	<20	--			
Benzene	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Carbon tetrachloride	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Chloroform	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Chloromethane	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
MEK	<20	<20	<20					<20	<20	<20	<20	<20	<20	<20	<20	--
Methylene Chloride	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Naphthalene	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Tetrahydrofuran	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Toluene	<1.0	<1.0	<1.0					<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Xylenes	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--			

¹ From Figure 3, Table 10 and Appendix B of the Revised Addendum, Background Groundwater Quality Report: New Wells for Denison Mines (USA) Corp.'s White Mesa Mill Site, San Juan County, Utah, April 30, 2008, prepared by INTERA, Inc. and Table 16 and Appendix D of the Revised Background Groundwater Quality Report: Existing Wells for Denison Mines (USA) Corp.'s White Mesa Uranium Mill Site, San Juan County, Utah, October 2007, prepared by INTERA, Inc.

*Range of average historic values for On-Site Monitoring Wells as reported on April 30, 2008 (MW-1, MW-2, MW-3, MW-3A, MW-4, MW-5, MW-11, MW-12, MW-14, MW-15, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-24, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31 and MW-32)

Table 2D Detected Constituents and Comparison to Historic Values and Mill Site Monitoring Wells

Entrance Spring													
Constituent	2009	2010	2011 May	2011 July	2012	2013	2014	2015	2016	2017	2018	2019	Range of Average Historic Values for Monitoring Wells ¹ *
Radiologics (pCi/l)													
Gross Alpha	0.9	<0.5	1.5	1.6	0.5	2.3	<1	3.05	<1	2.53	<1	2.63	ND - 36
VOCS (ug/L)													
Acetone	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	--
Benzene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Carbon tetrachloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Chloroform	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Chloromethane	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
MEK	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	<20	--
Methylene Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Naphthalene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Tetrahydrofuran	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--
Toluene	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.32	<1.0	<1.0	13.1	<1.0	5.59	--
Xylenes	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	--

¹ From Figure 3, Table 10 and Appendix B of the *Revised Addendum, Background Groundwater Quality Report: New Wells for Denison Mines (USA) Corp's White Mesa Mill Site, San Juan County, Utah*, April 30, 2008, prepared by INTERA, Inc. and Table 16 and Appendix D of the *Revised Background Groundwater Quality Report: Existing Wells for Denison Mines (USA) Corp.'s White Mesa Uranium Mill Site, San Juan County, Utah*, October 2007, prepared by INTERA, Inc.

*Range of average historic values for On-Site Monitoring Wells as reported on April 30, 2008 (MW-1, MW-2, MW-3, MW-3A, MW-4, MW-5, MW-11, MW-12, MW-14, MW-15, MW-17, MW-18, MW-19, MW-20, MW-22, MW-23, MW-24, MW-25, MW-26, MW-27, MW-28, MW-29, MW-30, MW-31 and MW-32)

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Tab A

Seeps and Springs Field Data Sheets and Photographic Documentation

Field Data Record-Seeps and Springs Sampling

Seep or Spring Location: Cottonwood spring

Date For Initial Sampling Visit: 6/11/2019 Time: 0950

Sample Collected: Yes No

Date For Second Sampling Visit: _____ Time: _____

Sample Collected: Yes No

Date For Third Sampling Visit: _____ Time: _____

Sample Collected: Yes No

Sampling Personnel: Tanner Holliday, Deen Lyman, Dean Henderson

Weather Conditions at Time of Sampling: Sunny

Estimated Seep or Spring Flow Rate: .50 GPM

Field Parameter Measurements:

- pH 7.09
- Temperature (°C) 15.97
- Conductivity µMHOC/cm 1701
- Turbidity (NTU) (if measured) 0
- Redox Potential Eh (mV) (if measured) 470

Analytical Parameters/Sample Collection Method:

Parameter	Sample Taken		Filtered		Sampling Method			
					Direct	Peristaltic Pump	Ladle	Other (describe in notes section)
VOCs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metals	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Non Radiologics	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QC Samples Associated with this Location:

Rinsate Blank

Duplicate

Duplicate Sample Name: _____

Notes: Arrived on site at 0940 Samples collected at 0950
Water was clear.
Dean Henderson with the DWMRC on site split sampling event.

Cottonwood Spring 6/11/19



Field Data Record-Seeps and Springs Sampling

Seep or Spring Location: Entrance Seep

Date For Initial Sampling Visit: 6/11/2019 **Time:** 0815

Sample Collected: Yes No

Date For Second Sampling Visit: _____ **Time:** _____

Sample Collected: Yes No

Date For Third Sampling Visit: _____ **Time:** _____

Sample Collected: Yes No

Sampling Personnel: Tanner Holliday, Deen Lyman, Dean Henderson

Weather Conditions at Time of Sampling: Sunny

Estimated Seep or Spring Flow Rate: Water was stagnant, no visual flow

Field Parameter Measurements:

- pH 7.09
- Temperature (°C) 14.02
- Conductivity µMHO/cm 1425
- Turbidity (NTU) (if measured) 63.9
- Redox Potential Eh (mV) (if measured) 517

Analytical Parameters/Sample Collection Method:

Parameter	Sample Taken		Filtered		Sampling Method			
					Direct	Peristaltic Pump	Ladle	Other (describe in notes section)
VOCs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metals	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Non Radiologies	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QC Samples Associated with this Location:

- Rinsate Blank
- Duplicate

Duplicate Sample Name: _____

Notes: Arrived on site at 0808 Samples collected at 0815
water was dirty and stagnant, no real flow, cows & horses been in the area.
Dean Henderson with the DWMRC on site split sampling event.

Entrance Seep 6/11/19



Field Data Record-Seeps and Springs Sampling

Seep or Spring Location: Back spring

Date For Initial Sampling Visit: 6/11/2019 Time: 0850

Sample Collected: Yes No

Date For Second Sampling Visit: _____ Time: _____

Sample Collected: Yes No

Date For Third Sampling Visit: _____ Time: _____

Sample Collected: Yes No

Sampling Personnel: Tanner Holliday, Deen Lyman, Dean Henderson

Weather Conditions at Time of Sampling: Sunny

Estimated Seep or Spring Flow Rate: 10 GPM

Field Parameter Measurements:

- pH 7.40
- Temperature (°C) 13.66
- Conductivity μMHO/cm 1254
- Turbidity (NTU) (if measured) 0
- Redox Potential Eh (mV) (if measured) 387

Analytical Parameters/Sample Collection Method:

Parameter	Sample Taken		Filtered		Sampling Method			
					Direct	Peristaltic Pump	Ladle	Other (describe in notes section)
VOCs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metals	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Non Radiologics	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QC Samples Associated with this Location:

Rinsate Blank

Duplicate

Duplicate Sample Name: _____

Notes: Arrived on site at 0840 Samples collected at 0850
water was clear
Dean Henderson with the DWMRC on site split sampling event.

Field Data Record-Seeps and Springs Sampling

Seep or Spring Location: Ruin Spring

Date For Initial Sampling Visit: 6/11/2019 **Time:** 0850

Sample Collected: Yes No

Date For Second Sampling Visit: _____ **Time:** _____

Sample Collected: Yes No

Date For Third Sampling Visit: _____ **Time:** _____

Sample Collected: Yes No

Sampling Personnel: Tanner Holliday, Deen Lyman, Dean Henderson

Weather Conditions at Time of Sampling: Sunny

Estimated Seep or Spring Flow Rate: 1.0 GPM

Field Parameter Measurements:

- pH 7.40
- Temperature (°C) 13.66
- Conductivity µMHOC/cm 1254
- Turbidity (NTU) (if measured) 0
- Redox Potential Eh (mV) (if measured) 387

Analytical Parameters/Sample Collection Method:

Parameter	Sample Taken		Filtered		Sampling Method			
					Direct	Peristaltic Pump	Ladle	Other (describe in notes section)
VOCs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metals	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Non Radiologics	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QC Samples Associated with this Location:

- Rinsate Blank
- Duplicate

Duplicate Sample Name: _____

Notes: Arrived on site at 0840 Samples collected at 0850
water was clear.
Dean Henderson with the DWMRC on site split sampling event.



Ruin Spring 6/11/19

Field Data Record-Seeps and Springs Sampling

Seep or Spring Location: Westwater seep 2019

Date For Initial Sampling Visit: 3/20/2019 Time: 0913

Sample Collected: Yes No

Date For Second Sampling Visit: 3/27/2019 Time: 0930

Sample Collected: Yes No

Date For Third Sampling Visit: _____ Time: _____

Sample Collected: Yes No

Sampling Personnel: Tanner Holliday, Deen Lyman

Weather Conditions at Time of Sampling: cloudy

Estimated Seep or Spring Flow Rate: Low Flow.

Field Parameter Measurements:

-pH 7.14

-Temperature (°C) 11.72

-Conductivity μMHOC/cm 1628

-Turbidity (NTU) (if measured) 11.7

-Redox Potential Eh (mV) (if measured) 355

2026

Analytical Parameters/Sample Collection Method:

Parameter	Sample Taken		Filtered		Sampling Method			
					Direct	Peristaltic Pump	Ladle	Other (describe in notes section)
VOCs	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metals	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Non Radiologics	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QC Samples Associated with this Location:

Rinsate Blank

Duplicate

Duplicate Sample Name: _____

Notes: Arrived on site at 0925. Samples collected at 0930.
Picture was taken. Left site at 0940.

Westwater Seep 3/20/2019





Westwater Seep 3/27/2019

Field Data Record-Seeps and Springs Sampling

Seep or Spring Location: Coral Canyon Seep

Q1 Date For Initial Sampling Visit: 3/20/2019 Time: 0946

Sample Collected: Yes No

Q2 Date For Second Sampling Visit: 6/11/2019 Time: 1231

Sample Collected: Yes No

Q3 Date For Third Sampling Visit: 8/7/2019 Time: 1223

Sample Collected: Yes No

Sampling Personnel: _____

Weather Conditions at Time of Sampling: _____

Estimated Seep or Spring Flow Rate: _____

Field Parameter Measurements:

- pH _____
- Temperature (°C) _____
- Conductivity μ MHOC/cm _____
- Turbidity (NTU) (if measured) _____
- Redox Potential Eh (mV) (if measured) _____

Analytical Parameters/Sample Collection Method:

Parameter	Sample Taken		Filtered		Sampling Method			
					Direct	Peristaltic Pump	Ladle	Other (describe in notes section)
VOCs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metals	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Non Radiologics	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

QC Samples Associated with this Location:

- Rinsate Blank
- Duplicate

Duplicate Sample Name: _____

Notes: Q4 pic was taken at 0854. spring was dry

A photograph of a rocky, shaded canyon. The foreground is dominated by a large, dark tree trunk and a dense thicket of brush, including many thin, light-colored sticks and some green foliage. The canyon walls are rocky and covered in patches of moss and lichen. The lighting is dramatic, with bright highlights on the rocks and deep shadows in the crevices. A white text box is overlaid on the right side of the image.

Corral Canyon Seep 3/20/2019



Corral Canyon Seep 6/11/2019

Corral Canyon Seep 8/7/2019



Corral Canyon Seep 10/18/2019



Field Data Record-Seeps and Springs Sampling

Seep or Spring Location: Corral spring

Q1 Date For Initial Sampling Visit: 3/20/2019 Time: 0933

Sample Collected: Yes No

Q2 Date For Second Sampling Visit: 6/11/2019 Time: 1214

Sample Collected: Yes No

Q3 Date For Third Sampling Visit: 8/7/2019 Time: 1209

Sample Collected: Yes No

Sampling Personnel: _____

Weather Conditions at Time of Sampling: _____

Estimated Seep or Spring Flow Rate: _____

Field Parameter Measurements:

-pH _____

-Temperature (°C) _____

-Conductivity μ MHOC/cm _____

-Turbidity (NTU) (if measured) _____

-Redox Potential Eh (mV) (if measured) _____

Analytical Parameters/Sample Collection Method:

Parameter	Sample Taken		Filtered		Sampling Method			
					Direct	Peristaltic Pump	Ladle	Other (describe in notes section)
VOCs	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Metals	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Nutrients	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other Non Radiologics	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Gross Alpha	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>


QC Samples Associated with this Location:

Rinsate Blank


Duplicate

Duplicate Sample Name: _____


Notes: Q4 pics taken at 0920. spring ~~was~~ was dry.



Corral Spring 3/20/2019

A photograph of a rocky, brush-covered hillside. The foreground is dominated by a dense thicket of dark, tangled branches and some green foliage. The background shows a steep, rocky slope covered in sparse, dry-looking vegetation and patches of green. The ground is uneven and rocky. In the bottom right corner, there is a white rectangular label with black text. Two white circular marks are visible at the top edge of the image.

Corral Spring 6/11/2019

A photograph of a natural, rocky, and brushy area. The foreground is dominated by a dense thicket of dark, bare, tangled branches and shrubs. The ground is uneven, covered with reddish-brown soil, scattered rocks of various sizes, and patches of dry, yellowish-brown grass. A few small, green plants are visible in the lower right. In the upper right corner, there is a white rectangular label with black text. Two white circular marks are visible at the top edge of the image, likely from a scanner or binder.

Corral Spring 8/7/2019



Corral Spring 10/18/2019

Tab B

Field Parameter Measurement Data

Field parameters

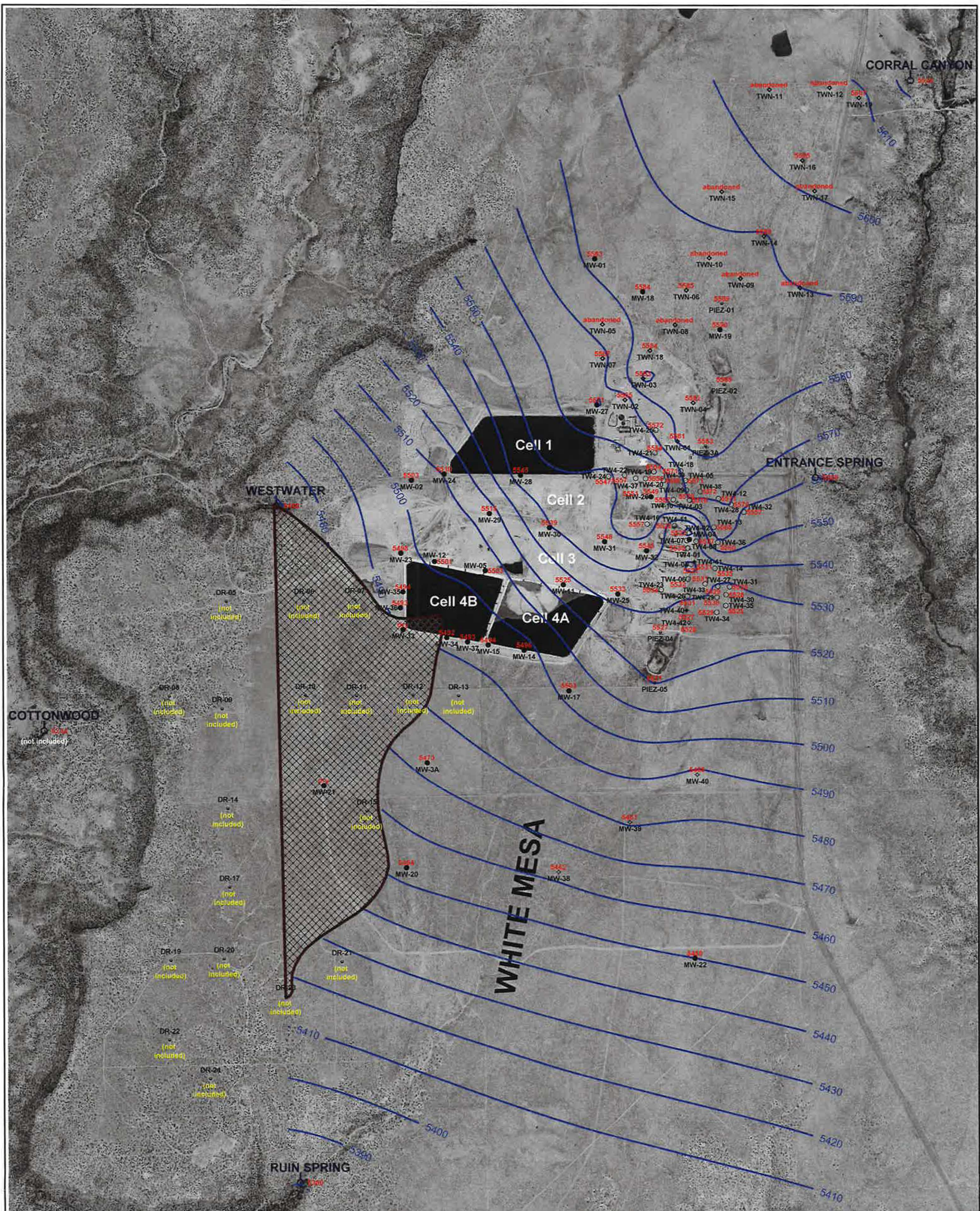
Location	Date Sampled	pH	Conductivity	Turbidity	Redox	Temperature
Cottonwood Spring	6/11/2019	7.09	1701	0	470	15.97
Entrance Seep	6/11/2019	7.09	1425	63.8	517	14.02
Back Spring (Duplicate of Ruin Spring)	6/11/2019	7.40	1254	0	387	13.66
Ruin Spring	6/11/2019	7.40	1254	0	387	13.66
Westwater Seep	3/27/2019	7.14	1628	11.7	355	11.72

Tab C










Survey Data and Contour Map

Seeps and Springs Survey Locations

Mid-December 2009 Survey			
Location	Latitude (N)	Longitude (W)	Elevation
FROG POND	37°33'03.5358"	109°29'04.9552"	5589.56
CORRAL CANYON	37°33'07.1392"	109°29'12.3907"	5623.97
ENTRANCE SPRING	37°32'01.6487"	109°29'33.7005"	5559.71
CORRAL SPRINGS	37°29'37.9192"	109°29'35.8201"	5383.35
RUIN SPRING	37°30'06.0448"	109°31'23.4300"	5380.03
COTTONWOOD	37°31'21.7002"	109°32'14.7923"	5234.33
WESTWATER	37°31'58.5020"	109°31'25.7345"	5468.23
Verification Survey July 2010			
RUIN SPRING	37°30'06.0456"	109°31'23.4181"	5380.01
COTTONWOOD	37°31'21.6987"	109°32'14.7927"	5234.27
WESTWATER	37°31'58.5013"	109°31'25.7357"	5468.32



EXPLANATION

-  estimated dry area
- TW4-42**
 5528 temporary perched monitoring well installed April, 2019 showing elevation in feet amsl
- MW-38**
 5462 perched monitoring well installed February, 2018 showing elevation in feet amsl
- TW4-40**
 5527 temporary perched monitoring well installed February, 2018 showing elevation in feet amsl
- MW-5**
 5503 perched monitoring well showing elevation in feet amsl
- TW4-12**
 5571 temporary perched monitoring well showing elevation in feet amsl
- TWN-7**
 5567 temporary perched nitrate monitoring well showing elevation in feet amsl
- PIEZ-1**
 5589 perched piezometer showing elevation in feet amsl
- RUIN SPRING**
 5380 seep or spring showing elevation in feet amsl

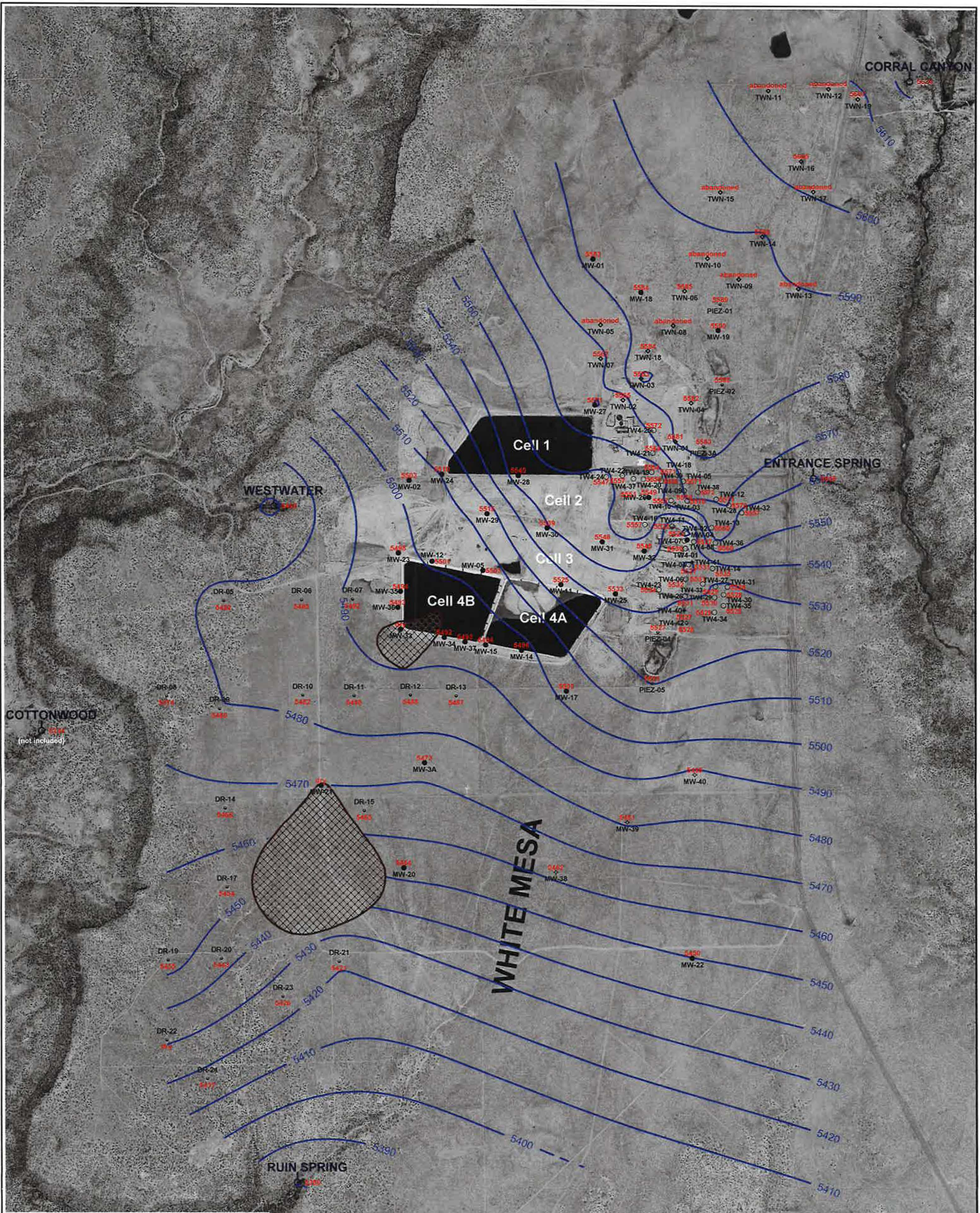
NOTES: MW-4, MW-26, TW4-1, TW4-2, TW4-4, TW4-11, TW4-19, TW4-20, TW4-21, TW4-37, TW4-39, TW4-40 and TW4-41 are chloroform pumping wells; TW4-22, TW4-24, TW4-25 and TWN-2 are nitrate pumping wells; TW4-11 water level is below the base of the Burro Canyon Formation












