

Douglas A. Ducey
Governor

ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY



Misael Cabrera
Director

Report Review

Inspection ID: 408353

Permit No: 88788

Place ID: 827

AZURITE Place Name: ENERGY FUELS RESOURCES - CANYON MINE

Inspection Type: Report Review

Type of Report: Annual Environmental Soil Sampling Report (2022)

Date Received: 9/22/2022

Date Reviewed: 9/29/2022

Reviewer: Mariana Mendez Armendariz

Results of Inspection:

Is the report certified for truth, accuracy, and completeness by a responsible official?

- ☒ Yes – Scott Bakken
☐ No – Contact Permittee for proper signature.

Does the Permittee state they are in compliance?

- ☒ Yes – File report without contacting Permittee.
☐ No – Request additional information or permit deviation report as necessary.

Reviewer Comments:

The Permittee has not exceeded the Uranium and Radium-226 trigger levels as stated in the permit; therefore, the report is submitted annually.

2022 Soil Results (Uranium) -

Duplicate of East (69): 0.571 mg/kg

Badge #66: 0.936 mg/kg

Badge #67: 0.937 mg/kg

Badge #68: 0.637 mg/kg

Badge #69: 0.577 mg/kg

Badge #114: 0.937 mg/kg

Badge #115: 0.608 mg/kg

The trigger level for uranium for this mine is 60 mg/kg.

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2022 Soil Results (Radium-226) -

Duplicate of East (69): 0.57 ± 0.21 pCi/g

Badge #66: 0.43 ± 0.2 pCi/g

Badge #67: 0.91 ± 0.24 pCi/g

Badge #68: 0.78 ± 0.22 pCi/g

Badge #69: 0.51 ± 0.26 pCi/g

Badge #114: 1.1 ± 0.24 pCi/g

Badge #115: 0.65 ± 0.19 pCi/g

The trigger level for Radium-226 for this mine is 20 pCi/g.

No reporting deficiencies noted.



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

September 22, 2022

VIA PDF AND EXPEDITED DELIVERY

Daniel Czecholinski, Director
Division of Air Quality
Arizona Department of Environmental Quality
Technical Services Unit
1110 West Washington Street
Phoenix, AZ 85007

**Subject: Energy Fuels Resources (USA) Inc. Pinyon Plain Mine 2022 Annual
Environmental Soil Sampling Air Quality Class II Permit No. 88788**

Dear Mr. Czecholinski:

Attached please find the Annual Environmental Soil Sampling Results for the Pinyon Plain Mine for 2022. The Environmental Soil Monitoring Results are required by Section II.B.2.b of Attachment D to the Arizona Department of Environmental Quality ("ADEQ") Air Quality Class II Permit No. 88788 (the "Permit") for the Pinyon Plain Mine. Attachment D, Section II.B.2.b requires that soil samples be collected within 60 days of Permit issuance and subsequent samples be collected quarterly for one year and annually thereafter. Reporting of soil data is required within 30 days of data receipt. As previously noted, the final quarterly soil sampling data required by the Permit was submitted in November 2017. Beginning in 2018, soil samples were collected annually. Also attached is a certification signature as required by VIII of Attachment A to the Permit.

The soil results are below the trigger levels specified in the Permit. No additional reporting as contemplated in Attachment D, Section II.B.3.c and Section II.B.3.d is required.

If you have any questions or comments, please do not hesitate to contact me at 303-389-4131.

Yours very truly,

A handwritten signature in black ink, appearing to read 'Jordan C. App', is written over a light blue horizontal line.

ENERGY FUELS RESOURCES (USA) INC.
Jordan C. App
Environmental Scientist

cc: Scott Bakken
Matt Germansen
Kathy Weinel

ANNUAL ENVIRONMENTAL SOIL MONITORING REPORT
FOR 2022
ENERGY FUELS RESOURCES (USA) INC.



PINYON PLAIN MINE
6.5 MILES SOUTHEAST OF TUSAYAN
COCONINO COUNTY, ARIZONA

September 21, 2022

PREPARED BY:
Energy Fuels Resources (USA) Inc.
225 Union Boulevard, Ste. 600
Lakewood, Colorado 80228

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FIGURES

Figure 1	Sampling and Monitoring Location Map
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Pinyon Plain Mine Air Quality Control Permit No. 88788

1.0 Introduction

The Pinyon Plain Mine (the “Mine”) is an underground uranium mine, operated by Energy Fuels Resources (USA) Inc. (“EFRI”). The Mine is located 6.5 miles southeast of Tusayan in Coconino County, Arizona. The Mine is capable of producing a maximum of 109,500 tons per year of uranium ore. Ore is hauled to the White Mesa Mill (the “Mill”), near Blanding, Utah for processing. No ore processing occurs on site when operating. The site contains a mine shaft, a ventilation shaft, an office building, a head-frame and associated hoist and maintenance building, a septic vault, ore stockpiles (when mining), development rock stockpiles (when mining), topsoil stockpiles, other facilities associated with the mine operation and a lined non-stormwater impoundment. The location of the Mine is shown on Figure 1.

Pursuant to Attachment D, Section II.A of the Arizona Department of Environmental Quality (ADEQ”) Air Quality Control Permit, Number 88788 (the “Permit”), EFRI is required to conduct soil and gamma monitoring at six locations outside of the mine site. The locations are shown on Figure 1. The frequency of monitoring is described in Section 2 below.

This report presents the soil monitoring results for the Mine as required by the Permit and as described below.

2.0 Radiation Monitoring Activities

Pursuant to the current Permit, approved on October 13, 2016, soil and passive gamma monitoring is required to be conducted in accordance with the ADEQ-approved standard Operating Procedures (“SOPs”) included as Appendices 2 and 3 to the Permit. Attachment D, Section II.B.1.b requires that Optically Stimulated Luminescence (“OSL”) monitors for passive gamma be collected on a calendar quarter basis. Attachment D, Section II.B.2.b requires that soil samples be collected within 60 days of Permit issuance and subsequent samples be collected quarterly for one year and annually thereafter. Reporting of both soil and gamma data is required within 30 days of data receipt. Pursuant to the Permit, 5 quarterly soil samples were collected from fourth quarter 2016 through fourth quarter 2017. Soil sampling was conducted annually starting in 2018. The annual 2022 results are reported herein.

Gamma data will be reported under separate cover within 30 days of data receipt in accordance with the Permit requirements.

3.0 Trigger Levels

Attachment D, Section II.B.3.c specifies Initial Action Trigger Levels (“trigger level”) for uranium and radium-226 in soil and passive gamma results. The ADEQ-approved trigger levels were developed as described in the ADEQ Technical Review and Evaluation of Application for Air Quality Significant Revision and in the report entitled *Development of the Proposed Trigger Levels for Energy Fuel’s Arizona Mines*.

The trigger level for uranium and radium-226 in soil are 60 mg/kg and 20 pCi/g respectively. The soil results reported herein will be compared to this trigger level.

4.0 Analysis of Findings

Soil and duplicate results are included in Appendix A.

The soil results are below the trigger levels specified in the Permit. No additional reporting as contemplated in Attachment D, Section II.B.3.c and Section II.B.3.d is required.

5.0 Certification

**ENERGY FUELS RESOURCES (USA) INC.
PINYON PLAIN MINE, AIR QUALITY CONTROL PERMIT NUMBER 88788
CERTIFICATION OF TRUTH, ACCURACY AND COMPLETENESS**

Based on information and belief formed after reasonable inquiry, the statements and information in the foregoing document are true, accurate, and complete.



September 21, 2022

Signature of Responsible Official
Scott Bakken
Vice President, Regulatory Affairs