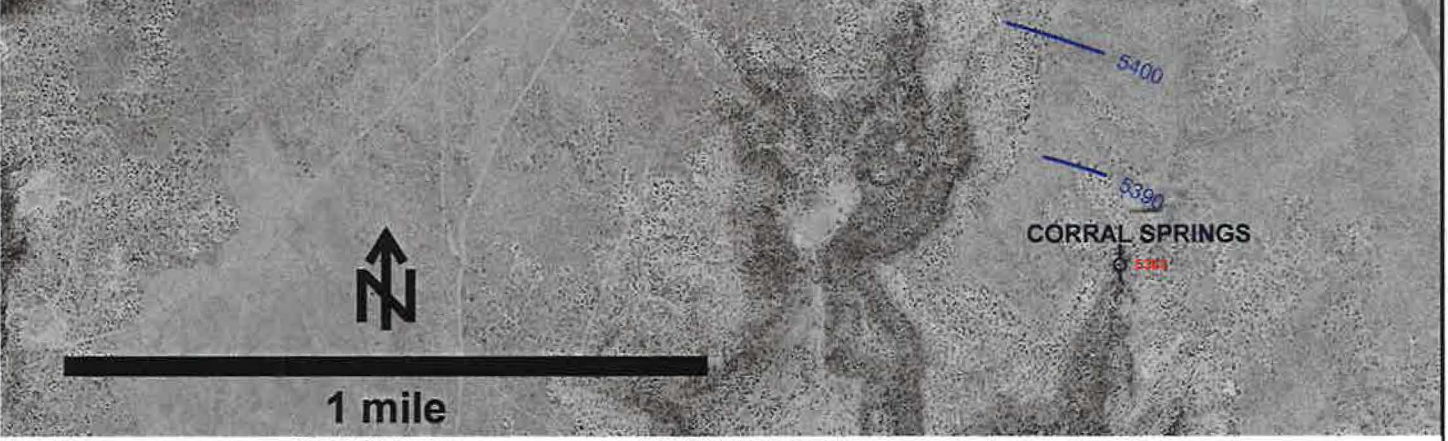
**HYDRO
GEO
CHEM, INC.**


**KRIGED 3rd QUARTER, 2019 WATER LEVELS
(DR PIEZOMETERS NOT INCLUDED)
WHITE MESA SITE**

APPROVED	DATE	REFERENCE	FIGURE
		H:/718000/nov19/WL/Uwl0919nodr.srf	C-1



- EXPLANATION**
-  estimated dry area
 - TW4-42**
 5528 temporary perched monitoring well installed April, 2019 showing elevation in feet amsl
 - MW-38**
 5462 perched monitoring well installed February, 2018 showing elevation in feet amsl
 - TW4-40**
 5527 temporary perched monitoring well installed February, 2018 showing elevation in feet amsl
 - MW-5**
 5503 perched monitoring well showing elevation in feet amsl
 - TW4-12**
 5571 temporary perched monitoring well showing elevation in feet amsl
 - TWN-7**
 5567 temporary perched nitrate monitoring well showing elevation in feet amsl
 - PIEZ-1**
 5589 perched piezometer showing elevation in feet amsl
 - RUIN SPRING**
 5380 seep or spring showing elevation in feet amsl



 <p>HYDRO GEO CHEM, INC.</p>	KRIGED 3rd QUARTER, 2019 WATER LEVELS WHITE MESA SITE		
	APPROVED	DATE	REFERENCE
		H:/718000/nov19/WL/Uwl0919dr.srf	FIGURE C-2

Tab D

Analytical Laboratory Data



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Annual Seeps and Springs 2019
Lab Sample ID: 1903737-001
Client Sample ID: Westwater Seep
Collection Date: 3/27/2019 930h
Received Date: 3/29/2019 1000h

Contact: Tanner Holliday

Analytical Results

DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	4/5/2019 1023h	4/9/2019 1737h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	4/5/2019 1023h	4/10/2019 1316h	E200.7	10.0	185	
Chromium	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.0100	< 0.0100	
Copper	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.0100	< 0.0100	
Iron	mg/L	4/5/2019 1023h	4/10/2019 1523h	E200.8	0.100	1.20	
Lead	mg/L	4/5/2019 1023h	4/9/2019 1737h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	4/5/2019 1023h	4/10/2019 1316h	E200.7	10.0	43.7	
Manganese	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.0100	0.528	B
Mercury	mg/L	4/4/2019 1830h	4/10/2019 830h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	4/5/2019 1023h	4/9/2019 1728h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	4/5/2019 1023h	4/10/2019 1329h	E200.7	1.00	3.99	
Selenium	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.00500	< 0.00500	
Silver	mg/L	4/5/2019 1023h	4/9/2019 1728h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	4/5/2019 1023h	4/10/2019 1316h	E200.7	10.0	152	2
Thallium	mg/L	4/5/2019 1023h	4/9/2019 1737h	E200.8	0.000500	< 0.000500	
Tin	mg/L	4/5/2019 1023h	4/8/2019 1225h	E200.8	0.100	< 0.100	
Uranium	mg/L	4/5/2019 1023h	4/9/2019 1741h	E200.8	0.000300	0.00492	
Vanadium	mg/L	4/5/2019 1023h	4/10/2019 1329h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	4/5/2019 1023h	4/9/2019 1728h	E200.8	0.0100	< 0.0100	†

† - Analyte(s) were observed above the reporting limit in the filter blank. The filter blank was acceptable, as any associated samples do not have results above the reporting limit/PQL.

2 - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.

B - The filter blank was acceptable, as the method blank result is less than 10% of the lowest reported sample concentration.



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Annual Seeps and Springs 2019
Lab Sample ID: 1903737-001
Client Sample ID: Westwater Seep
Collection Date: 3/27/2019 930h
Received Date: 3/29/2019 1000h

Contact: Tanner Holliday

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	4/9/2019 1235h	4/9/2019 1649h	E350.1	0.0500	< 0.0500	
Bicarbonate (as CaCO ₃)	mg/L		4/2/2019 749h	SM2320B	1.00	450	
Carbonate (as CaCO ₃)	mg/L		4/2/2019 749h	SM2320B	1.00	< 1.00	
Chloride	mg/L		4/10/2019 2248h	E300.0	5.00	41.6	
Fluoride	mg/L		4/11/2019 227h	E300.0	0.100	0.505	
Ion Balance	%		4/10/2019 1356h	Calc.	-100	0.902	
Nitrate/Nitrite (as N)	mg/L		3/29/2019 1326h	E353.2	0.100	< 0.100	
Sulfate	mg/L		4/10/2019 2248h	E300.0	37.5	436	
Total Anions, Measured	meq/L		4/10/2019 1356h	Calc.		19.3	
Total Cations, Measured	meq/L		4/10/2019 1356h	Calc.		19.6	
Total Dissolved Solids	mg/L		3/29/2019 1145h	SM2540C	20.0	1,110	
Total Dissolved Solids Ratio, Measured/Calculated			4/10/2019 1356h	Calc.		0.981	
Total Dissolved Solids, Calculated	mg/L		4/10/2019 1356h	Calc.		1,130	

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer



ORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Annual Seeps and Springs 2019
Lab Sample ID: 1903737-001A
Client Sample ID: Westwater Seep
Collection Date: 3/27/2019 930h
Received Date: 3/29/2019 1000h

Contact: Tanner Holliday

Test Code: 8260-W-DEN100

Analytical Results

VOAs by GC/MS Method 8260C/5030C

Analyzed: 3/29/2019 1207h

Units: µg/L

Dilution Factor: 1

Method: SW8260C

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

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Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	Units: µg/L	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4		17060-07-0	47.8	50.00	95.5	72-151	
Surr: 4-Bromofluorobenzene		460-00-4	51.3	50.00	103	80-152	
Surr: Dibromofluoromethane		1868-53-7	50.6	50.00	101	72-135	
Surr: Toluene-d8		2037-26-5	50.8	50.00	102	80-124	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: April 26, 2019

Company : Energy Fuels Resources (USA), Inc.
 Address : 225 Union Boulevard
 Suite 600
 Lakewood, Colorado 80228
 Contact: Ms. Kathy Weinel
 Project: Analytical for Annual Seeps and Spring 2019

Client Sample ID: Westwater Seep	Project: DNMI00106
Sample ID: 475027001	Client ID: DNMI001
Matrix: Ground Water	
Collect Date: 27-MAR-19 09:30	
Receive Date: 01-APR-19	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Total Alpha Radium, Liquid "As Received"													
Gross Radium Alpha	U	0.232	+/-0.270	0.982	1.00	pCi/L			JXC9	04/05/19	1228	1863376	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 903.0	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			95.1	(25%-125%)

Notes:

Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

Column headers are defined as follows:

- | | |
|---------------------------------------|--------------------------------|
| DF: Dilution Factor | Lc/LC: Critical Level |
| DL: Detection Limit | PF: Prep Factor |
| MDA: Minimum Detectable Activity | RL: Reporting Limit |
| MDC: Minimum Detectable Concentration | SQL: Sample Quantitation Limit |



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-002
Client Sample ID: Ruin Spring
Collection Date: 6/11/2019 850h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Analytical Results

DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	6/14/2019 1410h	6/17/2019 1535h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	6/14/2019 1410h	6/28/2019 1518h	E200.7	10.0	165	
Chromium	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.0100	< 0.0100	
Copper	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.0100	< 0.0100	
Iron	mg/L	6/14/2019 1410h	6/17/2019 1535h	E200.8	0.0300	< 0.0300	
Lead	mg/L	6/14/2019 1410h	6/17/2019 1535h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	6/14/2019 1410h	6/28/2019 1518h	E200.7	10.0	45.6	
Manganese	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.0100	< 0.0100	
Mercury	mg/L	6/21/2019 1450h	6/24/2019 752h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.0100	0.0202	
Nickel	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	6/14/2019 1410h	6/28/2019 1705h	E200.7	1.00	3.31	
Selenium	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.00500	0.0108	
Silver	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	6/14/2019 1410h	6/28/2019 1518h	E200.7	10.0	128	
Thallium	mg/L	6/14/2019 1410h	6/17/2019 1535h	E200.8	0.000500	< 0.000500	
Tin	mg/L	6/14/2019 1410h	6/17/2019 1351h	E200.8	0.100	< 0.100	
Uranium	mg/L	6/14/2019 1410h	6/17/2019 1550h	E200.8	0.000300	0.00902	
Vanadium	mg/L	6/14/2019 1410h	6/28/2019 1705h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	6/14/2019 1410h	6/17/2019 1930h	E200.8	0.0100	< 0.0100	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-002
Client Sample ID: Ruin Spring
Collection Date: 6/11/2019 850h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Analytical Results

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
 Toll Free: (888) 263-8686
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Kyle F. Gross
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Jose Rocha
 QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	6/23/2019 2000h	6/24/2019 1127h	E350.1	0.0500	< 0.0500	
Bicarbonate (as CaCO3)	mg/L		6/17/2019 739h	SM2320B	1.00	202	
Carbonate (as CaCO3)	mg/L		6/17/2019 739h	SM2320B	1.00	< 1.00	
Chloride	mg/L		6/28/2019 043h	E300.0	1.00	23.9	
Fluoride	mg/L		6/28/2019 256h	E300.0	0.100	0.505	
Ion Balance	%		6/28/2019 1847h	Calc.	-100	9.31	
Nitrate/Nitrite (as N)	mg/L		6/14/2019 1048h	E353.2	0.100	1.56	
Sulfate	mg/L		6/27/2019 2139h	E300.0	37.5	474	
Total Anions, Measured	meq/L		6/28/2019 1847h	Calc.		14.6	
Total Cations, Measured	meq/L		6/28/2019 1847h	Calc.		17.6	
Total Dissolved Solids	mg/L		6/14/2019 1100h	SM2540C	20.0	900	
Total Dissolved Solids Ratio, Measured/Calculated			6/28/2019 1847h	Calc.		0.935	
Total Dissolved Solids, Calculated	mg/L		6/28/2019 1847h	Calc.		962	



ORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-002A
Client Sample ID: Ruin Spring
Collection Date: 6/11/2019 850h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Test Code: 8260-W-DEN100

Analytical Results

VOAs by GC/MS Method 8260C/5030C

Analyzed: 6/13/2019 1437h

Units: µg/L

Dilution Factor: 1

Method: SW8260C

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	Units: µg/L	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4		17060-07-0	51.3	50.00	103	72-151	
Surr: 4-Bromofluorobenzene		460-00-4	64.8	50.00	130	80-152	
Surr: Dibromofluoromethane		1868-53-7	45.2	50.00	90.3	72-135	
Surr: Toluene-d8		2037-26-5	51.7	50.00	103	80-124	

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: July 8, 2019

Company : Energy Fuels Resources (USA), Inc.
 Address : 225 Union Boulevard
 Suite 600
 Lakewood, Colorado 80228
 Contact: Ms. Kathy Weinel
 Project: Analytical for Seeps and Springs 2019

Client Sample ID: Ruin Spring	Project: DNMI00106
Sample ID: 481772002	Client ID: DNMI001
Matrix: Ground Water	
Collect Date: 11-JUN-19 08:50	
Receive Date: 13-JUN-19	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Total Alpha Radium, Liquid "As Received"													
Gross Radium Alpha	U	-0.116	+/-0.106	0.642	1.00	pCi/L			LXB3	06/28/19	1148	1888588	1

The following Analytical Methods were performed:

Method	Description	Analyst	Comments
	EPA 903.0		

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			90.6	(25%-125%)

Notes:

Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

Column headers are defined as follows:

DF: Dilution Factor	Lc/LC: Critical Level
DL: Detection Limit	PF: Prep Factor
MDA: Minimum Detectable Activity	RL: Reporting Limit
MDC: Minimum Detectable Concentration	SQL: Sample Quantitation Limit



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-001
Client Sample ID: Entrance Seep
Collection Date: 6/11/2019 815h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Analytical Results

DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.00500	0.00894	
Beryllium	mg/L	6/14/2019 1410h	6/17/2019 1448h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	6/14/2019 1410h	6/28/2019 1507h	E200.7	10.0	155	2
Chromium	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.0100	< 0.0100	
Copper	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.0100	< 0.0100	
Iron	mg/L	6/14/2019 1410h	6/17/2019 1448h	E200.8	0.0300	0.453	
Lead	mg/L	6/14/2019 1410h	6/17/2019 1448h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	6/14/2019 1410h	6/28/2019 1507h	E200.7	10.0	48.0	2
Manganese	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.0100	0.587	
Mercury	mg/L	6/21/2019 1450h	6/24/2019 758h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.0100	0.0143	
Nickel	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	6/14/2019 1410h	6/28/2019 1703h	E200.7	1.00	4.66	
Selenium	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.00500	< 0.00500	
Silver	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	6/14/2019 1410h	6/28/2019 1507h	E200.7	10.0	126	2
Thallium	mg/L	6/14/2019 1410h	6/17/2019 1448h	E200.8	0.000500	< 0.000500	
Tin	mg/L	6/14/2019 1410h	6/17/2019 1342h	E200.8	0.100	< 0.100	
Uranium	mg/L	6/14/2019 1410h	6/17/2019 1547h	E200.8	0.000300	0.0701	
Vanadium	mg/L	6/14/2019 1410h	6/28/2019 1703h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	6/14/2019 1410h	6/17/2019 1927h	E200.8	0.0100	< 0.0100	

² - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-001
Client Sample ID: Entrance Seep
Collection Date: 6/11/2019 815h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Analytical Results

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	6/23/2019 2000h	6/24/2019 1120h	E350.1	0.0500	0.168	'
Bicarbonate (as CaCO3)	mg/L		6/17/2019 739h	SM2320B	1.00	480	
Carbonate (as CaCO3)	mg/L		6/17/2019 739h	SM2320B	1.00	< 1.00	
Chloride	mg/L		6/27/2019 2016h	E300.0	1.00	104	
Fluoride	mg/L		6/28/2019 346h	E300.0	0.100	0.912	
Ion Balance	%		6/28/2019 1847h	Calc.	-100	4.46	
Nitrate/Nitrite (as N)	mg/L		6/14/2019 1110h	E353.2	0.100	< 0.100	
Sulfate	mg/L		6/27/2019 2016h	E300.0	7.50	160	
Total Anions, Measured	meq/L		6/28/2019 1847h	Calc.		15.9	
Total Cations, Measured	meq/L		6/28/2019 1847h	Calc.		17.4	
Total Dissolved Solids	mg/L		6/14/2019 1100h	SM2540C	20.0	892	@
Total Dissolved Solids Ratio, Measured/Calculated			6/28/2019 1847h	Calc.		1.01	
Total Dissolved Solids, Calculated	mg/L		6/28/2019 1847h	Calc.		887	

@ - High RPD due to suspected sample non-homogeneity or matrix interference.

' - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.

3440 South 700 West
 Salt Lake City, UT 84119

 Phone: (801) 263-8686
 Toll Free: (888) 263-8686
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 e-mail: awal@awal-labs.com
 web: www.awal-labs.com

 Kyle F. Gross
 Laboratory Director

 Jose Rocha
 QA Officer



ORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-001A
Client Sample ID: Entrance Seep
Collection Date: 6/11/2019 815h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Test Code: 8260-W-DEN100

Analytical Results

VOAs by GC/MS Method 8260C/5030C

Analyzed: 6/13/2019 1417h

Units: µg/L

Dilution Factor: 1

Method: SW8260C

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	5.59	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	Units: µg/L	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4		17060-07-0	56.3	50.00	113	72-151	
Surr: 4-Bromofluorobenzene		460-00-4	53.1	50.00	106	80-152	
Surr: Dibromofluoromethane		1868-53-7	51.1	50.00	102	72-135	
Surr: Toluene-d8		2037-26-5	50.6	50.00	101	80-124	

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2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Certificate of Analysis

Report Date: July 8, 2019

Company : Energy Fuels Resources (USA), Inc.
 Address : 225 Union Boulevard
 Suite 600
 Lakewood, Colorado 80228
 Contact: Ms. Kathy Weinel
 Project: Analytical for Seeps and Springs 2019

Client Sample ID: Entrance Seep	Project: DNMI00106
Sample ID: 481772001	Client ID: DNMI001
Matrix: Ground Water	
Collect Date: 11-JUN-19 08:15	
Receive Date: 13-JUN-19	
Collector: Client	

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Total Alpha Radium, Liquid "As Received"													
Gross Radium Alpha		2.63	+/-0.455	0.947	1.00	pCi/L			LXB3	06/28/19	1148	1888588	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments											
	EPA 903.0												
Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits								
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			89.9	(25%-125%)								

Notes:

Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

Column headers are defined as follows:

- | | |
|---------------------------------------|--------------------------------|
| DF: Dilution Factor | Lc/LC: Critical Level |
| DL: Detection Limit | PF: Prep Factor |
| MDA: Minimum Detectable Activity | RL: Reporting Limit |
| MDC: Minimum Detectable Concentration | SQL: Sample Quantitation Limit |



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-003
Client Sample ID: Cottonwood Spring
Collection Date: 6/11/2019 950h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Analytical Results

DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	6/14/2019 1410h	6/17/2019 1454h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	6/14/2019 1410h	6/28/2019 1527h	E200.7	10.0	122	
Chromium	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.0100	< 0.0100	
Copper	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.0100	< 0.0100	
Iron	mg/L	6/14/2019 1410h	6/17/2019 1454h	E200.8	0.0300	< 0.0300	
Lead	mg/L	6/14/2019 1410h	6/17/2019 1454h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	6/14/2019 1410h	6/28/2019 1527h	E200.7	10.0	35.3	
Manganese	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.0100	< 0.0100	
Mercury	mg/L	6/21/2019 1450h	6/24/2019 800h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.0100	< 0.0100	
Nickel	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	6/14/2019 1410h	6/28/2019 1712h	E200.7	1.00	6.78	
Selenium	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.00500	< 0.00500	
Silver	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	6/14/2019 1410h	6/28/2019 1527h	E200.7	10.0	268	
Thallium	mg/L	6/14/2019 1410h	6/17/2019 1454h	E200.8	0.000500	< 0.000500	
Tin	mg/L	6/14/2019 1410h	6/17/2019 1401h	E200.8	0.100	< 0.100	
Uranium	mg/L	6/14/2019 1410h	6/17/2019 1553h	E200.8	0.000300	0.0101	
Vanadium	mg/L	6/14/2019 1410h	6/28/2019 1712h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	6/14/2019 1410h	6/17/2019 1939h	E200.8	0.0100	< 0.0100	

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-003
Client Sample ID: Cottonwood Spring
Collection Date: 6/11/2019 950h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Analytical Results