Date

APPENDIX A
PINYON PLAIN SOIL RESULTS

Summary of Soil Results for Pinyon Plain Mine

Badge Location	Uranium Trigger Level (mg/kg)	Uranium Results (mg/kg)	Radium-226 Trigger Level (pCi/g)	Radium-226 Results (pCi/g)
Fourth Quarter 2016				
Pinyon Plain South (66)	60	1.02	20	1 ± 0.23
Pinyon Plain West (67)		0.96		1.1 ± 0.23
Pinon Plain North (68)		0.65		0.91 ± 0.25
Pinyon Plain East (69)		0.57		0.54 ± 0.16
Duplicate (70) of East (69)		0.59		0.88 ± 0.22
First Quarter 2017				
Duplicate (65) of East (69)	60	0.67	20	0.64 ± 0.19
Pinyon Plain South (66)		0.75		0.81 ± 0.19
Pinyon Plain West (67)		0.93		1.5 ± 0.27
Pinon Plain North (68)		0.60		1 ± 0.25
Pinyon Plain East (69)		0.60		0.41 ± 0.2
Second Quarter 2017				
Duplicate (65) of South (66)	60	1.66	20	2 ± 0.26
Pinyon Plain South (66)		1.78		1.3 ± 0.26
Pinyon Plain West (67)		0.97		1.2 ± 0.29
Pinon Plain North (68)		0.64		1.4 ± 0.3
Pinyon Plain East (69)		0.58		0.61 ± 0.27
Third Quarter 2017				
Duplicate (65) of South (66)	60	0.74	20	0.31 ± 0.14
Pinyon Plain South (66)		0.81		1 ± 0.2
Pinyon Plain West (67)		0.84		1 ± 0.2
Pinon Plain North (68)		0.57		0.8 ± 0.19
Pinyon Plain East (69)		0.57		0.3 ± 0.2
Fourth Quarter 2017				
Duplicate (65) of South (66)	60	0.81	20	0.77 ± 0.17
Pinyon Plain South (66)		1.07		0.87 ± 0.18
Pinyon Plain West (67)		0.85		1.2 ± 0.23
Pinon Plain North (68)		0.58		0.75 ± 0.22
Pinyon Plain East (69)		0.54		0.63 ± 0.18
Annual 2018				
Duplicate (65) of North (68)	60	0.59	20	1.2 ± 0.35
Pinyon Plain South (66)		0.72		0.74 ± 0.24
Pinyon Plain West (67)		0.84		1.1 ± 0.28
Pinon Plain North (68)		0.54		0.91 ± 0.2
Pinyon Plain East (69)		0.52		0.71 ± 0.19
Annual 2019				
Duplicate of North (68)	60	0.69	20	1.4 ± 0.31
Pinyon Plain South (66)		0.70		0.83 ± 0.17
Pinyon Plain West (67)		0.89		1.4 ± 0.27
Pinon Plain North (68)		0.63		1 ± 0.22
Pinyon Plain East (69)		0.55		1.1 ± 0.21

Summary of Soil Results for Pinyon Plain Mine

Badge Location	Uranium Trigger Level (mg/kg)	Uranium Results (mg/kg)	Radium-226 Trigger Level (pCi/g)	Radium-226 Results (pCi/g)
Annual 2020				
Duplicate of West (67)	60	0.86	20	1.4 ± 0.22
Pinyon Plain South (66)		0.67		1 ± 0.18
Pinyon Plain West (67)		0.89		1.2 ± 0.21
Pinon Plain North (68)		0.64		1.1 ± 0.25
Pinyon Plain East (69)		0.55		1 ± 0.23
Annual 2021				
Duplicate of South (66)	60	0.755	20	0.43 ± 0.14
Pinyon Plain South (66)		0.801		0.82 ± 0.17
Pinyon Plain West (67)		0.937		0.94 ± 0.19
Pinon Plain North (68)		0.657		0.92 ± 0.24
Pinyon Plain East (69)		0.593		0.52 ± 0.2
Pinyon Plain Southwest (114)		0.849		1.2 ± 0.24
Pinyon Plain Southeast (115)		0.472		0.25 ± 0.17
Annual 2022				
Duplicate of East (69)	60	0.571	20	0.57 ± 0.21
Pinyon Plain South (66)		0.939		0.43 ± 0.2
Pinyon Plain West (67)		0.937		0.91 ± 0.24
Pinon Plain North (68)		0.637		0.78 ± 0.22
Pinyon Plain East (69)		0.577		0.51 ± 0.26
Pinyon Plain Southwest (114)		0.937		1.1 ± 0.24
Pinyon Plain Southeast (115)		0.608		0.65 ± 0.19

APPENDIX B

PINYON PLAIN LABORATORY DATA

September 15, 2022

Report to:

Kathy Weinel

Energy Fuels Resources (USA) Inc.