3440 South 700 West
Salt Lake City, UT 84119

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Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	6/23/2019 2000h	6/24/2019 1128h	E350.1	0.0500	< 0.0500	
Bicarbonate (as CaCO3)	mg/L		6/17/2019 739h	SM2320B	1.00	286	
Carbonate (as CaCO3)	mg/L		6/17/2019 739h	SM2320B	1.00	< 1.00	
Chloride	mg/L		6/27/2019 2156h	E300.0	5.00	138	
Fluoride	mg/L		6/28/2019 403h	E300.0	0.100	0.249	
Ion Balance	%		6/28/2019 1847h	Calc.	-100	6.19	
Nitrate/Nitrite (as N)	mg/L		6/14/2019 1111h	E353.2	0.100	< 0.100	
Sulfate	mg/L		6/27/2019 2156h	E300.0	37.5	423	
Total Anions, Measured	meq/L		6/28/2019 1847h	Calc.		18.4	
Total Cations, Measured	meq/L		6/28/2019 1847h	Calc.		20.9	
Total Dissolved Solids	mg/L		6/14/2019 1100h	SM2540C	20.0	1,010	
Total Dissolved Solids Ratio, Measured/Calculated			6/28/2019 1847h	Calc.		0.868	
Total Dissolved Solids, Calculated	mg/L		6/28/2019 1847h	Calc.		1,170	



ORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-003A
Client Sample ID: Cottonwood Spring
Collection Date: 6/11/2019 950h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Test Code: 8260-W-DEN100

Analytical Results

VOAs by GC/MS Method 8260C/5030C

Analyzed: 6/13/2019 1457h

Units: µg/L

Dilution Factor: 1

Method: SW8260C

3440 South 700 West

Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	Units: µg/L	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4		17060-07-0	51.2	50.00	102	72-151	
Surr: 4-Bromofluorobenzene		460-00-4	54.5	50.00	109	80-152	
Surr: Dibromofluoromethane		1868-53-7	45.5	50.00	91.0	72-135	
Surr: Toluene-d8		2037-26-5	50.6	50.00	101	80-124	

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Certificate of Analysis

Report Date: July 8, 2019

Company : Energy Fuels Resources (USA), Inc.
Address : 225 Union Boulevard
Suite 600
Lakewood, Colorado 80228
Contact: Ms. Kathy Weinel
Project: Analytical for Seeps and Springs 2019

Client Sample ID: Cottonwood Spring Project: DNMI00106
Sample ID: 481772003 Client ID: DNMI001
Matrix: Ground Water
Collect Date: 11-JUN-19 09:50
Receive Date: 13-JUN-19
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Total Alpha Radium, Liquid "As Received"													
Gross Radium Alpha	U	0.393	+/-0.257	0.833	1.00	pCi/L			LXB3	06/28/19	1149	1888588	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments											
	EPA 903.0												
Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits								
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			76.6	(25%-125%)								

Notes:

Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

Column headers are defined as follows:

DF: Dilution Factor Lc/LC: Critical Level
DL: Detection Limit PF: Prep Factor
MDA: Minimum Detectable Activity RL: Reporting Limit
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-004
Client Sample ID: Back Spring
Collection Date: 6/11/2019 850h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Analytical Results

DISSOLVED METALS

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Arsenic	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.00500	< 0.00500	
Beryllium	mg/L	6/14/2019 1410h	6/17/2019 1508h	E200.8	0.000500	< 0.000500	
Cadmium	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.000500	< 0.000500	
Calcium	mg/L	6/14/2019 1410h	6/28/2019 1529h	E200.7	10.0	157	
Chromium	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.0250	< 0.0250	
Cobalt	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.0100	< 0.0100	
Copper	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.0100	< 0.0100	
Iron	mg/L	6/14/2019 1410h	6/17/2019 1508h	E200.8	0.0300	< 0.0300	
Lead	mg/L	6/14/2019 1410h	6/17/2019 1508h	E200.8	0.00100	< 0.00100	
Magnesium	mg/L	6/14/2019 1410h	6/28/2019 1529h	E200.7	10.0	35.7	
Manganese	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.0100	< 0.0100	
Mercury	mg/L	6/21/2019 1450h	6/24/2019 802h	E245.1	0.000500	< 0.000500	
Molybdenum	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.0100	0.0187	
Nickel	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.0200	< 0.0200	
Potassium	mg/L	6/14/2019 1410h	6/28/2019 1715h	E200.7	1.00	3.30	
Selenium	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.00500	0.00961	
Silver	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.0100	< 0.0100	
Sodium	mg/L	6/14/2019 1410h	6/28/2019 1529h	E200.7	10.0	119	
Thallium	mg/L	6/14/2019 1410h	6/17/2019 1508h	E200.8	0.000500	< 0.000500	
Tin	mg/L	6/14/2019 1410h	6/17/2019 1404h	E200.8	0.100	< 0.100	
Uranium	mg/L	6/14/2019 1410h	6/17/2019 1557h	E200.8	0.000300	0.00901	
Vanadium	mg/L	6/14/2019 1410h	6/28/2019 1715h	E200.7	0.0150	< 0.0150	
Zinc	mg/L	6/14/2019 1410h	6/17/2019 1943h	E200.8	0.0100	< 0.0100	

3440 South 700 West
 Salt Lake City, UT 84119

 Phone: (801) 263-8686
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 web: www.awal-labs.com

Kyle F. Gross
 Laboratory Director

Jose Rocha
 QA Officer



INORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Tanner Holliday
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-004
Client Sample ID: Back Spring
Collection Date: 6/11/2019 850h
Received Date: 6/13/2019 1054h

Analytical Results

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686
Toll Free: (888) 263-8686
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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Compound	Units	Date Prepared	Date Analyzed	Method Used	Reporting Limit	Analytical Result	Qual
Ammonia (as N)	mg/L	6/23/2019 2000h	6/24/2019 1129h	E350.1	0.0500	< 0.0500	
Bicarbonate (as CaCO3)	mg/L		6/17/2019 739h	SM2320B	1.00	202	
Carbonate (as CaCO3)	mg/L		6/17/2019 739h	SM2320B	1.00	< 1.00	
Chloride	mg/L		6/28/2019 100h	E300.0	1.00	23.7	
Fluoride	mg/L		6/28/2019 420h	E300.0	0.100	0.460	
Ion Balance	%		6/28/2019 1847h	Calc.	-100	6.06	
Nitrate/Nitrite (as N)	mg/L		6/14/2019 1051h	E353.2	0.100	1.65	
Sulfate	mg/L		6/27/2019 2213h	E300.0	37.5	455	
Total Anions, Measured	meq/L		6/28/2019 1847h	Calc.		14.2	
Total Cations, Measured	meq/L		6/28/2019 1847h	Calc.		16.1	
Total Dissolved Solids	mg/L		6/14/2019 1100h	SM2540C	20.0	816	
Total Dissolved Solids Ratio, Measured/Calculated			6/28/2019 1847h	Calc.		0.889	
Total Dissolved Solids, Calculated	mg/L		6/28/2019 1847h	Calc.		918	



ORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-004A
Client Sample ID: Back Spring
Collection Date: 6/11/2019 850h
Received Date: 6/13/2019 1054h

Contact: Tanner Holliday

Test Code: 8260-W-DEN100

Analytical Results

VOAs by GC/MS Method 8260C/5030C

Analyzed: 6/13/2019 1517h

Units: µg/L

Dilution Factor: 1

Method: SW8260C

3440 South 700 West
Salt Lake City, UT 84119

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Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	Units: µg/L	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4		17060-07-0	51.4	50.00	103	72-151	
Surr: 4-Bromofluorobenzene		460-00-4	55.2	50.00	110	80-152	
Surr: Dibromofluoromethane		1868-53-7	45.6	50.00	91.3	72-135	
Surr: Toluene-d8		2037-26-5	51.5	50.00	103	80-124	

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Certificate of Analysis

Report Date: July 8, 2019

Company : Energy Fuels Resources (USA), Inc.
Address : 225 Union Boulevard
Suite 600
Lakewood, Colorado 80228
Contact: Ms. Kathy Weinel
Project: Analytical for Seeps and Springs 2019

Client Sample ID: Back Spring Project: DNMI00106
Sample ID: 481772004 Client ID: DNMI001
Matrix: Ground Water
Collect Date: 11-JUN-19 08:50
Receive Date: 13-JUN-19
Collector: Client

Parameter	Qualifier	Result	Uncertainty	MDC	RL	Units	PF	DF	Analyst	Date	Time	Batch	Method
Rad Gas Flow Proportional Counting													
GFPC, Total Alpha Radium, Liquid "As Received"													
Gross Radium Alpha	U	0.201	+/-0.158	0.545	1.00	pCi/L			LXB3	07/02/19	0613	1888588	1

The following Analytical Methods were performed:

Method	Description	Analyst Comments
	EPA 903.0	

Surrogate/Tracer Recovery	Test	Result	Nominal	Recovery%	Acceptable Limits
Barium Carrier	GFPC, Total Alpha Radium, Liquid "As Received"			91.3	(25%-125%)

Notes:

Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

SRL = Sample Reporting Limit. For metals analysis only. When the sample is U qualified and ND, the SRL column reports the value which is the greater of either the adjusted MDL or the CRDL.

Column headers are defined as follows:

DF: Dilution Factor Lc/LC: Critical Level
DL: Detection Limit PF: Prep Factor
MDA: Minimum Detectable Activity RL: Reporting Limit
MDC: Minimum Detectable Concentration SQL: Sample Quantitation Limit



ORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc.
Project: Annual Seeps and Springs 2019
Lab Sample ID: 1903737-002A
Client Sample ID: Trip Blank
Collection Date: 3/27/2019 930h
Received Date: 3/29/2019 1000h

Contact: Tanner Holliday

Test Code: 8260-W-DEN100

Analytical Results

VOAs by GC/MS Method 8260C/5030C

Analyzed: 3/29/2019 1227h

Units: µg/L

Dilution Factor: 1

Method: SW8260C

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

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web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Surrogate	Units: µg/L	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4		17060-07-0	48.5	50.00	97.0	72-151	
Surr: 4-Bromofluorobenzene		460-00-4	52.2	50.00	104	80-152	
Surr: Dibromofluoromethane		1868-53-7	50.5	50.00	101	72-135	
Surr: Toluene-d8		2037-26-5	51.2	50.00	102	80-124	



ORGANIC ANALYTICAL REPORT

Client: Energy Fuels Resources, Inc. **Contact:** Tanner Holliday
Project: Seeps and Springs 2019
Lab Sample ID: 1906343-005A
Client Sample ID: Trip Blank
Collection Date: 6/11/2019 815h
Received Date: 6/13/2019 1054h

Test Code: 8260-W-DEN100

Analytical Results

VOAs by GC/MS Method 8260C/5030C

Analyzed: 6/13/2019 1357h

Units: µg/L

Dilution Factor: 1

Method: SW8260C

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

Kyle F. Gross

Laboratory Director

Compound	CAS Number	Reporting Limit	Analytical Result	Qual
2-Butanone	78-93-3	20.0	< 20.0	
Acetone	67-64-1	20.0	< 20.0	
Benzene	71-43-2	1.00	< 1.00	
Carbon tetrachloride	56-23-5	1.00	< 1.00	
Chloroform	67-66-3	1.00	< 1.00	
Chloromethane	74-87-3	1.00	< 1.00	
Methylene chloride	75-09-2	1.00	< 1.00	
Naphthalene	91-20-3	1.00	< 1.00	
Tetrahydrofuran	109-99-9	1.00	< 1.00	
Toluene	108-88-3	1.00	< 1.00	
Xylenes, Total	1330-20-7	1.00	< 1.00	

Jose Rocha

QA Officer

Surrogate	Units: µg/L	CAS	Result	Amount Spiked	% REC	Limits	Qual
Surr: 1,2-Dichloroethane-d4		17060-07-0	50.9	50.00	102	72-151	
Surr: 4-Bromofluorobenzene		460-00-4	53.9	50.00	108	80-152	
Surr: Dibromofluoromethane		1868-53-7	45.4	50.00	90.9	72-135	
Surr: Toluene-d8		2037-26-5	50.2	50.00	100	80-124	



Tanner Holliday
Energy Fuels Resources, Inc.
6425 South Hwy 191
Blanding, UT 84511
TEL: (435) 678-2221

RE: Annual Seeps and Springs 2019

Dear Tanner Holliday:

Lab Set ID: 1903737

3440 South 700 West
Salt Lake City, UT 84119

American West Analytical Laboratories received sample(s) on 3/29/2019 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

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All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

Thank You,

Approved by:

Kyle F.	Digitally signed by Kyle F. Gross
Gross	Date: 2019.04.11 15:39:22 -06'00'

Laboratory Director or designee



SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc.
Project: Annual Seeps and Springs 2019
Lab Set ID: 1903737
Date Received: 3/29/2019 1000h

Contact: Tanner Holliday

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1903737-001A	Westwater Seep	3/27/2019 930h	Aqueous	VOA by GC/MS Method 8260C/5030C
1903737-001B	Westwater Seep	3/27/2019 930h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, Low Level
1903737-001B	Westwater Seep	3/27/2019 930h	Aqueous	Anions, E300.0
1903737-001C	Westwater Seep	3/27/2019 930h	Aqueous	Total Dissolved Solids, A2540C
1903737-001D	Westwater Seep	3/27/2019 930h	Aqueous	Ammonia, Aqueous
1903737-001D	Westwater Seep	3/27/2019 930h	Aqueous	Nitrite/Nitrate (as N), E353.2
1903737-001E	Westwater Seep	3/27/2019 930h	Aqueous	Mercury, Drinking Water Dissolved
1903737-001E	Westwater Seep	3/27/2019 930h	Aqueous	ICPMS Metals, Dissolved
1903737-001E	Westwater Seep	3/27/2019 930h	Aqueous	ICP Metals, Dissolved
1903737-001E	Westwater Seep	3/27/2019 930h	Aqueous	Ion Balance
1903737-002A	Trip Blank	3/27/2019 930h	Aqueous	VOA by GC/MS Method 8260C/5030C

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Kyle F. Gross

Laboratory Director

Jose Rocha

QA Officer



Inorganic Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Tanner Holliday
Project: Annual Seeps and Springs 2019
Lab Set ID: 1903737

3440 South 700 West
Salt Lake City, UT 84119

Sample Receipt Information:

Date of Receipt: 3/29/2019
Date(s) of Collection: 3/27/2019
Sample Condition: Intact
C-O-C Discrepancies: See Chain of Custody

Holding Time and Preservation Requirements: The analysis and preparation for the samples were performed within the method holding times. The samples were properly preserved.

Preparation and Analysis Requirements: The samples were analyzed following the methods stated on the analytical reports.

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Batch QC Requirements: MB, LCS, MS, MSD, RPD, DUP:

Method Blanks (MB): No target analytes were detected above reporting limits, indicating that the procedure was free from contamination, with the following exceptions: Zinc and Manganese were observed above the reporting limit in the filter blank MB-FILTER-61769. The blank was acceptable, as any associated samples do not have results above the reporting limits.

Laboratory Control Samples (LCS): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicates (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
1903737-001E	Sodium	MSD	High analyte concentration

Duplicate (DUP): The parameters that required a duplicate analysis had RPDs within the control limits.

Corrective Action: None required.



Volatile Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Tanner Holliday
Project: Annual Seeps and Springs 2019
Lab Set ID: 1903737

3440 South 700 West
Salt Lake City, UT 84119

Sample Receipt Information:

Date of Receipt: 3/29/2019
Date(s) of Collection: 3/27/2019
Sample Condition: Intact
C-O-C Discrepancies: See Chain of Custody
Method: SW-846 8260C/5030C
Analysis: Volatile Organic Compounds

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Toll Free: (888) 263-8686

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e-mail: awal@awal-labs.com

web: www.awal-labs.com

General Set Comments: No target analytes were observed above reporting limits.

Holding Time and Preservation Requirements: All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

Kyle F. Gross
Laboratory Director

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Jose Rocha
QA Officer

Batch QC Requirements: MB, LCS, MS, MSD, RPD, and Surrogates:

Method Blanks (MBs): No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

Laboratory Control Sample (LCSs): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicate (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

Surrogates: All surrogate recoveries were within established limits.

Corrective Action: None required.



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-61799		Date Analyzed:	04/10/2019 1314h										
Test Code: 200.7-DIS		Date Prepared:	04/05/2019 1023h										
Calcium	11.0	mg/L	E200.7	0.0937	1.00	10.00	0	110	85 - 115				
Magnesium	11.2	mg/L	E200.7	0.0439	1.00	10.00	0	112	85 - 115				
Potassium	11.1	mg/L	E200.7	0.134	1.00	10.00	0	111	85 - 115				
Sodium	11.1	mg/L	E200.7	0.187	1.00	10.00	0	111	85 - 115				
Vanadium	0.218	mg/L	E200.7	0.00138	0.00500	0.2000	0	109	85 - 115				
Lab Sample ID: LCS-61800		Date Analyzed:	04/08/2019 1221h										
Test Code: 200.8-DIS		Date Prepared:	04/05/2019 1023h										
Arsenic	0.198	mg/L	E200.8	0.000298	0.00200	0.2000	0	98.8	85 - 115				
Beryllium	0.198	mg/L	E200.8	0.000198	0.00200	0.2000	0	99.2	85 - 115				
Cadmium	0.192	mg/L	E200.8	0.0000858	0.000500	0.2000	0	96.2	85 - 115				
Chromium	0.200	mg/L	E200.8	0.00191	0.00200	0.2000	0	99.9	85 - 115				
Cobalt	0.195	mg/L	E200.8	0.000300	0.00400	0.2000	0	97.4	85 - 115				
Copper	0.196	mg/L	E200.8	0.00282	0.00200	0.2000	0	97.9	85 - 115				
Iron	0.992	mg/L	E200.8	0.0496	0.100	1.000	0	99.2	85 - 115				
Lead	0.180	mg/L	E200.8	0.000448	0.00200	0.2000	0	90.1	85 - 115				
Manganese	0.200	mg/L	E200.8	0.00108	0.00200	0.2000	0	99.8	85 - 115				
Molybdenum	0.191	mg/L	E200.8	0.000652	0.00200	0.2000	0	95.6	85 - 115				
Selenium	0.197	mg/L	E200.8	0.000574	0.00200	0.2000	0	98.5	85 - 115				
Thallium	0.177	mg/L	E200.8	0.000154	0.00200	0.2000	0	88.7	85 - 115				
Tin	0.967	mg/L	E200.8	0.00116	0.00400	1.000	0	96.7	85 - 115				
Uranium	0.196	mg/L	E200.8	0.000176	0.00200	0.2000	0	97.8	85 - 115				
Lab Sample ID: LCS-61800		Date Analyzed:	04/09/2019 1725h										
Test Code: 200.8-DIS		Date Prepared:	04/05/2019 1023h										
Nickel	0.189	mg/L	E200.8	0.00148	0.00200	0.2000	0	94.6	85 - 115				
Silver	0.194	mg/L	E200.8	0.000232	0.00200	0.2000	0	97.0	85 - 115				
Zinc	0.961	mg/L	E200.8	0.00418	0.00600	1.000	0	96.1	85 - 115				



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-61789	Date Analyzed:	04/10/2019	824h										
Test Code: HG-DW-DIS-245.1	Date Prepared:	04/04/2019	1830h										
Mercury	0.00361	mg/L	E245.1	0.0000396	0.0000900	0.003330	0	108	85 - 115				



American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-61799	Date Analyzed:	04/10/2019	1311h										
Test Code:	200.7-DIS	Date Prepared:	04/05/2019	1023h									
Calcium	< 1.00	mg/L	E200.7	0.0937	1.00								
Magnesium	< 1.00	mg/L	E200.7	0.0439	1.00								
Potassium	< 1.00	mg/L	E200.7	0.134	1.00								
Sodium	< 1.00	mg/L	E200.7	0.187	1.00								
Vanadium	< 0.00500	mg/L	E200.7	0.00138	0.00500								
Lab Sample ID: MB-61800	Date Analyzed:	04/08/2019	1218h										
Test Code:	200.8-DIS	Date Prepared:	04/05/2019	1023h									
Arsenic	< 0.000200	mg/L	E200.8	0.0000298	0.000200								
Beryllium	< 0.000200	mg/L	E200.8	0.0000198	0.000200								
Cadmium	< 0.0000500	mg/L	E200.8	0.00000858	0.0000500								
Chromium	< 0.000200	mg/L	E200.8	0.000191	0.000200								
Cobalt	< 0.000400	mg/L	E200.8	0.0000300	0.000400								
Copper	< 0.000200	mg/L	E200.8	0.000282	0.000200								
Iron	< 0.0100	mg/L	E200.8	0.00496	0.0100								
Lead	< 0.000200	mg/L	E200.8	0.0000448	0.000200								
Manganese	< 0.000200	mg/L	E200.8	0.000108	0.000200								
Molybdenum	< 0.000200	mg/L	E200.8	0.0000652	0.000200								
Selenium	< 0.000200	mg/L	E200.8	0.0000574	0.000200								
Thallium	< 0.000200	mg/L	E200.8	0.0000154	0.000200								
Tin	< 0.000400	mg/L	E200.8	0.000116	0.000400								
Uranium	< 0.000200	mg/L	E200.8	0.0000176	0.000200								
Lab Sample ID: MB-FILTER-61769	Date Analyzed:	04/08/2019	1247h										
Test Code:	200.8-DIS	Date Prepared:	04/05/2019	1023h									
Arsenic	< 0.00200	mg/L	E200.8	0.000298	0.00200								
Cadmium	< 0.000500	mg/L	E200.8	0.0000858	0.000500								
Chromium	< 0.00200	mg/L	E200.8	0.00191	0.00200								



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-FILTER-61769	Date Analyzed:	04/08/2019	1247h										
Test Code: 200.8-DIS	Date Prepared:	04/05/2019	1023h										
Cobalt	< 0.00400	mg/L	E200.8	0.000300	0.00400								
Copper	< 0.00200	mg/L	E200.8	0.00282	0.00200								
Manganese	0.00538	mg/L	E200.8	0.00108	0.00200								B
Molybdenum	< 0.00200	mg/L	E200.8	0.000652	0.00200								
Selenium	< 0.00200	mg/L	E200.8	0.000574	0.00200								
Tin	< 0.00400	mg/L	E200.8	0.00116	0.00400								
Lab Sample ID: MB-61800	Date Analyzed:	04/09/2019	1722h										
Test Code: 200.8-DIS	Date Prepared:	04/05/2019	1023h										
Nickel	< 0.00200	mg/L	E200.8	0.00148	0.00200								
Silver	< 0.00200	mg/L	E200.8	0.000232	0.00200								
Zinc	< 0.00600	mg/L	E200.8	0.00418	0.00600								
Lab Sample ID: MB-FILTER-61769	Date Analyzed:	04/09/2019	1744h										
Test Code: 200.8-DIS	Date Prepared:	04/05/2019	1023h										
Beryllium	< 0.000200	mg/L	E200.8	0.0000198	0.000200								
Lead	< 0.000200	mg/L	E200.8	0.0000448	0.000200								
Nickel	< 0.000200	mg/L	E200.8	0.000148	0.000200								
Silver	< 0.000200	mg/L	E200.8	0.0000232	0.000200								
Thallium	< 0.000200	mg/L	E200.8	0.0000154	0.000200								
Uranium	< 0.000200	mg/L	E200.8	0.0000176	0.000200								
Zinc	0.000800	mg/L	E200.8	0.000418	0.000600								B†
Lab Sample ID: MB-FILTER-61769	Date Analyzed:	04/10/2019	1533h										
Test Code: 200.8-DIS	Date Prepared:	04/05/2019	1023h										
Iron	< 0.100	mg/L	E200.8	0.0496	0.100								



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-61789	Date Analyzed:	04/10/2019	822h										
Test Code: HG-DW-DIS-245.1	Date Prepared:	04/04/2019	1830h										
Mercury	< 0.0000900	mg/L	E245.1	0.0000396	0.0000900								

† - Analyte(s) were observed above the reporting limit in the filter blank. The filter blank was acceptable, as any associated samples do not have results above the reporting limit/PQL.

B - The filter blank was acceptable, as the method blank result is less than 10% of the lowest reported sample concentration.



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Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001EMS													
Date Analyzed:		04/10/2019 1318h											
Test Code:		200.7-DIS											
Date Prepared:		04/05/2019 1023h											
Calcium	194	mg/L	E200.7	0.937	10.0	10.00	185	85.4	70 - 130				
Magnesium	53.6	mg/L	E200.7	0.439	10.0	10.00	43.7	99.7	70 - 130				
Sodium	162	mg/L	E200.7	1.87	10.0	10.00	152	103	70 - 130				
Lab Sample ID: 1903737-001EMS													
Date Analyzed:		04/10/2019 1336h											
Test Code:		200.7-DIS											
Date Prepared:		04/05/2019 1023h											
Potassium	15.5	mg/L	E200.7	0.134	1.00	10.00	3.99	115	70 - 130				
Vanadium	0.213	mg/L	E200.7	0.00138	0.00500	0.2000	0	107	70 - 130				
Lab Sample ID: 1903737-001EMS													
Date Analyzed:		04/08/2019 1234h											
Test Code:		200.8-DIS											
Date Prepared:		04/05/2019 1023h											
Arsenic	0.208	mg/L	E200.8	0.000298	0.00200	0.2000	0.00262	103	75 - 125				
Cadmium	0.191	mg/L	E200.8	0.0000858	0.000500	0.2000	0.0000868	95.5	75 - 125				
Chromium	0.196	mg/L	E200.8	0.00191	0.00200	0.2000	0	97.8	75 - 125				
Cobalt	0.192	mg/L	E200.8	0.000300	0.00400	0.2000	0.00128	95.3	75 - 125				
Copper	0.192	mg/L	E200.8	0.00282	0.00200	0.2000	0	95.8	75 - 125				
Manganese	0.711	mg/L	E200.8	0.00108	0.00200	0.2000	0.528	91.6	75 - 125				
Molybdenum	0.201	mg/L	E200.8	0.000652	0.00200	0.2000	0.003	98.9	75 - 125				
Selenium	0.200	mg/L	E200.8	0.000574	0.00200	0.2000	0.000832	99.5	75 - 125				
Tin	0.986	mg/L	E200.8	0.00116	0.00400	1.000	0	98.6	75 - 125				
Lab Sample ID: 1903737-001EMS													
Date Analyzed:		04/09/2019 1731h											
Test Code:		200.8-DIS											
Date Prepared:		04/05/2019 1023h											
Beryllium	0.200	mg/L	E200.8	0.000198	0.00200	0.2000	0	100	75 - 125				
Lead	0.187	mg/L	E200.8	0.000448	0.00200	0.2000	0	93.5	75 - 125				
Nickel	0.190	mg/L	E200.8	0.00148	0.00200	0.2000	0	95.0	75 - 125				
Silver	0.189	mg/L	E200.8	0.000232	0.00200	0.2000	0.000388	94.2	75 - 125				
Thallium	0.183	mg/L	E200.8	0.000154	0.00200	0.2000	0	91.4	75 - 125				



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001EMS	Date Analyzed:	04/09/2019	1731h										
Test Code:	200.8-DIS	Date Prepared:	04/05/2019	1023h									
Uranium	0.202	mg/L	E200.8	0.000176	0.00200	0.2000	0.00491	98.5	75 - 125				
Zinc	0.977	mg/L	E200.8	0.00418	0.00600	1.000	0	97.7	75 - 125				
Lab Sample ID: 1903737-001EMS	Date Analyzed:	04/10/2019	1526h										
Test Code:	200.8-DIS	Date Prepared:	04/05/2019	1023h									
Iron	2.25	mg/L	E200.8	0.0992	0.200	1.000	1.2	105	75 - 125				
Lab Sample ID: 1903737-001EMS	Date Analyzed:	04/10/2019	832h										
Test Code:	HG-DW-DIS-245.1	Date Prepared:	04/04/2019	1830h									
Mercury	0.00364	mg/L	E245.1	0.0000396	0.0000900	0.003330	0	109	85 - 115				



3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687

e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001EMSD		Date Analyzed:	04/10/2019 1320h										
Test Code: 200.7-DIS		Date Prepared:	04/05/2019 1023h										
Calcium	198	mg/L	E200.7	0.937	10.0	10.00	185	123	70 - 130	194	1.93	20	
Magnesium	55.3	mg/L	E200.7	0.439	10.0	10.00	43.7	116	70 - 130	53.6	3.06	20	
Sodium	165	mg/L	E200.7	1.87	10.0	10.00	152	134	70 - 130	162	1.91	20	2
Lab Sample ID: 1903737-001EMSD		Date Analyzed:	04/10/2019 1338h										
Test Code: 200.7-DIS		Date Prepared:	04/05/2019 1023h										
Potassium	15.3	mg/L	E200.7	0.134	1.00	10.00	3.99	113	70 - 130	15.5	1.42	20	
Vanadium	0.211	mg/L	E200.7	0.00138	0.00500	0.2000	0	106	70 - 130	0.213	1.06	20	
Lab Sample ID: 1903737-001EMSD		Date Analyzed:	04/08/2019 1237h										
Test Code: 200.8-DIS		Date Prepared:	04/05/2019 1023h										
Arsenic	0.209	mg/L	E200.8	0.000298	0.00200	0.2000	0.00262	103	75 - 125	0.208	0.495	20	
Cadmium	0.188	mg/L	E200.8	0.0000858	0.000500	0.2000	0.0000868	94.2	75 - 125	0.191	1.46	20	
Chromium	0.192	mg/L	E200.8	0.00191	0.00200	0.2000	0	96.0	75 - 125	0.196	1.91	20	
Cobalt	0.189	mg/L	E200.8	0.000300	0.00400	0.2000	0.00128	93.6	75 - 125	0.192	1.77	20	
Copper	0.190	mg/L	E200.8	0.00282	0.00200	0.2000	0	94.8	75 - 125	0.192	1.02	20	
Manganese	0.702	mg/L	E200.8	0.00108	0.00200	0.2000	0.528	87.1	75 - 125	0.711	1.28	20	
Molybdenum	0.200	mg/L	E200.8	0.000652	0.00200	0.2000	0.003	98.3	75 - 125	0.201	0.529	20	
Selenium	0.199	mg/L	E200.8	0.000574	0.00200	0.2000	0.000832	99.0	75 - 125	0.2	0.451	20	
Tin	0.988	mg/L	E200.8	0.00116	0.00400	1.000	0	98.8	75 - 125	0.986	0.166	20	
Lab Sample ID: 1903737-001EMSD		Date Analyzed:	04/09/2019 1734h										
Test Code: 200.8-DIS		Date Prepared:	04/05/2019 1023h										
Beryllium	0.199	mg/L	E200.8	0.000198	0.00200	0.2000	0	99.4	75 - 125	0.2	0.823	20	
Lead	0.182	mg/L	E200.8	0.000448	0.00200	0.2000	0	90.9	75 - 125	0.187	2.81	20	
Nickel	0.187	mg/L	E200.8	0.00148	0.00200	0.2000	0	93.7	75 - 125	0.19	1.31	20	
Silver	0.189	mg/L	E200.8	0.000232	0.00200	0.2000	0.000388	94.1	75 - 125	0.189	0.0912	20	
Thallium	0.177	mg/L	E200.8	0.000154	0.00200	0.2000	0	88.6	75 - 125	0.183	3.14	20	



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001EMSD	Date Analyzed:	04/09/2019	1734h										
Test Code:	200.8-DIS	Date Prepared:	04/05/2019	1023h									
Uranium	0.196	mg/L	E200.8	0.000176	0.00200	0.2000	0.00491	95.5	75 - 125	0.202	3.04	20	
Zinc	0.984	mg/L	E200.8	0.00418	0.00600	1.000	0	98.4	75 - 125	0.977	0.741	20	
Lab Sample ID: 1903737-001EMSD	Date Analyzed:	04/10/2019	1530h										
Test Code:	200.8-DIS	Date Prepared:	04/05/2019	1023h									
Iron	2.22	mg/L	E200.8	0.0992	0.200	1.000	1.2	102	75 - 125	2.25	1.35	20	
Lab Sample ID: 1903737-001EMSD	Date Analyzed:	04/10/2019	834h										
Test Code:	HG-DW-DIS-245.1	Date Prepared:	04/04/2019	1830h									
Mercury	0.00374	mg/L	E245.1	0.0000396	0.0000900	0.003330	0	112	85 - 115	0.00364	2.67	20	

² - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1903737

Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday

Dept: WC

QC Type: DUP

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001CDUP		Date Analyzed: 03/29/2019 1145h											
Test Code: TDS-W-2540C													
Total Dissolved Solids	1,110	mg/L	SM2540C	16.0	20.0					1110	0.360	5	



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: WC
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-R124526 Date Analyzed: 04/10/2019 1943h													
Test Code: 300.0-W													
Chloride	4.74	mg/L	E300.0	0.0386	0.100	5.000	0	94.7	90 - 110				
Fluoride	4.97	mg/L	E300.0	0.0240	0.100	5.000	0	99.3	90 - 110				
Sulfate	5.11	mg/L	E300.0	0.0557	0.750	5.000	0	102	90 - 110				
Lab Sample ID: LCS-R124168 Date Analyzed: 04/02/2019 749h													
Test Code: ALK-W-2320B-LL													
Alkalinity (as CaCO3)	250	mg/L	SM2320B	0.781	1.00	250.0	0	100	90 - 110				
Lab Sample ID: LCS-61874 Date Analyzed: 04/09/2019 1646h													
Test Code: NH3-W-350.1 Date Prepared: 04/09/2019 1235h													
Ammonia (as N)	10.8	mg/L	E350.1	0.0492	0.0500	10.00	0	108	90 - 110				
Lab Sample ID: LCS-R124079 Date Analyzed: 03/29/2019 1312h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.03	mg/L	E353.2	0.00363	0.0100	1.000	0	103	90 - 110				
Lab Sample ID: LCS-R124148 Date Analyzed: 03/29/2019 1145h													
Test Code: TDS-W-2540C													
Total Dissolved Solids	180	mg/L	SM2540C	8.00	10.0	205.0	0	87.8	80 - 120				



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: WC
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-R124526													
Date Analyzed: 04/10/2019 1926h													
Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.0386	0.100								
Fluoride	< 0.100	mg/L	E300.0	0.0240	0.100								
Sulfate	< 0.750	mg/L	E300.0	0.0557	0.750								
Lab Sample ID: MB-R124168													
Date Analyzed: 04/02/2019 749h													
Test Code: ALK-W-2320B-LL													
Bicarbonate (as CaCO3)	< 1.00	mg/L	SM2320B	0.781	1.00								
Carbonate (as CaCO3)	< 1.00	mg/L	SM2320B	0.781	1.00								
Lab Sample ID: MB-61874													
Date Analyzed: 04/09/2019 1645h													
Test Code: NH3-W-350.1													
Date Prepared: 04/09/2019 1235h													
Ammonia (as N)	< 0.0500	mg/L	E350.1	0.0492	0.0500								
Lab Sample ID: MB-R124079													
Date Analyzed: 03/29/2019 1310h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00363	0.0100								
Lab Sample ID: MB-R124148													
Date Analyzed: 03/29/2019 1145h													
Test Code: TDS-W-2540C													
Total Dissolved Solids	< 10.0	mg/L	SM2540C	8.00	10.0								



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Kyle F. Gross
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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: WC
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001BMS		Date Analyzed: 04/10/2019 2305h											
Test Code: 300.0-W													
Chloride	502	mg/L	E300.0	3.86	10.0	500.0	41.6	92.1	90 - 110				
Fluoride	480	mg/L	E300.0	2.40	10.0	500.0	0	96.1	90 - 110				
Sulfate	947	mg/L	E300.0	5.57	75.0	500.0	436	102	90 - 110				
Lab Sample ID: 1903737-001BMS		Date Analyzed: 04/02/2019 749h											
Test Code: ALK-W-2320B-LL													
Alkalinity (as CaCO3)	1,450	mg/L	SM2320B	0.781	1.00	1,000	450	100	80 - 120				
Lab Sample ID: 1903737-001DMS		Date Analyzed: 04/09/2019 1650h											
Test Code: NH3-W-350.1		Date Prepared: 04/09/2019 1235h											
Ammonia (as N)	10.8	mg/L	E350.1	0.0492	0.0500	10.00	0	108	90 - 110				
Lab Sample ID: 1903737-001DMS		Date Analyzed: 03/29/2019 1314h											
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	11.0	mg/L	E353.2	0.0363	0.100	10.00	0	110	90 - 110				§

§ - QC limits are set with an accuracy of two significant figures, therefore the recovery rounds to an acceptable value within the control limits.



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: WC
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001BMSD													
Date Analyzed:		04/10/2019 2322h											
Test Code: 300.0-W													
Chloride	509	mg/L	E300.0	3.86	10.0	500.0	41.6	93.5	90 - 110	502	1.36	20	
Fluoride	486	mg/L	E300.0	2.40	10.0	500.0	0	97.2	90 - 110	480	1.16	20	
Sulfate	945	mg/L	E300.0	5.57	75.0	500.0	436	102	90 - 110	947	0.234	20	
Lab Sample ID: 1903737-001BMSD													
Date Analyzed:		04/02/2019 749h											
Test Code: ALK-W-2320B-LL													
Alkalinity (as CaCO3)	1,460	mg/L	SM2320B	0.781	1.00	1,000	450	101	80 - 120	1450	0.275	10	
Lab Sample ID: 1903737-001DMSD													
Date Analyzed:		04/09/2019 1651h											
Date Prepared:		04/09/2019 1235h											
Test Code: NH3-W-350.1													
Ammonia (as N)	10.7	mg/L	E350.1	0.0492	0.0500	10.00	0	107	90 - 110	10.8	0.929	10	
Lab Sample ID: 1903737-001DMSD													
Date Analyzed:		03/29/2019 1316h											
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	10.6	mg/L	E353.2	0.0363	0.100	10.00	0	106	90 - 110	11	3.70	10	



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: MSVOA
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS VOC-2 032919A		Date Analyzed: 03/29/2019 743h											
Test Code: 8260-W-DEN100													
Benzene	20.7	µg/L	SW8260C	0.147	1.00	20.00	0	104	82 - 132				
Chloroform	19.8	µg/L	SW8260C	0.166	1.00	20.00	0	99.2	85 - 124				
Methylene chloride	20.0	µg/L	SW8260C	0.448	1.00	20.00	0	99.8	65 - 154				
Naphthalene	16.6	µg/L	SW8260C	0.704	1.00	20.00	0	83.3	63 - 129				
Tetrahydrofuran	16.1	µg/L	SW8260C	0.436	1.00	20.00	0	80.4	59 - 125				
Toluene	20.8	µg/L	SW8260C	0.177	1.00	20.00	0	104	69 - 129				
Xylenes, Total	66.9	µg/L	SW8260C		1.00	60.00	0	111	66 - 124				
Surr: 1,2-Dichloroethane-d4	46.6	µg/L	SW8260C			50.00		93.3	80 - 136				
Surr: 4-Bromofluorobenzene	49.5	µg/L	SW8260C			50.00		99.0	85 - 121				
Surr: Dibromofluoromethane	50.2	µg/L	SW8260C			50.00		100	78 - 132				
Surr: Toluene-d8	51.8	µg/L	SW8260C			50.00		104	81 - 123				



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: MSVOA
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB VOC-2 032919A	Date Analyzed:		03/29/2019 823h										
Test Code: 8260-W-DEN100													
2-Butanone	< 20.0	µg/L	SW8260C	1.31	20.0								
Acetone	< 20.0	µg/L	SW8260C	2.87	20.0								
Benzene	< 1.00	µg/L	SW8260C	0.147	1.00								
Carbon tetrachloride	< 1.00	µg/L	SW8260C	0.262	1.00								
Chloroform	< 1.00	µg/L	SW8260C	0.166	1.00								
Chloromethane	< 1.00	µg/L	SW8260C	0.832	1.00								
Methylene chloride	< 1.00	µg/L	SW8260C	0.448	1.00								
Naphthalene	< 1.00	µg/L	SW8260C	0.704	1.00								
Tetrahydrofuran	< 1.00	µg/L	SW8260C	0.436	1.00								
Toluene	< 1.00	µg/L	SW8260C	0.177	1.00								
Xylenes, Total	< 1.00	µg/L	SW8260C		1.00								
Surr: 1,2-Dichloroethane-d4	47.9	µg/L	SW8260C			50.00		95.9	80 - 136				
Surr: 4-Bromofluorobenzene	53.4	µg/L	SW8260C			50.00		107	85 - 121				
Surr: Dibromofluoromethane	49.0	µg/L	SW8260C			50.00		98.0	78 - 132				
Surr: Toluene-d8	51.0	µg/L	SW8260C			50.00		102	81 - 123				



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: MSVOA
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001AMS	Date Analyzed: 03/29/2019 1319h												
Test Code: 8260-W-DEN100													
Benzene	21.3	µg/L	SW8260C	0.147	1.00	20.00	0	107	66 - 145				
Chloroform	20.5	µg/L	SW8260C	0.166	1.00	20.00	0	103	50 - 146				
Methylene chloride	20.5	µg/L	SW8260C	0.448	1.00	20.00	0	103	30 - 192				
Naphthalene	16.4	µg/L	SW8260C	0.704	1.00	20.00	0	81.8	41 - 131				
Tetrahydrofuran	17.8	µg/L	SW8260C	0.436	1.00	20.00	0	89.2	43 - 146				
Toluene	21.5	µg/L	SW8260C	0.177	1.00	20.00	0	108	18 - 192				
Xylenes, Total	68.8	µg/L	SW8260C		1.00	60.00	0	115	42 - 167				
Surr: 1,2-Dichloroethane-d4	47.8	µg/L	SW8260C			50.00		95.7	72 - 151				
Surr: 4-Bromofluorobenzene	50.2	µg/L	SW8260C			50.00		100	80 - 152				
Surr: Dibromofluoromethane	51.5	µg/L	SW8260C			50.00		103	72 - 135				
Surr: Toluene-d8	51.1	µg/L	SW8260C			50.00		102	80 - 124				



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QC SUMMARY REPORT

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Lab Set ID: 1903737
Project: Annual Seeps and Springs 2019

Contact: Tanner Holliday
Dept: MSVOA
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1903737-001AMSD	Date Analyzed: 03/29/2019 1339h												
Test Code: 8260-W-DEN100													
Benzene	20.8	µg/L	SW8260C	0.147	1.00	20.00	0	104	66 - 145	21.3	2.42	25	
Chloroform	20.0	µg/L	SW8260C	0.166	1.00	20.00	0	100	50 - 146	20.5	2.52	25	
Methylene chloride	20.0	µg/L	SW8260C	0.448	1.00	20.00	0	100	30 - 192	20.5	2.32	25	
Naphthalene	15.9	µg/L	SW8260C	0.704	1.00	20.00	0	79.4	41 - 131	16.4	3.10	25	
Tetrahydrofuran	18.7	µg/L	SW8260C	0.436	1.00	20.00	0	93.5	43 - 146	17.8	4.71	25	
Toluene	20.8	µg/L	SW8260C	0.177	1.00	20.00	0	104	18 - 192	21.5	3.26	25	
Xylenes, Total	66.5	µg/L	SW8260C		1.00	60.00	0	111	42 - 167	68.8	3.36	25	
Surr: 1,2-Dichloroethane-d4	47.3	µg/L	SW8260C			50.00		94.6	72 - 151				
Surr: 4-Bromofluorobenzene	49.5	µg/L	SW8260C			50.00		99.0	80 - 152				
Surr: Dibromofluoromethane	50.4	µg/L	SW8260C			50.00		101	72 - 135				
Surr: Toluene-d8	50.5	µg/L	SW8260C			50.00		101	80 - 124				

WORK ORDER Summary

Work Order: **1903737**

Page 1 of 1

Client: Energy Fuels Resources, Inc.