225 Union Blvd. , Suite 600

Lakewood, CO 80228

Bill to:

Accounts Payable

Energy Fuels Resources (USA) Inc.

225 Union Blvd. , Suite 600

Lakewood, CO 80228

Project ID:

ACZ Project ID: L74673

Kathy Weinel:

Enclosed are the analytical results for sample(s) submitted to ACZ Laboratories, Inc. (ACZ) on July 20, 2022. This project has been assigned to ACZ's project number, L74673. Please reference this number in all future inquiries.

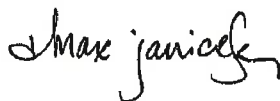
All analyses were performed according to ACZ's Quality Assurance Plan. The enclosed results relate only to the samples received under L74673. Each section of this report has been reviewed and approved by the appropriate Laboratory Supervisor, or a qualified substitute.

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

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

All samples and sub-samples associated with this project will be disposed of after October 15, 2022. If the samples are determined to be hazardous, additional charges apply for disposal (typically \$11/sample). If you would like the samples to be held longer than ACZ's stated policy or to be returned, please contact your Project Manager or Customer Service Representative for further details and associated costs. ACZ retains analytical raw data reports for ten years.

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



Max Janicek has reviewed and
approved this report.



Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: PINYON PLAIN MINE 69

ACZ Sample ID: **L74673-01**
Date Sampled: 07/11/22 13:17
Date Received: 07/20/22
Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	M6020B ICP-MS	510	0.577			mg/Kg	0.051	0.255	08/10/22 17:14	mfm

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.5		*	%	0.1	0.5	07/22/22 1:55	scm

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees	USDA No. 1, 1972								07/21/22 15:00	scm
Digestion - Hot Plate	M3050B ICP-MS								08/04/22 11:24	mep
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2								07/25/22 9:27	scm

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 68

ACZ Sample ID: **L74673-02**

Date Sampled: 07/11/22 13:30

Date Received: 07/20/22

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	M6020B ICP-MS	505	0.637			mg/Kg	0.0505	0.253	08/10/22 17:16	mfm

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.7		*	%	0.1	0.5	07/22/22 3:16	scm

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees	USDA No. 1, 1972								07/21/22 15:03	scm
Digestion - Hot Plate	M3050B ICP-MS								08/04/22 11:40	mep
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2								07/25/22 9:31	scm

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 67

ACZ Sample ID: **L74673-03**

Date Sampled: 07/11/22 13:40

Date Received: 07/20/22

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	M6020B ICP-MS	510	0.937			mg/Kg	0.051	0.255	08/10/22 17:18	mfm

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.1		*	%	0.1	0.5	07/22/22 4:37	scm

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees	USDA No. 1, 1972								07/21/22 15:06	scm
Digestion - Hot Plate	M3050B ICP-MS								08/04/22 11:57	mep
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2								07/25/22 9:35	scm

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 66

ACZ Sample ID: **L74673-04**

Date Sampled: 07/11/22 13:58

Date Received: 07/20/22

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	M6020B ICP-MS	505	0.939			mg/Kg	0.0505	0.253	08/10/22 17:21	mfm

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.9		*	%	0.1	0.5	07/22/22 5:57	scm

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees	USDA No. 1, 1972								07/21/22 15:10	scm
Digestion - Hot Plate	M3050B ICP-MS								08/04/22 12:13	mep
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2								07/25/22 9:38	scm

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 114

ACZ Sample ID: **L74673-05**

Date Sampled: 07/11/22 13:52

Date Received: 07/20/22

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	M6020B ICP-MS	515	0.937			mg/Kg	0.0515	0.258	08/10/22 17:23	mfm

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	97.2		*	%	0.1	0.5	07/22/22 7:18	scm

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees	USDA No. 1, 1972								07/21/22 15:13	scm
Digestion - Hot Plate	M3050B ICP-MS								08/04/22 12:30	mep
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2								07/25/22 9:42	scm

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 115

ACZ Sample ID: **L74673-06**

Date Sampled: 07/11/22 14:10

Date Received: 07/20/22

Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	M6020B ICP-MS	505	0.608			mg/Kg	0.0505	0.253	08/10/22 17:25	mfm