Due Date: 4/12/2019

Client ID: ENE300

Contact: Tanner Holliday

Project: Annual Seeps and Springs 2019

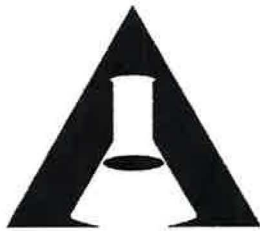
QC Level: III

WO Type: Project

Comments: QC 3 (no chromatograms). EDD-Denison. CC KWeinel@energyfuels.com.;

DB

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage	
1903737-001A	Westwater Seep	3/27/2019 0930h	3/29/2019 1000h	8260-W-DEN100	Aqueous		VOCFridge	3
				<i>Test Group: 8260-W-DEN100; # of Analytes: 11 / # of Surr: 4</i>				
1903737-001B				300.0-W			df - wc	1
				<i>3 SEL Analytes: CL F SO4</i>				
				ALK-W-2320B-LL			df - wc	
				<i>2 SEL Analytes: ALKB ALKC</i>				
1903737-001C				TDS-W-2540C			df - tds	
				<i>1 SEL Analytes: TDS</i>				
1903737-001D				NH3-W-350.1			df - no2/no3 & nh3	
				<i>1 SEL Analytes: NH3N</i>				
				NH3-W-PR			df - no2/no3 & nh3	
				NO2/NO3-W-353.2			df - no2/no3 & nh3	
				<i>1 SEL Analytes: NO3NO2N</i>				
1903737-001E				200.7-DIS			df-met	
				<i>5 SEL Analytes: CA MG K NA V</i>				
				200.7-DIS-PR			df-met	
				200.8-DIS			df-met	
				<i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>				
				200.8-DIS-PR			df-met	
				HG-DW-DIS-245.1			df-met	
				<i>1 SEL Analytes: HG</i>				
				HG-DW-DIS-PR			df-met	
				IONBALANCE			df-met	
				<i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>				
1903737-002A	Trip Blank	3/27/2019 0930h	3/29/2019 1000h	8260-W-DEN100	Aqueous		VOCFridge	3
				<i>Test Group: 8260-W-DEN100; # of Analytes: 11 / # of Surr: 4</i>				



**American West
Analytical Laboratories**

463 W. 3600 S. Salt Lake City, UT 84115
 Phone # (801) 263-8686 Toll Free # (888) 263-8686
 Fax # (801) 263-8687 Email awal@awal-labs.com
 www.awal-labs.com

CHAIN OF CUSTODY

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

1903737
 AWAL Lab Sample Set #
 Page 1 of 1

QC Level: 3	Turn Around Time: Standard	Unless other arrangements have been made, signed reports will be emailed by 5:00 pm on the day they are due.	Due Date: 4/12/19								
Include EDD: <input checked="" type="checkbox"/> LOCUS UPLOAD <input checked="" type="checkbox"/> EXCEL Field Filtered For: <input checked="" type="checkbox"/> Dissolved Metals			Laboratory Use Only Samples Were: 1 Shipped or hand delivered 2 Ambient or chilled 3 Temperature 0.3 °C 4 Received Broken/Leaking (Improperly Sealed) Y N 5 Properly Preserved Y N Checked at bench Y N 6 Received Within Holding Times Y N								
For Compliance With: <input type="checkbox"/> NELAP <input type="checkbox"/> RCRA <input type="checkbox"/> CWA <input type="checkbox"/> SDWA <input type="checkbox"/> ELAP / AZLA <input type="checkbox"/> NLLAP <input type="checkbox"/> Non-Compliance <input type="checkbox"/> Other:											
Known Hazards & Sample Comments			COC Tape Was: 1 Present on Outer Package Y N 2 Unbroken on Outer Package Y N 3 Present on Sample Y N 4 Unbroken on Sample Y N Discrepancies Between Sample Labels and COC Record Y N								
# of Containers	Sample Matrix	NO2/NO3 (353.2)		NH3 (4500G or 350.1)	F, Cl, SO4 (4500 or 300.0)	TDS (2540C)	Carb/Bicarb (2320B)	Dissolved Metals (200.7/200.8/245.1)	As, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Ag, Tl, Sn, U, V, Zn, Na, K, Mg, Ca	Ion Balance	VOCs (8260C)
7	W	x		x	x	x	x	x	x	x	x
3	W										x

Client: **Energy Fuels Resources, Inc.**
 Address: **6425 S. Hwy. 191**
Blanding, UT 84511
 Contact: **Tanner Holliday**
 Phone #: **(435) 678-2221** Cell #: _____
 Email: **gpalmer@energyfuels.com; KWeinel@energyfuels.com; tholliday@energyfuels.com**
 Project Name: **Annual Seeps and Springs 2019**
 Project #: _____
 PO #: _____
 Sampler Name: **Tanner Holliday**

Sample ID:	Date Sampled	Time Sampled	# of Containers	Sample Matrix	NO2/NO3 (353.2)	NH3 (4500G or 350.1)	F, Cl, SO4 (4500 or 300.0)	TDS (2540C)	Carb/Bicarb (2320B)	Dissolved Metals (200.7/200.8/245.1)	As, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Ag, Tl, Sn, U, V, Zn, Na, K, Mg, Ca	Ion Balance	VOCs (8260C)	Known Hazards & Sample Comments
1 Westwater Seep	3/27/2019	930	7	W	x	x	x	x	x	x	x	x	x	
2 Trip Blank	3/27/2019	930	3	W									x	
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														

Relinquished by: Signature <i>Tanner Holliday</i>	Date: 3/28/2019	Received by: Signature _____	Date: _____
Print Name: Tanner Holliday	Time: 1130	Print Name: _____	Time: _____
Relinquished by: Signature _____	Date: _____	Received by: Signature _____	Date: _____
Print Name: _____	Time: _____	Print Name: _____	Time: _____
Relinquished by: Signature _____	Date: _____	Received by: Signature _____	Date: _____
Print Name: _____	Time: _____	Print Name: _____	Time: _____
Relinquished by: Signature _____	Date: _____	Received by: Signature <i>Denise Braun</i>	Date: 3/29/19
Print Name: _____	Time: _____	Print Name: <i>Denise Braun</i>	Time: 10:00

Special Instructions:
 Sample containers for metals were field filtered. See the Analytical Scope of Work for Reporting Limits and VOC analyte list.

Lab Set ID: 1903737

pH Lot #: 5910

Preservation Check Sheet

Sample Set Extension and pH

Analysis	Preservative																			
Ammonia	pH <2 H ₂ SO ₄	-001 yes																		
COD	pH <2 H ₂ SO ₄	↓																		
Cyanide	pH >12 NaOH																			
Metals	pH <2 HNO ₃	yes																		
NO ₂ /NO ₃	pH <2 H ₂ SO ₄	yes																		
O & G	pH <2 HCL	↓																		
Phenols	pH <2 H ₂ SO ₄																			
Sulfide	pH >9 NaOH, Zn Acetate																			
TKN	pH <2 H ₂ SO ₄																			
T PO ₄	pH <2 H ₂ SO ₄																			
Cr VI+	pH >9 (NH ₄) ₂ SO ₄																			

- Procedure:
- 1) Pour a small amount of sample in the sample lid
 - 2) Pour sample from lid gently over wide range pH paper
 - 3) **Do Not** dip the pH paper in the sample bottle or lid
 - 4) If sample is not preserved, properly list its extension and receiving pH in the appropriate column above
 - 5) Flag COC, notify client if requested
 - 6) Place client conversation on COC
 - 7) Samples may be adjusted

Frequency: All samples requiring preservation

- * The sample required additional preservative upon receipt.
- + The sample was received unpreserved.
- ▲ The sample was received unpreserved and therefore preserved upon receipt.
- # The sample pH was unadjustable to a pH < 2 due to the sample matrix.
- The sample pH was unadjustable to a pH > ____ due to the sample matrix interference.



April 26, 2019

Ms. Kathy Weinel
Energy Fuels Resources (USA), Inc.
225 Union Boulevard
Suite 600
Lakewood, Colorado 80228

Re: Analytical for Annual Seeps and Spring 2019
Work Order: 475027

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on April 01, 2019. This revised data report has been prepared and reviewed in accordance with GEL's standard operating procedures. This package has been revised to show correct method.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4289.

Sincerely,

Taylor Cannon for
Julie Robinson
Project Manager

Purchase Order: DW16138
Enclosures



Energy Fuels Resources (USA), Inc.
Analytical for
SDG: 475027

This package has been revised to show correct method.

Receipt Narrative
for
Energy Fuels Resources (USA), Inc.
SDG: 475027

April 26, 2019

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary:

Sample receipt: The sample arrived at GEL Laboratories LLC, Charleston, South Carolina on April 01, 2019 for analysis. The sample was delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

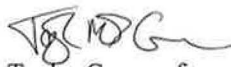
Sample Identification: The laboratory received the following sample:

<u>Laboratory ID</u>	<u>Client ID</u>
475027001	Westwater Seep

Case Narrative:

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.



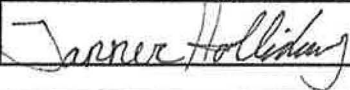
Taylor Cannon for
Julie Robinson
Project Manager

475027

CHAIN OF CUSTODY

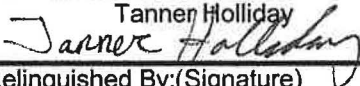

Samples Shipped to: Gel Laboratories 2040 Savage Road Charleston, SC 29407
 Contact: Tanner Holliday Ph: 435 678 4115 tholliday@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature
Annual Seeps and Spring 2019	Tanner Holliday	

Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
Westwater seep	3/27/2019	930	Gross Alpha

Comments:

Relinquished By:(Signature) Tanner Holliday 	Date/Time 3/28/2019 1130	Received By:(Signature) 	Date/Time 4/1/19 855
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time

SAMPLE RECEIPT & REVIEW FORM

Client: <u>DNMI</u>	SDG/AR/COC/Work Order: <u>475027</u>
Received By: <u>ZKW</u>	Date Received: <u>4/1/19</u>
Circle Applicable: FedEx Express FedEx Ground <u>UPS</u> Field Services Courier Other	
Carrier and Tracking Number <u>1Z 187444 01 9112 9494</u>	

Suspected Hazard Information	Yes	No	*If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.
A) Shipped as a DOT Hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Hazard Class Shipped: _____ UN#: _____ If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___
B) Did the client designate the samples are to be received as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or radioactive stickers on containers equal client designation
C) Did the RSO classify the samples as radioactive?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Maximum Net Counts Observed* (Observed Counts - Arca Background Counts): <u>0</u> CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3
D) Did the client designate samples are hazardous?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	COC notation or hazard labels on containers equal client designation
E) Did the RSO identify possible hazards?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If D or E is yes, select Hazards below: PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

Sample Receipt Criteria		Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1	Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2	Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Client contacted and provided COC COC created upon receipt
3	Samples requiring cold preservation within (0 ≤ 6 deg. C)?*	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Preservation Method: Wet Ice Ice Packs Dry ice <u>None</u> Other: _____ *all temperatures are recorded in Celsius TEMP: <u>21°C</u>
4	Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Temperature Device Serial #: <u>IR3-18</u> Secondary Temperature Device Serial # (If Applicable): _____
5	Sample containers intact and sealed?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6	Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sample ID's and Containers Affected: If Preservation added, Lot#: _____
7	Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
					Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
					Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8	Samples received within holding time?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and tests affected:
9	Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	ID's and containers affected:
10	Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11	Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: No container count on COC Other (describe)
12	Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
13	COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

GEL Laboratories LLC – Login Review Report

Report Date: 26-APR-19

Work Order: 475027

Page 1 of 2

GEL Work Order/SDG: 475027 Annual Seeps and Spring 2019
 Client SDG: 475027
 Project Manager: Julie Robinson
 Project Name: DNMI00106 Analytical for
 Purchase Order: DW16138
 Package Level: LEVEL3
 EDD Format: EIM_DNMI

Work Order Due Date: 29-APR-19
 Package Due Date: 27-APR-19
 EDD Due Date: 29-APR-19
 QA Due Date: 29-APR-19
 QAR Date: 30-APR-19

Collector: C
 Prelogin #: 20190486669
 Project Workdef ID: 1329132
 SDG Status: Closed
 Logged by:

GEL ID	Client Sample ID	Client Sample Desc.	Collect Date & Time	Receive Date & Time	Time Zone	# of Cont.	Lab Matrix	Fax Due Date	Days to Process	CofC #	Prelog Group	Lab QC	Field QC
475027001	Westwater Seep		27-MAR-19 09:30	01-APR-19 08:55	-2	1	GROUND WATER		20		1		

Client Sample ID	Status	Tests/Methods	Product Reference	Fax Date	PM Comments	Aux Data	Receive Codes
-001 Westwater Seep	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha				

Product: GFCTORAL Workdef ID: 1461303 In Product Group? No Group Name: Group Reference:
 Method: EPA 903.0 Path: Drinking Water (903.0 or 9315)
 Product Description: GFPC, Total Alpha Radium, Liquid Product Reference: Gross Alpha
 Samples: 001 Moisture Correction: "As Received"

Parmname Check: All parmnames scheduled properly

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
	Gross Radium Alpha	1	pCi/L	REG	Y	Y	No

Action	Product Name	Description	Samples
--------	--------------	-------------	---------

Contingent Tests

Login Requirements:

Requirement	Include?	Comments
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GEL Laboratories LLC – Login Review Report

Report Date: 26-APR-19

Work Order: 475027

Page 2 of 2

Peer Review by: _____ Work Order (SDG#), PO# Checked? _____ C of C signed in receiver location? _____

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List of current GEL Certifications as of 26 April 2019

State	Certification
Alaska	17-018
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana NELAP	03046 (AI33904)
Louisiana SDWA	LA024
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122019-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-19-15
Utah NELAP	SC000122018-27
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

**Radiochemistry
Technical Case Narrative
Energy Fuels Resources (DNMI)
SDG #: 475027**

Product: GFPC, Total Alpha Radium, Liquid

Analytical Method: EPA 903.0

Analytical Procedure: GL-RAD-A-044 REV# 10

Analytical Batch: 1863376

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
475027001	Westwater Seep
1204251123	Method Blank (MB)
1204251124	475027001(Westwater Seep) Sample Duplicate (DUP)
1204251125	475027001(Westwater Seep) Matrix Spike (MS)
1204251126	475027001(Westwater Seep) Matrix Spike Duplicate (MSD)
1204251127	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Preparation Information

Aliquot Reduced

Aliquots were reduced due to limited sample volume.

Miscellaneous Information

Additional Comments

The matrix spike and matrix spike duplicate, 1204251125 (Westwater SeepMS) and 1204251126 (Westwater SeepMSD), aliquots were reduced to conserve sample volume.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 475027 GEL Work Order: 475027

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the CRDL.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature: 

Name: Theresa Austin

Date: 26 APR 2019

Title: Group Leader

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: April 26, 2019

Page 1 of

Energy Fuels Resources (USA), Inc.
225 Union Boulevard
Suite 600

Lakewood, Colorado

Contact: Ms. Kathy Weinel

Workorder: 475027

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	1863376										
QC1204251124	475027001	DUP									
Gross Radium Alpha	U	0.232	U	0.721	pCi/L	N/A		N/A	JXC9	04/05/19	12:2
	Uncertainty	+/-0.270		+/-0.313							
QC1204251127	LCS										
Gross Radium Alpha	887			780	pCi/L		87.9	(75%-125%)		04/05/19	12:2
	Uncertainty			+/-10.1							
QC1204251123	MB										
Gross Radium Alpha			U	0.249	pCi/L					04/05/19	12:2
	Uncertainty			+/-0.282							
QC1204251125	475027001	MS									
Gross Radium Alpha	4450	U	0.232	3780	pCi/L		84.8	(75%-125%)		04/05/19	12:2
	Uncertainty		+/-0.270	+/-52.1							
QC1204251126	475027001	MSD									
Gross Radium Alpha	4450	U	0.232	3720	pCi/L	1.45	83.5	(0%-20%)		04/05/19	12:2
	Uncertainty		+/-0.270	+/-50.7							

Notes:

Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- F Estimated Value
- H Analytical holding time was exceeded
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 475027

Page 2 of

Parname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
M		Matrix Related Failure								
N/A		RPD or %Recovery limits do not apply.								
N1		See case narrative								
ND		Analyte concentration is not detected above the detection limit								
NJ		Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier								
Q		One or more quality control criteria have not been met. Refer to the applicable narrative or DER.								
R		Sample results are rejected								
U		Analyte was analyzed for, but not detected above the CRDL.								
UI		Gamma Spectroscopy--Uncertain identification								
UJ		Gamma Spectroscopy--Uncertain identification								
UL		Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.								
X		Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier								
Y		QC Samples were not spiked with this compound								
^		RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.								
h		Preparation or preservation holding time was exceeded								

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.

^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.

For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.



Tanner Holliday
Energy Fuels Resources, Inc.
6425 South Hwy 191
Blanding, UT 84511
TEL: (435) 678-2221

RE: Seeps and Springs 2019

Dear Tanner Holliday:

Lab Set ID: 1906343

3440 South 700 West
Salt Lake City, UT 84119

American West Analytical Laboratories received sample(s) on 6/13/2019 for the analyses presented in the following report.

American West Analytical Laboratories (AWAL) is accredited by The National Environmental Laboratory Accreditation Program (NELAP) in Utah and Texas; and is state accredited in Colorado, Idaho, New Mexico, Wyoming, and Missouri.

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

All analyses were performed in accordance to the NELAP protocols unless noted otherwise. Accreditation scope documents are available upon request. If you have any questions or concerns regarding this report please feel free to call.

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

The abbreviation "Surr" found in organic reports indicates a surrogate compound that is intentionally added by the laboratory to determine sample injection, extraction, and/or purging efficiency. The "Reporting Limit" found on the report is equivalent to the practical quantitation limit (PQL). This is the minimum concentration that can be reported by the method referenced and the sample matrix. The reporting limit must not be confused with any regulatory limit. Analytical results are reported to three significant figures for quality control and calculation purposes.

Thank You,

Approved by:

**Jose G.
Rocha**
Digitally signed by Jose G. Rocha
DN: cn=Jose G. Rocha,
o=American West Analytical
Laboratories, ou,
email=jose@awal-labs.com,
c=US
Date: 2019.07.05 14:33:52
-06'00'

Laboratory Director or designee



SAMPLE SUMMARY

Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Set ID: 1906343
Date Received: 6/13/2019 1054h

Contact: Tanner Holliday

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1906343-001A	Entrance Seep	6/11/2019 815h	Aqueous	VOA by GC/MS Method 8260C/5030C
1906343-001B	Entrance Seep	6/11/2019 815h	Aqueous	Anions, E300.0
1906343-001B	Entrance Seep	6/11/2019 815h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, Low Level
1906343-001C	Entrance Seep	6/11/2019 815h	Aqueous	Total Dissolved Solids, A2540C
1906343-001D	Entrance Seep	6/11/2019 815h	Aqueous	Nitrite/Nitrate (as N), E353.2
1906343-001D	Entrance Seep	6/11/2019 815h	Aqueous	Ammonia, Aqueous
1906343-001E	Entrance Seep	6/11/2019 815h	Aqueous	Mercury, Drinking Water Dissolved
1906343-001E	Entrance Seep	6/11/2019 815h	Aqueous	Ion Balance
1906343-001E	Entrance Seep	6/11/2019 815h	Aqueous	ICP Metals, Dissolved
1906343-001E	Entrance Seep	6/11/2019 815h	Aqueous	ICPMS Metals, Dissolved
1906343-002A	Ruin Spring	6/11/2019 850h	Aqueous	VOA by GC/MS Method 8260C/5030C
1906343-002B	Ruin Spring	6/11/2019 850h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, Low Level
1906343-002B	Ruin Spring	6/11/2019 850h	Aqueous	Anions, E300.0
1906343-002C	Ruin Spring	6/11/2019 850h	Aqueous	Total Dissolved Solids, A2540C
1906343-002D	Ruin Spring	6/11/2019 850h	Aqueous	Nitrite/Nitrate (as N), E353.2
1906343-002D	Ruin Spring	6/11/2019 850h	Aqueous	Ammonia, Aqueous
1906343-002E	Ruin Spring	6/11/2019 850h	Aqueous	Mercury, Drinking Water Dissolved
1906343-002E	Ruin Spring	6/11/2019 850h	Aqueous	Ion Balance
1906343-002E	Ruin Spring	6/11/2019 850h	Aqueous	ICP Metals, Dissolved
1906343-002E	Ruin Spring	6/11/2019 850h	Aqueous	ICPMS Metals, Dissolved
1906343-003A	Cottonwood Spring	6/11/2019 950h	Aqueous	VOA by GC/MS Method 8260C/5030C
1906343-003B	Cottonwood Spring	6/11/2019 950h	Aqueous	Anions, E300.0
1906343-003B	Cottonwood Spring	6/11/2019 950h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, Low Level
1906343-003C	Cottonwood Spring	6/11/2019 950h	Aqueous	Total Dissolved Solids, A2540C
1906343-003D	Cottonwood Spring	6/11/2019 950h	Aqueous	Nitrite/Nitrate (as N), E353.2
1906343-003D	Cottonwood Spring	6/11/2019 950h	Aqueous	Ammonia, Aqueous
1906343-003E	Cottonwood Spring	6/11/2019 950h	Aqueous	Mercury, Drinking Water Dissolved
1906343-003E	Cottonwood Spring	6/11/2019 950h	Aqueous	Ion Balance



Client: Energy Fuels Resources, Inc.
Project: Seeps and Springs 2019
Lab Set ID: 1906343
Date Received: 6/13/2019 1054h

Contact: Tanner Holliday

Lab Sample ID	Client Sample ID	Date Collected	Matrix	Analysis
1906343-003E	Cottonwood Spring	6/11/2019 950h	Aqueous	ICP Metals, Dissolved
1906343-003E	Cottonwood Spring	6/11/2019 950h	Aqueous	ICPMS Metals, Dissolved
1906343-004A	Back Spring	6/11/2019 850h	Aqueous	VOA by GC/MS Method 8260C/5030C
1906343-004B	Back Spring	6/11/2019 850h	Aqueous	Alkalinity/ Bicarbonate/ Carbonate, Low Level
1906343-004B	Back Spring	6/11/2019 850h	Aqueous	Anions, E300.0
1906343-004C	Back Spring	6/11/2019 850h	Aqueous	Total Dissolved Solids, A2540C
1906343-004D	Back Spring	6/11/2019 850h	Aqueous	Nitrite/Nitrate (as N), E353.2
1906343-004D	Back Spring	6/11/2019 850h	Aqueous	Ammonia, Aqueous
1906343-004E	Back Spring	6/11/2019 850h	Aqueous	Ion Balance
1906343-004E	Back Spring	6/11/2019 850h	Aqueous	ICP Metals, Dissolved
1906343-004E	Back Spring	6/11/2019 850h	Aqueous	ICPMS Metals, Dissolved
1906343-004E	Back Spring	6/11/2019 850h	Aqueous	Mercury, Drinking Water Dissolved
1906343-005A	Trip Blank	6/11/2019 815h	Aqueous	VOA by GC/MS Method 8260C/5030C

3440 South 700 West
Salt Lake City, UT 84119

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 Fax: (801) 263-8687
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web: www.awal-labs.com

Kyle F. Gross
 Laboratory Director

Jose Rocha
 QA Officer



Inorganic Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Tanner Holliday
Project: Seeps and Springs 2019
Lab Set ID: 1906343

3440 South 700 West
 Salt Lake City, UT 84119

Sample Receipt Information:

Date of Receipt: 6/13/2019
Date of Collection: 6/11/2019
Sample Condition: Intact
C-O-C Discrepancies: None

Holding Time and Preservation Requirements: The analysis and preparation of all samples were performed within the method holding times. All samples were properly preserved.