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.6		*	%	0.1	0.5	07/22/22 8:39	scm

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees	USDA No. 1, 1972								07/21/22 15:16	scm
Digestion - Hot Plate	M3050B ICP-MS								08/04/22 12:46	mep
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2								07/25/22 9:46	scm

Energy Fuels Resources (USA) Inc.
Project ID:
Sample ID: PINYON PLAIN MINE 169

ACZ Sample ID: **L74673-07**
Date Sampled: 07/11/22 13:17
Date Received: 07/20/22
Sample Matrix: Soil

Metals Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Uranium, total (3050)	M6020B ICP-MS	510	0.571			mg/Kg	0.051	0.255	08/10/22 17:28	mfm

Soil Analysis

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Solids, Percent	D2216-80	1	98.6		*	%	0.1	0.5	07/22/22 10:00	scm

Soil Preparation

Parameter	EPA Method	Dilution	Result	Qual	XQ	Units	MDL	PQL	Date	Analyst
Air Dry at 34 Degrees	USDA No. 1, 1972								07/21/22 15:20	scm
Digestion - Hot Plate	M3050B ICP-MS								08/04/22 13:02	mep
Sieve-2000 um (2.0mm)	ASA No.9, 15-4.2.2								07/25/22 9:50	scm



Laboratories, Inc.

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

Inorganic Reference

Report Header Explanations

<i>Batch</i>	A distinct set of samples analyzed at a specific time
<i>Found</i>	Value of the QC Type of interest
<i>Limit</i>	Upper limit for RPD, in %.
<i>Lower</i>	Lower Recovery Limit, in % (except for LCSS, mg/Kg)
<i>MDL</i>	Method Detection Limit. Same as Minimum Reporting Limit unless omitted or equal to the PQL (see comment #5). Allows for instrument and annual fluctuations.
<i>PCN/SCN</i>	A number assigned to reagents/standards to trace to the manufacturer's certificate of analysis
<i>PQL</i>	Practical Quantitation Limit. Synonymous with the EPA term "minimum level".
<i>QC</i>	True Value of the Control Sample or the amount added to the Spike
<i>Rec</i>	Recovered amount of the true value or spike added, in % (except for LCSS, mg/Kg)
<i>RPD</i>	Relative Percent Difference, calculation used for Duplicate QC Types
<i>Upper</i>	Upper Recovery Limit, in % (except for LCSS, mg/Kg)
<i>Sample</i>	Value of the Sample of interest

QC Sample Types

<i>AS</i>	Analytical Spike (Post Digestion)	<i>LCSWD</i>	Laboratory Control Sample - Water Duplicate
<i>ASD</i>	Analytical Spike (Post Digestion) Duplicate	<i>LFB</i>	Laboratory Fortified Blank
<i>CCB</i>	Continuing Calibration Blank	<i>LFM</i>	Laboratory Fortified Matrix
<i>CCV</i>	Continuing Calibration Verification standard	<i>LFMD</i>	Laboratory Fortified Matrix Duplicate
<i>DUP</i>	Sample Duplicate	<i>LRB</i>	Laboratory Reagent Blank
<i>ICB</i>	Initial Calibration Blank	<i>MS</i>	Matrix Spike
<i>ICV</i>	Initial Calibration Verification standard	<i>MSD</i>	Matrix Spike Duplicate
<i>ICSAB</i>	Inter-element Correction Standard - A plus B solutions	<i>PBS</i>	Prep Blank - Soil
<i>LCSS</i>	Laboratory Control Sample - Soil	<i>PBW</i>	Prep Blank - Water
<i>LCSSD</i>	Laboratory Control Sample - Soil Duplicate	<i>PQV</i>	Practical Quantitation Verification standard
<i>LCSW</i>	Laboratory Control Sample - Water	<i>SDL</i>	Serial Dilution

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

EFRC

ACZ Project ID: **L74673**

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

Solids, Percent

D2216-80

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG546973													
WG546973PBS	PBS	07/21/22 15:10				U	%		-0.1	0.1			
L74670-01DUP	DUP	07/21/22 17:51			92.5	92.7	%				0	20	