Preparation and Analysis Requirements: The samples were analyzed following the methods stated on the analytical reports.

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Batch QC Requirements: MB, LCS, MS, MSD, RPD, DUP:

Method Blanks (MB): No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

Laboratory Control Samples (LCS): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicates (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, with the following exceptions:

Sample ID	Analyte	QC	Explanation
190343-002E	Calcium	MS/MSD	High analyte concentrations
190343-002E	Magnesium	MS/MSD	High analyte concentrations
190343-002E	Sodium	MS/MSD	High analyte concentrations
1906343-0001D	Ammonia	MS/MSD	Sample matrix interference

Duplicate (DUP): The parameters that required a duplicate analysis had RPDs within the control limits, with the following exception: The RPD for TDS on sample 1906343-001C was outside of control limits due to suspected sample non-homogeneity or matrix interference.

Corrective Action: None required.



Volatile Case Narrative

Client: Energy Fuels Resources, Inc.
Contact: Tanner Holliday
Project: Seeps and Springs 2019
Lab Set ID: 1906343

3440 South 700 West
Salt Lake City, UT 84119

Sample Receipt Information:

Date of Receipt: 6/13/2019
Date of Collection: 6/11/2019
Sample Condition: Intact
C-O-C Discrepancies: None
Method: SW-846 8260C/5030C
Analysis: Volatile Organic Compounds

Phone: (801) 263-8686

Toll Free: (888) 263-8686

Fax: (801) 263-8687

e-mail: awal@awal-labs.com

web: www.awal-labs.com

General Set Comments: One target analyte was observed above its reporting limit.

Holding Time and Preservation Requirements: All samples were received in appropriate containers and properly preserved. The analysis and preparation of all samples were performed within the method holding times following the methods stated on the analytical reports.

Kyle F. Gross
Laboratory Director

Analytical QC Requirements: All instrument calibration and calibration check requirements were met. All internal standard recoveries met method criterion.

Jose Rocha
QA Officer

Batch QC Requirements: MB, LCS, MS, MSD, RPD, and Surrogates:

Method Blanks (MBs): No target analytes were detected above reporting limits, indicating that the procedure was free from contamination.

Laboratory Control Sample (LCSs): All LCS recoveries were within control limits, indicating that the preparation and analysis were in control.

Matrix Spike / Matrix Spike Duplicate (MS/MSD): All percent recoveries and RPDs (Relative Percent Differences) were inside established limits, indicating no apparent matrix interferences.

Surrogates: All surrogate recoveries were within established limits.

Corrective Action: None required.



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Salt Lake City, UT 84119

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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1906343

Project: Seeps and Springs 2019

Contact: Tanner Holliday

Dept: ME

QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-63253		Date Analyzed: 06/28/2019 1505h											
Test Code: 200.7-DIS		Date Prepared: 06/14/2019 1410h											
Calcium	10.7	mg/L	E200.7	0.0937	1.00	10.00	0	107	85 - 115				
Magnesium	11.2	mg/L	E200.7	0.0439	1.00	10.00	0	112	85 - 115				
Potassium	10.9	mg/L	E200.7	0.134	1.00	10.00	0	109	85 - 115				
Sodium	11.3	mg/L	E200.7	0.187	1.00	10.00	0	113	85 - 115				
Vanadium	0.220	mg/L	E200.7	0.00138	0.00500	0.2000	0	110	85 - 115				
Lab Sample ID: LCS-63254		Date Analyzed: 06/17/2019 1339h											
Test Code: 200.8-DIS		Date Prepared: 06/14/2019 1410h											
Arsenic	0.211	mg/L	E200.8	0.000298	0.00200	0.2000	0	106	85 - 115				
Beryllium	0.209	mg/L	E200.8	0.000198	0.00200	0.2000	0	105	85 - 115				
Cadmium	0.207	mg/L	E200.8	0.0000858	0.000500	0.2000	0	103	85 - 115				
Chromium	0.213	mg/L	E200.8	0.00191	0.00200	0.2000	0	107	85 - 115				
Cobalt	0.210	mg/L	E200.8	0.000300	0.00400	0.2000	0	105	85 - 115				
Copper	0.214	mg/L	E200.8	0.00282	0.00200	0.2000	0	107	85 - 115				
Iron	1.05	mg/L	E200.8	0.0496	0.100	1.000	0	105	85 - 115				
Lead	0.199	mg/L	E200.8	0.000448	0.00200	0.2000	0	99.3	85 - 115				
Manganese	0.215	mg/L	E200.8	0.00108	0.00200	0.2000	0	108	85 - 115				
Molybdenum	0.213	mg/L	E200.8	0.000652	0.00200	0.2000	0	106	85 - 115				
Nickel	0.211	mg/L	E200.8	0.00148	0.00200	0.2000	0	105	85 - 115				
Selenium	0.220	mg/L	E200.8	0.000574	0.00200	0.2000	0	110	85 - 115				
Silver	0.201	mg/L	E200.8	0.000232	0.00200	0.2000	0	100	85 - 115				
Thallium	0.197	mg/L	E200.8	0.000154	0.00200	0.2000	0	98.6	85 - 115				
Tin	1.05	mg/L	E200.8	0.00116	0.00400	1.000	0	105	85 - 115				
Uranium	0.211	mg/L	E200.8	0.000176	0.00200	0.2000	0	105	85 - 115				
Lab Sample ID: LCS-63254		Date Analyzed: 06/17/2019 1924h											
Test Code: 200.8-DIS		Date Prepared: 06/14/2019 1410h											
Zinc	1.02	mg/L	E200.8	0.00418	0.00600	1.000	0	102	85 - 115				



3440 South 700 West

Salt Lake City, UT 84119

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1906343

Project: Seeps and Springs 2019

Contact: Tanner Holliday

Dept: ME

QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-63387	Date Analyzed:	06/24/2019	746h										
Test Code: HG-DW-DIS-245.1	Date Prepared:	06/21/2019	1450h										
Mercury	0.00317	mg/L	E245.1	0.0000396	0.0000900	0.003330	0	95.2	85 - 115				



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1906343

Project: Seeps and Springs 2019

Contact: Tanner Holliday

Dept: ME

QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-63253													
Date Analyzed:		06/28/2019 1501h											
Test Code:		200.7-DIS											
Date Prepared:		06/14/2019 1410h											
Calcium	< 1.00	mg/L	E200.7	0.0937	1.00								
Magnesium	< 1.00	mg/L	E200.7	0.0439	1.00								
Potassium	< 1.00	mg/L	E200.7	0.134	1.00								
Sodium	< 1.00	mg/L	E200.7	0.187	1.00								
Vanadium	< 0.00500	mg/L	E200.7	0.00138	0.00500								
Lab Sample ID: MB-63254													
Date Analyzed:		06/17/2019 1336h											
Test Code:		200.8-DIS											
Date Prepared:		06/14/2019 1410h											
Arsenic	< 0.000200	mg/L	E200.8	0.0000298	0.000200								
Beryllium	< 0.000200	mg/L	E200.8	0.0000198	0.000200								
Cadmium	< 0.0000500	mg/L	E200.8	0.00000858	0.0000500								
Chromium	< 0.000200	mg/L	E200.8	0.000191	0.000200								
Cobalt	< 0.000400	mg/L	E200.8	0.0000300	0.000400								
Copper	< 0.000200	mg/L	E200.8	0.000282	0.000200								
Iron	< 0.0100	mg/L	E200.8	0.00496	0.0100								
Lead	< 0.000200	mg/L	E200.8	0.0000448	0.000200								
Manganese	< 0.000200	mg/L	E200.8	0.000108	0.000200								
Molybdenum	< 0.000200	mg/L	E200.8	0.0000652	0.000200								
Nickel	< 0.000200	mg/L	E200.8	0.000148	0.000200								
Selenium	< 0.000200	mg/L	E200.8	0.0000574	0.000200								
Silver	< 0.000200	mg/L	E200.8	0.0000232	0.000200								
Thallium	< 0.000200	mg/L	E200.8	0.0000154	0.000200								
Tin	< 0.000400	mg/L	E200.8	0.000116	0.000400								
Uranium	< 0.000200	mg/L	E200.8	0.0000176	0.000200								
Lab Sample ID: MB-63254													
Date Analyzed:		06/17/2019 1921h											
Test Code:		200.8-DIS											
Date Prepared:		06/14/2019 1410h											
Zinc	< 0.000600	mg/L	E200.8	0.000418	0.000600								



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 Salt Lake City, UT 84119

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Kyle F. Gross
 Laboratory Director

Jose Rocha
 QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-63387	Date Analyzed:	06/24/2019	744h										
Test Code: HG-DW-DIS-245.1	Date Prepared:	06/21/2019	1450h										
Mercury	< 0.0000900	mg/L	E245.1	0.0000396	0.0000900								



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-002EMS													
Date Analyzed:		06/28/2019 1514h											
Test Code:		200.7-DIS											
Date Prepared:		06/14/2019 1410h											
Calcium	161	mg/L	E200.7	0.937	10.0	10.00	165	-31.5	70 - 130				2
Magnesium	43.8	mg/L	E200.7	0.439	10.0	10.00	45.6	-17.7	70 - 130				2
Sodium	127	mg/L	E200.7	1.87	10.0	10.00	128	-5.56	70 - 130				2
Lab Sample ID: 1906343-002EMS													
Date Analyzed:		06/28/2019 1710h											
Test Code:		200.7-DIS											
Date Prepared:		06/14/2019 1410h											
Potassium	14.1	mg/L	E200.7	0.134	1.00	10.00	3.31	108	70 - 130				
Vanadium	0.217	mg/L	E200.7	0.00138	0.00500	0.2000	0	108	70 - 130				
Lab Sample ID: 1906343-002EMS													
Date Analyzed:		06/17/2019 1354h											
Test Code:		200.8-DIS											
Date Prepared:		06/14/2019 1410h											
Arsenic	0.208	mg/L	E200.8	0.000298	0.00200	0.2000	0.000569	104	75 - 125				
Beryllium	0.203	mg/L	E200.8	0.000198	0.00200	0.2000	0	101	75 - 125				
Cadmium	0.200	mg/L	E200.8	0.0000858	0.000500	0.2000	0	99.9	75 - 125				
Chromium	0.206	mg/L	E200.8	0.00191	0.00200	0.2000	0	103	75 - 125				
Cobalt	0.201	mg/L	E200.8	0.000300	0.00400	0.2000	0	101	75 - 125				
Copper	0.204	mg/L	E200.8	0.00282	0.00200	0.2000	0	102	75 - 125				
Iron	1.02	mg/L	E200.8	0.0496	0.100	1.000	0	102	75 - 125				
Lead	0.193	mg/L	E200.8	0.000448	0.00200	0.2000	0	96.3	75 - 125				
Manganese	0.209	mg/L	E200.8	0.00108	0.00200	0.2000	0	105	75 - 125				
Molybdenum	0.231	mg/L	E200.8	0.000652	0.00200	0.2000	0.0202	105	75 - 125				
Nickel	0.202	mg/L	E200.8	0.00148	0.00200	0.2000	0	101	75 - 125				
Selenium	0.227	mg/L	E200.8	0.000574	0.00200	0.2000	0.0108	108	75 - 125				
Silver	0.190	mg/L	E200.8	0.000232	0.00200	0.2000	0.00114	94.2	75 - 125				
Thallium	0.192	mg/L	E200.8	0.000154	0.00200	0.2000	0	96.0	75 - 125				
Tin	1.05	mg/L	E200.8	0.00116	0.00400	1.000	0	105	75 - 125				
Uranium	0.216	mg/L	E200.8	0.000176	0.00200	0.2000	0.00904	104	75 - 125				



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-002EMS	Date Analyzed:	06/17/2019	1933h										
Test Code: 200.8-DIS	Date Prepared:	06/14/2019	1410h										
Zinc	1.02	mg/L	E200.8	0.00418	0.00600	1.000	0.0068	101	75 - 125				
Lab Sample ID: 1906343-002EMS	Date Analyzed:	06/24/2019	754h										
Test Code: HG-DW-DIS-245.1	Date Prepared:	06/21/2019	1450h										
Mercury	0.00327	mg/L	E245.1	0.0000396	0.0000900	0.003330	0	98.2	85 - 115				

² - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



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Kyle F. Gross
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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-002EMSD		Date Analyzed:	06/28/2019 1516h										
Test Code: 200.7-DIS		Date Prepared:	06/14/2019 1410h										
Calcium	164	mg/L	E200.7	0.937	10.0	10.00	165	-8.21	70 - 130	161	1.43	20	2
Magnesium	46.4	mg/L	E200.7	0.439	10.0	10.00	45.6	8.40	70 - 130	43.8	5.79	20	2
Sodium	128	mg/L	E200.7	1.87	10.0	10.00	128	0.626	70 - 130	127	0.485	20	2
Lab Sample ID: 1906343-002EMSD		Date Analyzed:	06/28/2019 1708h										
Test Code: 200.7-DIS		Date Prepared:	06/14/2019 1410h										
Potassium	14.3	mg/L	E200.7	0.134	1.00	10.00	3.31	110	70 - 130	14.1	1.09	20	
Vanadium	0.214	mg/L	E200.7	0.00138	0.00500	0.2000	0	107	70 - 130	0.217	1.54	20	
Lab Sample ID: 1906343-002EMSD		Date Analyzed:	06/17/2019 1358h										
Test Code: 200.8-DIS		Date Prepared:	06/14/2019 1410h										
Arsenic	0.206	mg/L	E200.8	0.000298	0.00200	0.2000	0.000569	103	75 - 125	0.208	1.21	20	
Beryllium	0.201	mg/L	E200.8	0.000198	0.00200	0.2000	0	100	75 - 125	0.203	0.927	20	
Cadmium	0.196	mg/L	E200.8	0.0000858	0.000500	0.2000	0	98.1	75 - 125	0.2	1.80	20	
Chromium	0.208	mg/L	E200.8	0.00191	0.00200	0.2000	0	104	75 - 125	0.206	1.17	20	
Cobalt	0.201	mg/L	E200.8	0.000300	0.00400	0.2000	0	101	75 - 125	0.201	0.118	20	
Copper	0.203	mg/L	E200.8	0.00282	0.00200	0.2000	0	102	75 - 125	0.204	0.150	20	
Iron	1.02	mg/L	E200.8	0.0496	0.100	1.000	0	102	75 - 125	1.02	0.367	20	
Lead	0.190	mg/L	E200.8	0.000448	0.00200	0.2000	0	95.1	75 - 125	0.193	1.27	20	
Manganese	0.209	mg/L	E200.8	0.00108	0.00200	0.2000	0	104	75 - 125	0.209	0.313	20	
Molybdenum	0.228	mg/L	E200.8	0.000652	0.00200	0.2000	0.0202	104	75 - 125	0.231	1.15	20	
Nickel	0.204	mg/L	E200.8	0.00148	0.00200	0.2000	0	102	75 - 125	0.202	0.659	20	
Selenium	0.224	mg/L	E200.8	0.000574	0.00200	0.2000	0.0108	106	75 - 125	0.227	1.38	20	
Silver	0.189	mg/L	E200.8	0.000232	0.00200	0.2000	0.00114	94.1	75 - 125	0.19	0.157	20	
Thallium	0.191	mg/L	E200.8	0.000154	0.00200	0.2000	0	95.4	75 - 125	0.192	0.603	20	
Tin	1.04	mg/L	E200.8	0.00116	0.00400	1.000	0	104	75 - 125	1.05	1.31	20	
Uranium	0.215	mg/L	E200.8	0.000176	0.00200	0.2000	0.00904	103	75 - 125	0.216	0.417	20	



3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686, Toll Free: (888) 263-8686. Fax: (801) 263-8687
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: ME
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-002EMSD	Date Analyzed:	06/17/2019	1936h										
Test Code:	200.8-DIS	Date Prepared:	06/14/2019	1410h									
Zinc	1.02	mg/L	E200.8	0.00418	0.00600	1.000	0.0068	102	75 - 125	1.02	0.744	20	
Lab Sample ID: 1906343-002EMSD	Date Analyzed:	06/24/2019	756h										
Test Code:	HG-DW-DIS-245.1	Date Prepared:	06/21/2019	1450h									
Mercury	0.00324	mg/L	E245.1	0.0000396	0.0000900	0.003330	0	97.1	85 - 115	0.00327	1.08	20	

² - Analyte concentration is too high for accurate matrix spike recovery and/or RPD.



3440 South 700 West

Salt Lake City, UT 84119

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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1906343

Project: Seeps and Springs 2019

Contact: Tanner Holliday

Dept: WC

QC Type: DUP

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-001CDUP	Date Analyzed: 06/14/2019 1100h												
Test Code: TDS-W-2540C													
Total Dissolved Solids	1,010	mg/L	SM2540C	16.0	20.0					892	12.2	5	@

@ - High RPD due to suspected sample non-homogeneity or matrix interference.



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e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: WC
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS-R127501 Date Analyzed: 06/27/2019 1959h													
Test Code: 300.0-W													
Chloride	4.94	mg/L	E300.0	0.0386	0.100	5.000	0	98.8	90 - 110				
Fluoride	4.96	mg/L	E300.0	0.0240	0.100	5.000	0	99.1	90 - 110				
Sulfate	5.31	mg/L	E300.0	0.174	0.750	5.000	0	106	90 - 110				
Lab Sample ID: LCS-R127013 Date Analyzed: 06/17/2019 739h													
Test Code: ALK-W-2320B-LL													
Alkalinity (as CaCO3)	250	mg/L	SM2320B	0.781	1.00	250.0	0	99.8	90 - 110				
Lab Sample ID: LCS-63399 Date Analyzed: 06/24/2019 1101h													
Test Code: NH3-W-350.1 Date Prepared: 06/23/2019 2000h													
Ammonia (as N)	10.1	mg/L	E350.1	0.0492	0.0500	10.00	0	101	90 - 110				
Lab Sample ID: LCS-R126960 Date Analyzed: 06/14/2019 1028h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.07	mg/L	E353.2	0.00363	0.0100	1.000	0	107	90 - 110				
Lab Sample ID: LCS-R127047 Date Analyzed: 06/14/2019 1100h													
Test Code: TDS-W-2540C													
Total Dissolved Solids	182	mg/L	SM2540C	8.00	10.0	205.0	0	88.8	80 - 120				



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: WC
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB-R127501 Date Analyzed: 06/27/2019 1942h													
Test Code: 300.0-W													
Chloride	< 0.100	mg/L	E300.0	0.0386	0.100								
Fluoride	< 0.100	mg/L	E300.0	0.0240	0.100								
Sulfate	< 0.750	mg/L	E300.0	0.174	0.750								
Lab Sample ID: MB-R127013 Date Analyzed: 06/17/2019 739h													
Test Code: ALK-W-2320B-LL													
Bicarbonate (as CaCO3)	< 1.00	mg/L	SM2320B	0.781	1.00								
Carbonate (as CaCO3)	< 1.00	mg/L	SM2320B	0.781	1.00								
Lab Sample ID: MB-63399 Date Analyzed: 06/24/2019 1100h													
Test Code: NH3-W-350.1 Date Prepared: 06/23/2019 2000h													
Ammonia (as N)	< 0.0500	mg/L	E350.1	0.0492	0.0500								
Lab Sample ID: MB-R126960 Date Analyzed: 06/14/2019 1027h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	< 0.0100	mg/L	E353.2	0.00363	0.0100								
Lab Sample ID: MB-R127047 Date Analyzed: 06/14/2019 1100h													
Test Code: TDS-W-2540C													
Total Dissolved Solids	< 10.0	mg/L	SM2540C	8.00	10.0								



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Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: WC
QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-001BMS Date Analyzed: 06/27/2019 2033h													
Test Code: 300.0-W													
Chloride	209	mg/L	E300.0	0.772	2.00	100.0	104	105	90 - 110				
Fluoride	98.6	mg/L	E300.0	0.480	2.00	100.0	0.912	97.7	90 - 110				
Sulfate	262	mg/L	E300.0	3.48	15.0	100.0	160	102	90 - 110				
Lab Sample ID: 1906343-001BMS Date Analyzed: 06/17/2019 739h													
Test Code: ALK-W-2320B-LL													
Alkalinity (as CaCO3)	1,480	mg/L	SM2320B	0.781	1.00	1,000	480	99.6	80 - 120				
Lab Sample ID: 1906343-001DMS Date Analyzed: 06/24/2019 1120h													
Test Code: NH3-W-350.1 Date Prepared: 06/23/2019 2000h													
Ammonia (as N)	12.1	mg/L	E350.1	0.0492	0.0500	10.00	0.168	120	90 - 110				1
Lab Sample ID: 1906343-001DMS Date Analyzed: 06/14/2019 1120h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.02	mg/L	E353.2	0.00363	0.0100	1.000	0.0125	101	90 - 110				

¹ - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



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Kyle F. Gross
Laboratory Director

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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: WC
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-001BMSD Date Analyzed: 06/27/2019 2049h													
Test Code: 300.0-W													
Chloride	207	mg/L	E300.0	0.772	2.00	100.0	104	103	90 - 110	209	0.907	20	
Fluoride	97.3	mg/L	E300.0	0.480	2.00	100.0	0.912	96.4	90 - 110	98.6	1.29	20	
Sulfate	269	mg/L	E300.0	3.48	15.0	100.0	160	109	90 - 110	262	2.79	20	
Lab Sample ID: 1906343-001BMSD Date Analyzed: 06/17/2019 739h													
Test Code: ALK-W-2320B-LL													
Alkalinity (as CaCO3)	1,480	mg/L	SM2320B	0.781	1.00	1,000	480	100	80 - 120	1480	0.406	10	
Lab Sample ID: 1906343-001DMSD Date Analyzed: 06/24/2019 1126h													
Test Code: NH3-W-350.1 Date Prepared: 06/23/2019 2000h													
Ammonia (as N)	12.7	mg/L	E350.1	0.0492	0.0500	10.00	0.168	125	90 - 110	12.1	4.67	10	1
Lab Sample ID: 1906343-001DMSD Date Analyzed: 06/14/2019 1121h													
Test Code: NO2/NO3-W-353.2													
Nitrate/Nitrite (as N)	1.06	mg/L	E353.2	0.00363	0.0100	1.000	0.0125	104	90 - 110	1.02	3.28	10	

¹ - Matrix spike recovery indicates matrix interference. The method is in control as indicated by the LCS.



3440 South 700 West
Salt Lake City, UT 84119

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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: MSVOA
QC Type: LCS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: LCS VOC-3 061319A		Date Analyzed: 06/13/2019 742h											
Test Code: 8260-W-DEN100													
Benzene	20.5	µg/L	SW8260C	0.147	1.00	20.00	0	103	82 - 132				
Chloroform	19.3	µg/L	SW8260C	0.166	1.00	20.00	0	96.6	85 - 124				
Methylene chloride	20.1	µg/L	SW8260C	0.448	1.00	20.00	0	101	65 - 154				
Naphthalene	18.2	µg/L	SW8260C	0.704	1.00	20.00	0	91.2	63 - 129				
Tetrahydrofuran	15.6	µg/L	SW8260C	0.436	1.00	20.00	0	77.9	59 - 125				
Toluene	20.2	µg/L	SW8260C	0.177	1.00	20.00	0	101	69 - 129				
Xylenes, Total	63.0	µg/L	SW8260C	0.253	1.00	60.00	0	105	66 - 124				
Surr: 1,2-Dichloroethane-d4	52.0	µg/L	SW8260C			50.00		104	80 - 136				
Surr: 4-Bromofluorobenzene	51.3	µg/L	SW8260C			50.00		103	85 - 121				
Surr: Dibromofluoromethane	48.0	µg/L	SW8260C			50.00		95.9	78 - 132				
Surr: Toluene-d8	49.1	µg/L	SW8260C			50.00		98.3	81 - 123				



3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
Laboratory Director

Jose Rocha
QA Officer

QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: MSVOA
QC Type: MBLK

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: MB VOC-3 061319A	Date Analyzed:		06/13/2019 802h										
Test Code: 8260-W-DEN100													
2-Butanone	< 20.0	µg/L	SW8260C	1.31	20.0								
Acetone	< 20.0	µg/L	SW8260C	2.87	20.0								
Benzene	< 1.00	µg/L	SW8260C	0.147	1.00								
Carbon tetrachloride	< 1.00	µg/L	SW8260C	0.262	1.00								
Chloroform	< 1.00	µg/L	SW8260C	0.166	1.00								
Chloromethane	< 1.00	µg/L	SW8260C	0.832	1.00								
Methylene chloride	< 1.00	µg/L	SW8260C	0.448	1.00								
Naphthalene	< 1.00	µg/L	SW8260C	0.704	1.00								
Tetrahydrofuran	< 1.00	µg/L	SW8260C	0.436	1.00								
Toluene	< 1.00	µg/L	SW8260C	0.177	1.00								
Xylenes, Total	< 1.00	µg/L	SW8260C	0.253	1.00								
Surr: 1,2-Dichloroethane-d4	49.0	µg/L	SW8260C			50.00		98.1	80 - 136				
Surr: 4-Bromofluorobenzene	53.9	µg/L	SW8260C			50.00		108	85 - 121				
Surr: Dibromofluoromethane	44.1	µg/L	SW8260C			50.00		88.2	78 - 132				
Surr: Toluene-d8	50.5	µg/L	SW8260C			50.00		101	81 - 123				



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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.

Lab Set ID: 1906343

Project: Seeps and Springs 2019

Contact: Tanner Holliday

Dept: MSVOA

QC Type: MS

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-001AMS	Date Analyzed: 06/13/2019 1540h												
Test Code: 8260-W-DEN100													
Benzene	19.4	µg/L	SW8260C	0.147	1.00	20.00	0	97.0	66 - 145				
Chloroform	18.2	µg/L	SW8260C	0.166	1.00	20.00	0	90.9	50 - 146				
Methylene chloride	18.9	µg/L	SW8260C	0.448	1.00	20.00	0	94.4	30 - 192				
Naphthalene	17.6	µg/L	SW8260C	0.704	1.00	20.00	0	88.2	41 - 131				
Tetrahydrofuran	12.1	µg/L	SW8260C	0.436	1.00	20.00	0	60.4	43 - 146				
Toluene	22.0	µg/L	SW8260C	0.177	1.00	20.00	5.59	82.0	18 - 192				
Xylenes, Total	56.3	µg/L	SW8260C	0.253	1.00	60.00	0	93.9	42 - 167				
Surr: 1,2-Dichloroethane-d4	53.5	µg/L	SW8260C			50.00		107	72 - 151				
Surr: 4-Bromofluorobenzene	51.2	µg/L	SW8260C			50.00		102	80 - 152				
Surr: Dibromofluoromethane	48.5	µg/L	SW8260C			50.00		97.0	72 - 135				
Surr: Toluene-d8	44.1	µg/L	SW8260C			50.00		88.2	80 - 124				



American West
ANALYTICAL LABORATORIES

3440 South 700 West
Salt Lake City, UT 84119

Phone: (801) 263-8686, Toll Free: (888) 263-8686, Fax: (801) 263-8687
e-mail: awal@awal-labs.com, web: www.awal-labs.com

Kyle F. Gross
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QC SUMMARY REPORT

Client: Energy Fuels Resources, Inc.
Lab Set ID: 1906343
Project: Seeps and Springs 2019

Contact: Tanner Holliday
Dept: MSVOA
QC Type: MSD

Analyte	Result	Units	Method	MDL	Reporting Limit	Amount Spiked	Spike Ref. Amount	%REC	Limits	RPD Ref. Amt	% RPD	RPD Limit	Qual
Lab Sample ID: 1906343-001AMSD	Date Analyzed: 06/13/2019 1600h												
Test Code: 8260-W-DEN100													
Benzene	21.7	µg/L	SW8260C	0.147	1.00	20.00	0	108	66 - 145	19.4	11.1	25	
Chloroform	19.5	µg/L	SW8260C	0.166	1.00	20.00	0	97.5	50 - 146	18.2	7.06	25	
Methylene chloride	18.5	µg/L	SW8260C	0.448	1.00	20.00	0	92.3	30 - 192	18.9	2.30	25	
Naphthalene	18.5	µg/L	SW8260C	0.704	1.00	20.00	0	92.4	41 - 131	17.6	4.71	25	
Tetrahydrofuran	14.5	µg/L	SW8260C	0.436	1.00	20.00	0	72.4	43 - 146	12.1	18.0	25	
Toluene	24.5	µg/L	SW8260C	0.177	1.00	20.00	5.59	94.8	18 - 192	22	10.9	25	
Xylenes, Total	58.6	µg/L	SW8260C	0.253	1.00	60.00	0	97.7	42 - 167	56.3	4.04	25	
Surr: 1,2-Dichloroethane-d4	55.2	µg/L	SW8260C			50.00		110	72 - 151				
Surr: 4-Bromofluorobenzene	50.8	µg/L	SW8260C			50.00		102	80 - 152				
Surr: Dibromofluoromethane	52.3	µg/L	SW8260C			50.00		105	72 - 135				
Surr: Toluene-d8	48.4	µg/L	SW8260C			50.00		96.8	80 - 124				

WORK ORDER Summary

Work Order: **1906343**

Page 1 of 3

Client: Energy Fuels Resources, Inc.

Due Date: 6/27/2019

Client ID: ENE300

Contact: Tanner Holliday

Project: Seeps and Springs 2019

QC Level: III

WO Type: Project

Comments: QC 3 (no chromatograms). EDD-Denison. CC KWeinel@energyfuels.com; (USE PROJECT for special DLs). Do not use "*R_" samples as MS/MSD.;



Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel Storage	
1906343-001A	Entrance Seep	6/11/2019 0815h	6/13/2019 1054h	8260-W-DEN100	Aqueous	VOCFridge	3
				<i>Test Group: 8260-W-DEN100; # of Analytes: 11 / # of Surr: 4</i>			
1906343-001B				300.0-W		df - wc	1
				<i>3 SEL Analytes: CL F SO4</i>			
				ALK-W-2320B-LL		df - wc	
				<i>2 SEL Analytes: ALKB ALKC</i>			
1906343-001C				TDS-W-2540C		df - tds	
				<i>1 SEL Analytes: TDS</i>			
1906343-001D				NH3-W-350.1		df - no2/no3 & nh3	
				<i>1 SEL Analytes: NH3N</i>			
				NH3-W-PR		df - no2/no3 & nh3	
				NO2/NO3-W-353.2		df - no2/no3 & nh3	
				<i>1 SEL Analytes: NO3NO2N</i>			
1906343-001E				200.7-DIS		df-met	
				<i>5 SEL Analytes: CA MG K NA V</i>			
				200.7-DIS-PR		df-met	
				200.8-DIS		df-met	
				<i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>			
				200.8-DIS-PR		df-met	
				HG-DW-DIS-245.1		df-met	
				<i>1 SEL Analytes: HG</i>			
				HG-DW-DIS-PR		df-met	
				IONBALANCE		df-met	
				<i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>			
1906343-002A	Ruin Spring	6/11/2019 0850h	6/13/2019 1054h	8260-W-DEN100	Aqueous	VOCFridge	3
				<i>Test Group: 8260-W-DEN100; # of Analytes: 11 / # of Surr: 4</i>			
1906343-002B				300.0-W		df - wc	1
				<i>3 SEL Analytes: CL F SO4</i>			
				ALK-W-2320B-LL		df - wc	
				<i>2 SEL Analytes: ALKB ALKC</i>			
1906343-002C				TDS-W-2540C		df - tds	
				<i>1 SEL Analytes: TDS</i>			

WORK ORDER Summary

Work Order: **1906343** Page 2 of 3

Client: Energy Fuels Resources, Inc.

Due Date: 6/27/2019

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel Storage	
1906343-002D	Ruin Spring	6/11/2019 0850h	6/13/2019 1054h	NH3-W-350.1 <i>1 SEL Analytes: NH3N</i>	Aqueous	df - no2/no3 & nh3	1
				NH3-W-PR		df - no2/no3 & nh3	
				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3 & nh3	
1906343-002E				200.7-DIS <i>5 SEL Analytes: CA MG K NA V</i>		df-met	
				200.7-DIS-PR		df-met	
				200.8-DIS <i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>		df-met	
				200.8-DIS-PR		df-met	
				HG-DW-DIS-245.1 <i>1 SEL Analytes: HG</i>		df-met	
				HG-DW-DIS-PR		df-met	
				IONBALANCE <i>5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc</i>		df-met	
1906343-003A	Cottonwood Spring	6/11/2019 0950h	6/13/2019 1054h	8260-W-DEN100 <i>Test Group: 8260-W-DEN100; # of Analytes: 11 / # of Surr: 4</i>	Aqueous	VOCFridge	3
1906343-003B				300.0-W <i>3 SEL Analytes: CL F SO4</i>		df - wc	1
				ALK-W-2320B-LL <i>2 SEL Analytes: ALKB ALKC</i>		df - wc	
1906343-003C				TDS-W-2540C <i>1 SEL Analytes: TDS</i>		df - tds	
1906343-003D				NH3-W-350.1 <i>1 SEL Analytes: NH3N</i>		df - no2/no3 & nh3	
				NH3-W-PR		df - no2/no3 & nh3	
				NO2/NO3-W-353.2 <i>1 SEL Analytes: NO3NO2N</i>		df - no2/no3 & nh3	
1906343-003E				200.7-DIS <i>5 SEL Analytes: CA MG K NA V</i>		df-met	
				200.7-DIS-PR		df-met	
				200.8-DIS <i>17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN</i>		df-met	
				200.8-DIS-PR		df-met	
				HG-DW-DIS-245.1 <i>1 SEL Analytes: HG</i>		df-met	

WORK ORDER Summary

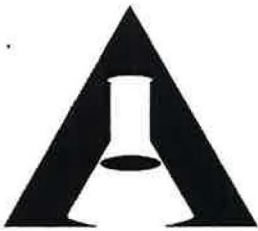
Work Order: **1906343**

Page 3 of 3

Client: Energy Fuels Resources, Inc.

Due Date: 6/27/2019

Sample ID	Client Sample ID	Collected Date	Received Date	Test Code	Matrix	Sel	Storage		
1906343-003E	Cottonwood Spring	6/11/2019 0950h	6/13/2019 1054h	HG-DW-DIS-PR	Aqueous	df-met		1	
				IONBALANCE		df-met			
				5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc					
1906343-004A	Back Spring	6/11/2019 0850h	6/13/2019 1054h	8260-W-DEN100	Aqueous		VOCFridge	3	
				Test Group: 8260-W-DEN100; # of Analytes: 11 / # of Surr: 4					
1906343-004B				300.0-W			df - wc	1	
				3 SEL Analytes: CL F SO4					
				ALK-W-2320B-LL			df - wc		
				2 SEL Analytes: ALKB ALKC					
1906343-004C				TDS-W-2540C			df - tds		
				1 SEL Analytes: TDS					
1906343-004D				NH3-W-350.1			df - no2/no3 & nh3		
				1 SEL Analytes: NH3N					
				NH3-W-PR			df - no2/no3 & nh3		
				NO2/NO3-W-353.2			df - no2/no3 & nh3		
				1 SEL Analytes: NO3NO2N					
1906343-004E				200.7-DIS			df-met		
				5 SEL Analytes: CA MG K NA V					
				200.7-DIS-PR			df-met		
				200.8-DIS			df-met		
				17 SEL Analytes: AS BE CD CR CO CU FE PB MN MO NI SE AG TL SN U ZN					
				200.8-DIS-PR			df-met		
				HG-DW-DIS-245.1			df-met		
				1 SEL Analytes: HG					
				HG-DW-DIS-PR			df-met		
				IONBALANCE			df-met		
				5 SEL Analytes: BALANCE Anions Cations TDS-Balance TDS-Calc					
1906343-005A	Trip Blank	6/11/2019 0815h	6/13/2019 1054h	8260-W-DEN100	Aqueous		VOCFridge	3	
				Test Group: 8260-W-DEN100; # of Analytes: 11 / # of Surr: 4					



American West Analytical Laboratories

463 W. 3600 S. Salt Lake City, UT 84115
Phone # (801) 263-8686 Toll Free # (888) 263-8686
Fax # (801) 263-8687 Email awal@awal-labs.com
www.awal-labs.com

CHAIN OF CUSTODY

All analysis will be conducted using NELAP accredited methods and all data will be reported using AWAL's standard analyte lists and reporting limits (PQL) unless specifically requested otherwise on this Chain of Custody and/or attached documentation.

1906343
AWAL Lab Sample Set #
Page 1 of 1

Client: Energy Fuels Resources, Inc.
Address: 6425 S. Hwy. 191 Blanding, UT 84511
Contact: Tanner Holliday
Phone #: (435) 678-2221
Email: gpalmer@energyfuels.com; KWeinel@energyfuels.com; tholliday@energyfuels.com
Project Name: Seeps and Springs 2019
Sampler Name: Tanner Holliday

Table with columns for QC Level (3), Turn Around Time (Standard), and various analyte columns (NO2/NO3, NH3, FI, Cl, SO4, TDS, Carb/Bicarb, Dissolved Metals, As, Be, Cd, Cr, Co, Cu, Fe, Pb, Mn, Hg, Mo, Ni, Se, Ag, Tl, Sn, U, V, Zn, Na, K, Mg, Ca, Ion Balance, VOCs). Rows include Entrance Seep, Ruin Spring, Cottonwood Spring, Back Spring, Trip Blank.

Due Date: 6/27/19
Laboratory Use Only
Samples Were:
1 Shipped on hand delivered (circled)
2 Ambient or Chilled
3 Temperature 0.3°C
4 Received Broken/Leaking (Improperly Sealed)
5 Properly Preserved
6 Received Within Holding Times
COC Tape Was:
1 Present on Outer Package
2 Unbroken on Outer Package
3 Present on Sample
4 Unbroken on Sample
Discrepancies Between Sample Labels and COC Record?

Relinquished by: Tanner Holliday (Signature)
Date: 6/12/2019
Received by: Denise Brown (Signature)
Date: 6/13/19
Time: 10:54

Special Instructions:
Sample containers for metals were field filtered. See the Analytical Scope of Work for Reporting Limits and VOC analyte list.

Lab Set ID: 1906343
 pH Lot #: 5912

Preservation Check Sheet

Sample Set Extension and pH

Analysis	Preservative	-001	-002	-003	-004													
Ammonia	pH <2 H ₂ SO ₄	yes	yes	yes	yes													
COD	pH <2 H ₂ SO ₄																	
Cyanide	pH >12 NaOH																	
Metals	pH <2 HNO ₃	yes	yes	yes	yes													
NO ₂ & NO ₃	pH <2 H ₂ SO ₄	yes	yes	yes	yes													
O & G	pH <2 HCL																	
Phenols	pH <2 H ₂ SO ₄																	
Sulfide	pH >9 NaOH, Zn Acetate																	
TKN	pH <2 H ₂ SO ₄																	
T PO ₄	pH <2 H ₂ SO ₄																	

- Procedure:
- 1) Pour a small amount of sample in the sample lid
 - 2) Pour sample from lid gently over wide range pH paper
 - 3) **Do Not** dip the pH paper in the sample bottle or lid
 - 4) If sample is not preserved, properly list its extension and receiving pH in the appropriate column above
 - 5) Flag COC, notify client if requested
 - 6) Place client conversation on COC
 - 7) Samples may be adjusted

Frequency: All samples requiring preservation

- * The sample required additional preservative upon receipt.
- + The sample was received unpreserved.
- ▲ The sample was received unpreserved and therefore preserved upon receipt.
- # The sample pH was unadjustable to a pH < 2 due to the sample matrix.
- The sample pH was unadjustable to a pH > _____ due to the sample matrix interference.



July 10, 2019

Ms. Kathy Weinel
Energy Fuels Resources (USA), Inc.
225 Union Boulevard
Suite 600
Lakewood, Colorado 80228

Re: Analytical for Seeps and Springs 2019
Work Order: 481772

Dear Ms. Weinel:

GEL Laboratories, LLC (GEL) appreciates the opportunity to provide the enclosed analytical results for the sample(s) we received on June 13, 2019. This original data report has been prepared and reviewed in accordance with GEL's standard operating procedures.

Test results for NELAP or ISO 17025 accredited tests are verified to meet the requirements of those standards, with any exceptions noted. The results reported relate only to the items tested and to the sample as received by the laboratory. These results may not be reproduced except as full reports without approval by the laboratory. Copies of GEL's accreditations and certifications can be found on our website at www.gel.com.

Our policy is to provide high quality, personalized analytical services to enable you to meet your analytical needs on time every time. We trust that you will find everything in order and to your satisfaction. If you have any questions, please do not hesitate to call me at (843) 556-8171, ext. 4289.

Sincerely,

Julie Robinson
Project Manager

Purchase Order: DW16138
Enclosures



Energy Fuels Resources (USA), Inc.
Analytical for
SDG: 481772

**Receipt Narrative
for
Energy Fuels Resources (USA), Inc.
SDG: 481772**

July 10, 2019

Laboratory Identification:

GEL Laboratories LLC
2040 Savage Road
Charleston, South Carolina 29407
(843) 556-8171

Summary:

Sample receipt: The samples arrived at GEL Laboratories LLC, Charleston, South Carolina on June 13, 2019 for analysis. The samples were delivered with proper chain of custody documentation and signatures. All sample containers arrived without any visible signs of tampering or breakage. There are no additional comments concerning sample receipt.

Sample Identification: The laboratory received the following samples:

<u>Laboratory ID</u>	<u>Client ID</u>
481772001	Entrance Seep
481772002	Ruin Spring
481772003	Cottonwood Spring
481772004	Back Spring

Case Narrative:

Sample analyses were conducted using methodology as outlined in GEL's Standard Operating Procedures. Any technical or administrative problems during analysis, data review, and reduction are contained in the analytical case narratives in the enclosed data package.

The enclosed data package contains the following sections: Case Narrative, Chain of Custody, Cooler Receipt Checklist, Data Package Qualifier Definitions and data from the following fractions: Radiochemistry.



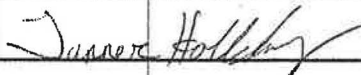
Julie Robinson
Project Manager

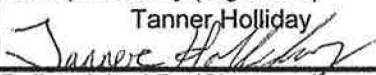


481772

CHAIN OF CUSTODY

Samples Shipped to: Gel Laboratories **Contact:** Tanner Holliday
2040 Savage Road Ph: 435 678 4115
Charleston, SC 29407 tholliday@energyfuels.com

Chain of Custody/Sampling Analysis Request

Project	Samplers Name	Samplers Signature	
Seeps and Springs 2019	Tanner Holliday		
Sample ID	Date Collected	Time Collected	Laboratory Analysis Requested
Entrance Seep	6/11/2019	815	Gross Alpha
Ruin Spring	6/11/2019	850	Gross Alpha
Cottonwood Spring	6/11/2019	950	Gross Alpha
Back Spring	6/11/2019	850	Gross Alpha
Comments:			

Relinquished By:(Signature) Tanner Holliday 	Date/Time 6/12/2019 1130	Received By:(Signature) 	Date/Time 6/13/2019
Relinquished By:(Signature)	Date/Time	Received By:(Signature) 	Date/Time



SAMPLE RECEIPT & REVIEW FORM

Client: DNM1 SDG/AR/COC/Work Order: 481772

Received By: ZKW Date Received: 6/13/19

Carrier and Tracking Number: FedEx Express FedEx Ground UPS Field Services Courier Other
1Z 187 444 0191174266

Suspected Hazard Information Yes No *If Net Counts > 100cpm on samples not marked "radioactive", contact the Radiation Safety Group for further investigation.

A) Shipped as a DOT Hazardous? Hazard Class Shipped: UN#: If UN2910, Is the Radioactive Shipment Survey Compliant? Yes ___ No ___

B) Did the client designate the samples are to be received as radioactive? COC notation or radioactive stickers on containers equal client designation

C) Did the RSO classify the samples as radioactive? Maximum Net Counts Observed* (Observed Counts - Area Background Counts): 0 CPM/mR/Hr Classified as: Rad 1 Rad 2 Rad 3

D) Did the client designate samples are hazardous? COC notation or hazard labels on containers equal client designation

E) Did the RSO identify possible hazards? If D or E is yes, select Hazards below. PCB's Flammable Foreign Soil RCRA Asbestos Beryllium Other:

Sample Receipt Criteria	Yes	NA	No	Comments/Qualifiers (Required for Non-Conforming Items)
1 Shipping containers received intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
2 Chain of custody documents included with shipment?	<input checked="" type="checkbox"/>			Circle Applicable: Client contacted and provided COC COC created upon receipt
3 Samples requiring cold preservation within (0 ≤ 6 deg. C)?*			<input checked="" type="checkbox"/>	Preservation Method: Wet Ice Ice Packs Dry ice <u>None</u> Other: TEMP: <u>23°C</u> *all temperatures are recorded in Celsius
4 Daily check performed and passed on IR temperature gun?	<input checked="" type="checkbox"/>			Temperature Device Serial #: <u>IR3-18</u> Secondary Temperature Device Serial # (If Applicable):
5 Sample containers intact and sealed?	<input checked="" type="checkbox"/>			Circle Applicable: Seals broken Damaged container Leaking container Other (describe)
6 Samples requiring chemical preservation at proper pH?	<input checked="" type="checkbox"/>			Sample ID's and Containers Affected: If Preservation added, Lot#:
7 Do any samples require Volatile Analysis?	<input checked="" type="checkbox"/>			If Yes, are Encores or Soil Kits present for solids? Yes ___ No ___ NA ___ (If yes, take to VOA Freezer)
				Do liquid VOA vials contain acid preservation? Yes ___ No ___ NA ___ (If unknown, select No)
				Are liquid VOA vials free of headspace? Yes ___ No ___ NA ___ Sample ID's and containers affected:
8 Samples received within holding time?	<input checked="" type="checkbox"/>			ID's and tests affected:
9 Sample ID's on COC match ID's on bottles?	<input checked="" type="checkbox"/>			ID's and containers affected:
10 Date & time on COC match date & time on bottles?	<input checked="" type="checkbox"/>			Circle Applicable: No dates on containers No times on containers COC missing info Other (describe)
11 Number of containers received match number indicated on COC?	<input checked="" type="checkbox"/>			Circle Applicable: No container count on COC Other (describe)
12 Are sample containers identifiable as GEL provided?	<input checked="" type="checkbox"/>			
13 COC form is properly signed in relinquished/received sections?	<input checked="" type="checkbox"/>			Circle Applicable: Not relinquished Other (describe)

Comments (Use Continuation Form if needed):

GEL Laboratories LLC – Login Review Report

Report Date: 10-JUL-19

Work Order: 481772

Page 1 of 2

GEL Work Order/SDG: 481772 Seeps and Springs 2019
 Client SDG: 481772
 Project Manager: Julie Robinson
 Project Name: DNMI00106 Analytical for
 Purchase Order: DW16138
 Package Level: LEVEL3
 EDD Format: EIM_DNMI

Work Order Due Date: 11-JUL-19
 Package Due Date: 09-JUL-19
 EDD Due Date: 11-JUL-19
 QA Due Date: 11-JUL-19
~~Due~~ Date: 12-JUL-19

Collector: C
 Prelogin #: 20190486669
 Project Workdef ID: 1329132
 SDG Status: Closed
 Logged by:

GEL ID	Client Sample ID	Client Sample Desc.	Collect Date & Time	Receive Date & Time	Time Zone	# of Cont.	Lab Matrix	Fax Due Date	Days to Process	CofC #	Prelog Group	Lab QC	Field QC
481772001	Entrance Seep		11-JUN-19 08:15	13-JUN-19 09:50	-2	1	GROUND WATER		19		1		
481772002	Ruin Spring		11-JUN-19 08:50	13-JUN-19 09:50	-2	1	GROUND WATER		19		1		
481772003	Cottonwood Spring		11-JUN-19 09:50	13-JUN-19 09:50	-2	1	GROUND WATER		19		1		
481772004	Back Spring		11-JUN-19 08:50	13-JUN-19 09:50	-2	1	GROUND WATER		19		1		

Client Sample ID	Status	Tests/Methods	Product Reference	Fax Date	PM Comments	Aux Data	Receive Codes
-001 Entrance Seep	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha				
-002 Ruin Spring	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha				
-003 Cottonwood Spring	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha				
-004 Back Spring	REVV	GFPC, Total Alpha Radium, Liquid	Gross Alpha				

Product: GFCTORAL Workdef ID: 1461303 In Product Group? No Group Name: Group Reference:

Method: EPA 903.0 Path: Drinking Water (903.0 or 9315)

Product Description: GFPC, Total Alpha Radium, Liquid Product Reference: Gross Alpha

Samples: 001, 002, 003, 004 Moisture Correction: "As Received"

Parmname Check: All parmnames scheduled properly

CAS #	Parmname	Client RDL or PQL & Unit	Reporting Units	Parm Function	Included in Sample?	Included in QC?	Custom List?
	Gross Radium Alpha	1	pCi/L	REG	Y	Y	No

Action	Product Name	Description	Samples
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Contingent Tests

GEL Laboratories LLC – Login Review Report

Report Date: 10-JUL-19

Work Order: 481772

Page 2 of 2

Login Requirements:

Requirement	Include?	Comments
-------------	----------	----------

Peer Review by: _____ Work Order (SDG#), PO# Checked? _____ C of C signed in receiver location? _____

List of current GEL Certifications as of 10 July 2019

State	Certification
Alaska	17-018
Arkansas	88-0651
CLIA	42D0904046
California	2940
Colorado	SC00012
Connecticut	PH-0169
DoD ELAP/ ISO17025 A2LA	2567.01
Florida NELAP	E87156
Foreign Soils Permit	P330-15-00283, P330-15-00253
Georgia	SC00012
Georgia SDWA	967
Hawaii	SC00012
Idaho	SC00012
Illinois NELAP	200029
Indiana	C-SC-01
Kansas NELAP	E-10332
Kentucky SDWA	90129
Kentucky Wastewater	90129
Louisiana Drinking Water	LA024
Louisiana NELAP	03046 (AI33904)
Maine	2019020
Maryland	270
Massachusetts	M-SC012
Michigan	9976
Mississippi	SC00012
Nebraska	NE-OS-26-13
Nevada	SC000122019-3
New Hampshire NELAP	2054
New Jersey NELAP	SC002
New Mexico	SC00012
New York NELAP	11501
North Carolina	233
North Carolina SDWA	45709
North Dakota	R-158
Oklahoma	9904
Pennsylvania NELAP	68-00485
Puerto Rico	SC00012
S. Carolina Radiochem	10120002
South Carolina Chemistry	10120001
Tennessee	TN 02934
Texas NELAP	T104704235-19-15
Utah NELAP	SC000122018-27
Vermont	VT87156
Virginia NELAP	460202
Washington	C780

**Radiochemistry
Technical Case Narrative
Energy Fuels Resources
SDG #: 481772**

Product: GFPC, Total Alpha Radium, Liquid

Analytical Method: EPA 903.0

Analytical Procedure: GL-RAD-A-044 REV# 10

Analytical Batch: 1888588

The following samples were analyzed using the above methods and analytical procedure(s).

<u>GEL Sample ID#</u>	<u>Client Sample Identification</u>
481772001	Entrance Seep
481772002	Ruin Spring
481772003	Cottonwood Spring
481772004	Back Spring
1204312433	Method Blank (MB)
1204312434	481772004(Back Spring) Sample Duplicate (DUP)
1204312435	481772004(Back Spring) Matrix Spike (MS)
1204312436	481772004(Back Spring) Matrix Spike Duplicate (MSD)
1204312437	Laboratory Control Sample (LCS)

The samples in this SDG were analyzed on an "as received" basis.

Data Summary:

All sample data provided in this report met the acceptance criteria specified in the analytical methods and procedures for initial calibration, continuing calibration, instrument controls and process controls where applicable, with the following exceptions.

Preparation Information

Aliquot Reduced

aliquots were reduced due to limited sample volume.

Technical Information

Recounts

Samples 1204312435 (Back SpringMS), 1204312436 (Back SpringMSD) and 1204312437 (LCS) were recounted due to low recovery. The recounts are reported. Samples 1204312434 (Back SpringDUP) and 481772004 (Back Spring) were recounted due to high MDCs. The recounts are reported.

Miscellaneous Information

Additional Comments

The matrix spike and matrix spike duplicate, 1204312435 (Back SpringMS) and 1204312436 (Back SpringMSD), aliquots were reduced to conserve sample volume.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

GEL LABORATORIES LLC

2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

Qualifier Definition Report for

DNMI001 Energy Fuels Resources (USA), Inc.

Client SDG: 481772 GEL Work Order: 481772

The Qualifiers in this report are defined as follows:

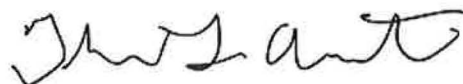
- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the CRDL.

Review/Validation

GEL requires all analytical data to be verified by a qualified data reviewer. In addition, all CLP-like deliverables receive a third level review of the fractional data package.

The following data validator verified the information presented in this data report:

Signature:



Name: Theresa Austin

Date: 08 JUL 2019

Title: Group Leader

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Report Date: July 8, 2019

Page 1 of

Energy Fuels Resources (USA), Inc.
 225 Union Boulevard
 Suite 600
 Lakewood, Colorado
 Contact: Ms. Kathy Weinel

Workorder: 481772

Paramname	NOM	Sample	Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
Rad Gas Flow											
Batch	1888588										
QC1204312434	481772004 DUP										
Gross Radium Alpha	U	0.201	U	0.478	pCi/L	N/A		N/A	LXB3	07/02/19	06:1
	Uncertainty	+/-0.158		+/-0.212							
QC1204312437	LCS										
Gross Radium Alpha	555			505	pCi/L		91.1	(75%-125%)		07/01/19	09:4
	Uncertainty			+/-5.10							
QC1204312433	MB										
Gross Radium Alpha			U	0.824	pCi/L					06/28/19	11:4
	Uncertainty			+/-0.357							
QC1204312435	481772004 MS										
Gross Radium Alpha	4470 U	0.201		3690	pCi/L		82.5	(75%-125%)		07/01/19	09:4
	Uncertainty	+/-0.158		+/-45.0							
QC1204312436	481772004 MSD										
Gross Radium Alpha	4470 U	0.201		3640	pCi/L	1.41	81.4	(0%-20%)		07/01/19	09:4
	Uncertainty	+/-0.158		+/-40.5							

Notes:

Counting Uncertainty is calculated at the 68% confidence level (1-sigma).

The Qualifiers in this report are defined as follows:

- ** Analyte is a surrogate compound
- < Result is less than value reported
- > Result is greater than value reported
- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- F Estimated Value
- H Analytical holding time was exceeded
- K Analyte present. Reported value may be biased high. Actual value is expected to be lower.
- L Analyte present. Reported value may be biased low. Actual value is expected to be higher.
- M M if above MDC and less than LLD

GEL LABORATORIES LLC

2040 Savage Road Charleston, SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

Workorder: 481772

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Parmname	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
M		Matrix Related Failure								
N/A		RPD or %Recovery limits do not apply.								
N1		See case narrative								
ND		Analyte concentration is not detected above the detection limit								
NJ		Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier								
Q		One or more quality control criteria have not been met. Refer to the applicable narrative or DER.								
R		Sample results are rejected								
U		Analyte was analyzed for, but not detected above the CRDL.								
UI		Gamma Spectroscopy--Uncertain identification								
UJ		Gamma Spectroscopy--Uncertain identification								
UL		Not considered detected. The associated number is the reported concentration, which may be inaccurate due to a low bias.								
X		Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier								
Y		QC Samples were not spiked with this compound								
^		RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.								
h		Preparation or preservation holding time was exceeded								

N/A indicates that spike recovery limits do not apply when sample concentration exceeds spike conc. by a factor of 4 or more or %RPD not applicable.
^ The Relative Percent Difference (RPD) obtained from the sample duplicate (DUP) is evaluated against the acceptance criteria when the sample is greater than five times (5X) the contract required detection limit (RL). In cases where either the sample or duplicate value is less than 5X the RL, a control limit of +/- the RL is used to evaluate the DUP result.

* Indicates that a Quality Control parameter was not within specifications.
For PS, PSD, and SDILT results, the values listed are the measured amounts, not final concentrations.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the QC Summary.

Tab E

Quality Assurance and Data Validation Tables

Table E-1 Holding Time Evaluation

	Required Holding Time	Cottonwood Spring	Entrance Seep	Back Spring (duplicate of Ruin Spring)	Ruin Spring	West Water Seep
Carbonate	14 days	OK	OK	OK	OK	OK
Bicarbonate	14 days	OK	OK	OK	OK	OK
Calcium	6 months	OK	OK	OK	OK	OK
Chloride	28 days	OK	OK	OK	OK	OK
Fluoride	28 days	OK	OK	OK	OK	OK
Magnesium	6 months	OK	OK	OK	OK	OK
Nitrogen-Ammonia	28 days	OK	OK	OK	OK	OK
Nitrogen-Nitrate	28 days	OK	OK	OK	OK	OK
Potassium	6 months	OK	OK	OK	OK	OK
Sodium	6 months	OK	OK	OK	OK	OK
Sulfate	28 days	OK	OK	OK	OK	OK
pH (s.u.)	N/A	OK	OK	OK	OK	OK
TDS	7 days	OK	OK	OK	OK	OK
Metals	6 months (except mercury which is 28 days)	OK	OK	OK	OK	OK
Radiologics	6 months	OK	OK	OK	OK	OK
VOCS (including THF)	14 days	OK	OK	OK	OK	OK

* - Corral Spring, and Corral Canyon were all dry and no samples were collected.

E-2 Laboratory Receipt Temperature Check

Work Order Number/Lab Set ID	Receipt Temp
AWAL - 1906343	0.3°C
GEL - 481772	N/A
AWAL - 1903737	0.3°C
GEL - 475027	N/A

N/A = These shipments contained samples for the analysis of Gross Alpha only. Per Table 1 in the approved QAP, samples submitted for Gross Alpha analyses do not have a sample temperature requirement.

E-3: Analytical Method Check - Routine Samples

Parameter	QAP/Permit Method	Method Used by Lab
Ammonia (as N)	A4500-NH3 G or E350.1	E350.1
Nitrate + Nitrite (as N)	E 353.1 or E353.2	E353.2
Metals	E 200.7 or E200.8	E200.7, E200.8
Mercury	E200.7 or E200.8 or E245.1	E245.1
Gross Alpha	E900.0 or E900.1 or E903.0	E903.0
VOCs	SW8260B or SW8260C	SW8260C
Chloride	A4500-Cl B, A4500-Cl E, or E300.0	E300.0
Fluoride	A4500-F C or E300.0	E300.0
Sulfate	A4500-SO4 E or E300.0	E300.0
TDS	A2540C	A2540C
Carbonate as CO ₃ , Bicarbonate as HCO ₃	A2320B	A2320B
Calcium, Magnesium, Potassium, Sodium	E200.7	E200.7

E-4 Reporting Limit Evaluation

Parameter	Permit-Specified RL
Ammonia (as N)	25 mg/L
Nitrate + Nitrite (as N)	10 mg/L
Metals ug/L	
Arsenic	50
Beryllium	4
Cadmium	5
Chromium	100
Cobalt	730
Copper	1300
Iron	11000
Lead	15
Manganese	800
Mercury	2
Molybdenum	40
Nickel	100
Selenium	50
Silver	100
Thallium	2
Tin	17000
Uranium	30
Vanadium	60
Zinc	5000
Gross Alpha	15
VOCs ug/L	
Acetone	700
Benzene	5
Carbon tetrachloride	5
Chloroform	70
Chloromethane	30
MEK	4000
Methylene Chloride	5
Naphthalene	100
Tetrahydrofuran	46
Toluene	1000
Xylenes	10000
Major Ions mg/L	
Chloride	1
Fluoride	4
Sulfate	1
TDS	10
Carbonate as CO ₃ , Bicarbonate as HCO ₃	Not Specified
Calcium, Magnesium, Potassium, Sodium	Not Specified

All analyses were reported to the required RLs unless noted in the text.

E-5: Trip Blank Evaluation

The trip blanks for the 2019 sampling program were nondetect.

Blank	Sample Date	Laboratory
1906343	6/11/2019	AWAL
1903737	3/27/2019	AWAL

E-6 Duplicate Sample Relative Percent Difference

Major Ions (mg/l)	Ruin Spring	Back Spring (Duplicate of Ruin Spring)	RPD %
Carbonate	<1.0	<1.0	N/C
Bicarbonate	202	202	0.0
Calcium	165	157	5.0
Chloride	23.9	23.7	0.8
Fluoride	0.505	0.46	9.3
Magnesium	45.6	35.7	24.4
Nitrogen-Ammonia	<0.05	<0.05	N/C
Nitrogen-Nitrate	1.56	1.65	5.6
Potassium	3.31	3.30	0.3
Sodium	128	119	7.3
Sulfate	474	455	4.1
TDS	900	816	9.8
Metals (ug/l)			
Arsenic	<5.0	<5.0	N/C
Beryllium	<0.5	<0.5	N/C
Cadmium	<0.5	<0.5	N/C
Chromium	<25	<25	N/C
Cobalt	<10	<10	N/C
Copper	<10	<10	N/C
Iron	<30	<30	N/C
Lead	<1.0	<1.0	N/C
Manganese	<10	<10	N/C
Mercury	<0.5	<0.5	N/C
Molybdenum	20.2	18.7	7.7
Nickel	<20	<20	N/C
Selenium	10.8	9.61	11.7
Silver	<10	<10	N/C
Thallium	<0.5	<0.5	N/C
Tin	<100	<100	N/C
Uranium	9.02	9.01	0.1
Vanadium	<15	<15	N/C
Zinc	<10	<10	N/C
Radiologics (pCi/l)			
Gross Alpha	<1.00	<1.00	N/C
VOCS (ug/L)			
Acetone	<20.0	<20.0	N/C
Benzene	<1.00	<1.00	N/C
Carbon tetrachloride	<1.00	<1.00	N/C
Chloroform	<1.00	<1.00	N/C
Chloromethane	<1.00	<1.00	N/C
MEK	<20.0	<20.0	N/C
Methylene Chloride	<1.00	<1.00	N/C

E-6 Duplicate Sample Relative Percent Difference

Major Ions (mg/l)	Ruin Spring	Back Spring (Duplicate of Ruin Spring)	RPD %
Naphthalene	<1.00	<1.00	N/C
Tetrahydrofuran	<1.00	<1.00	N/C
Toluene	<1.00	<1.00	N/C
Xylenes	<1.00	<1.00	N/C

N/C = Not Calculated

Per the approved QAP, an RPD greater than 20% is acceptable if the reported results are less than 5 times the RL. These results are provided for information only.

* Duplicate checks reported for gross alpha minus RN and U are not %RPD. Calculated values are based on the formula in the approved GWDP and QAP.

E-7 Radiologics Counting Error

Sample ID	Gross Alpha minus Rn & U	Gross Alpha minus Rn & U Precision (\pm)	Counting Error \leq 20%	GWQS	Within GWQS
Cottonwood Spring	<1.0	0.257	N/A	15	N/A
Entrance Seep	2.63	0.455	Y	15	N/A
Back Spring (duplicate of Ruin Spring)	<1.0	0.158	N/A	15	N/A
Ruin Spring	<1.0	0.106	N/A	15	N/A
Westwater Seep	<1.0	0.270	N/A	15	N/A

N/A - The sample results are non-detect and the QAP required checks are not applicable.

E-8: Laboratory Matrix QC

Matrix Spike % Recovery Comparison

Lab Report	Well	Analyte	MS %REC	MSD %REC	REC Range	RPD	RPD LIMIT
1906343	Ruin Spring	Calcium*	NC	NC	70 - 130	NC	20
1906343	Ruin Spring	Magnesium*	NC	NC	70 - 130	NC	20
1906343	Ruin Spring	Sodium*	NC	NC	70 - 130	NC	20
1906343	Entrance Seep	Ammonia (as N)	120	125	90-110	12.1	10
1903737	Westwater Seep	Sodium*	NC	NC	70 -130	NC	20

* Recovery was not calculated as the analyte level in the sample was greater than 4 times the spike amount.

NA = QC was not performed on an EFRI sample.

Laboratory Duplicate % Recovery Comparison

Lab Report	Well	Analyte	Sample Result (mg/L)	Lab Duplicate Result (mg/L)	RPD %	RPD Range %
1906343	Entrance Seep	TDS	1010	892	12.2	5

Surrogate % Recovery

All surrogate recoveries were within the laboratory established acceptance limits.

Method/Laboratory Reagent Blank detections

All method blank results were within the laboratory established acceptance limits.

Tab F

CSV Transmittal

Kathy Weinel

From: Kathy Weinel
Sent: Tuesday, January 14, 2020 12:43 PM
To: Phillip Goble
Cc: 'Dean Henderson'; Paul Goranson; David Frydenlund; Terry Slade; Logan Shumway; Scott Bakken
Subject: Transmittal of CSV Files White Mesa Mill 2019 Annual Seeps and Springs Monitoring
Attachments: 475027.csv; 481772.csv; 1903737-report-EDD.csv; 1906343-report-EDD.csv

Dear Mr. Goble,

Attached to this e-mail are the electronic copies of laboratory results for the annual seeps and springs monitoring conducted at the White Mesa Mill during 2019, in Comma Separated Value (CSV) format.

Please contact me at 303-389-4134 if you have any questions on this transmittal.

Yours Truly

Kathy Weinel



Kathy Weinel

Quality Assurance Manager

t: 303.389.4134 | f: 303.389.4125
225 Union Blvd., Suite 600
Lakewood, CO 80228

<http://www.energyfuels.com>

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