Uranium, total (3050)

M6020B ICP-MS

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Found	Units	Rec%	Lower	Upper	RPD	Limit	Qual
WG548246													
WG548246ICV	ICV	08/10/22 16:27	MS220701-3	.05		.05116	mg/L	102	90	110			
WG548246ICB	ICB	08/10/22 16:29				.00016	mg/L		-0.0003	0.0003			
WG547796PBS	PBS	08/10/22 16:43				U	mg/Kg		-0.15	0.15			
WG547796LCSS1	LCSS	08/10/22 16:46	PCN66103	30.9		28.63622	mg/Kg		23.9	37.9			
WG547796LCSSD1	LCSSD	08/10/22 16:48	PCN66103	30.9		27.98618	mg/Kg		23.9	37.9	2	20	
L74672-01MS	MS	08/10/22 16:53	MS220523-4	12.625	4.97	15.61051	mg/Kg	84	75	125			
L74672-01MSD	MSD	08/10/22 16:55	MS220523-4	12.625	4.97	15.53863	mg/Kg	84	75	125	0	20	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: **L74673**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
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No extended qualifiers associated with this analysis

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 69

Locator:

ACZ Sample ID: **L74673-01**

Date Sampled: 07/11/22 13:17

Date Received: 07/20/22

Sample Matrix: Soil

Radium 226 (3050)

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (3050)	09/14/22 0:00		0.51	0.26	0.74	pCi/g	*	fdw

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 68

Locator:

ACZ Sample ID: **L74673-02**

Date Sampled: 07/11/22 13:30

Date Received: 07/20/22

Sample Matrix: Soil

Radium 226 (3050)

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (3050)	09/14/22 0:00		0.78	0.22	0.97	pCi/g	*	fdw

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 67

Locator:

ACZ Sample ID: **L74673-03**

Date Sampled: 07/11/22 13:40

Date Received: 07/20/22

Sample Matrix: Soil

Radium 226 (3050)

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (3050)	09/14/22 0:00		0.91	0.24	1.1	pCi/g	*	fdw

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 66

Locator:

ACZ Sample ID: **L74673-04**

Date Sampled: 07/11/22 13:58

Date Received: 07/20/22

Sample Matrix: Soil

Radium 226 (3050)

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (3050)	09/14/22 0:00		0.43	0.2	0.62	pCi/g	*	fdw

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 114

Locator:

ACZ Sample ID: **L74673-05**

Date Sampled: 07/11/22 13:52

Date Received: 07/20/22

Sample Matrix: Soil

Radium 226 (3050)

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (3050)	09/14/22 0:00		1.1	0.24	0.91	pCi/g	*	fdw

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 115

Locator:

ACZ Sample ID: **L74673-06**

Date Sampled: 07/11/22 14:10

Date Received: 07/20/22

Sample Matrix: Soil

Radium 226 (3050)

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (3050)	09/14/22 0:00		0.65	0.19	1.1	pCi/g	*	fdw

Energy Fuels Resources (USA) Inc.

Project ID:

Sample ID: PINYON PLAIN MINE 169

Locator:

ACZ Sample ID: **L74673-07**

Date Sampled: 07/11/22 13:17

Date Received: 07/20/22

Sample Matrix: Soil

Radium 226 (3050)

Prep Method:

M903.1

Parameter	Measure Date	Prep Date	Result	Error(+/-)	LLD	Units	XQ	Analyst
Radium 226 (3050)	09/14/22 0:00		0.57	0.21	0.9	pCi/g	*	fdw

Report Header Explanations

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

QC Sample Types

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

QC Sample Type Explanations

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

ACZ Qualifiers (Qual)

H	Analysis exceeded method hold time.
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Method Prefix Reference

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

Comments

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

For a complete list of ACZ's Extended Qualifiers, please click:

<https://aczk.com/wp-content/uploads/2019/04/Ext-Qual-List.pdf>

EFRC

ACZ Project ID: **L74673**

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

Radium 226 (3050)

M903.1

Units: pCi/g

ACZ ID	Type	Analyzed	PCN/SCN	QC	Sample	Error	LLD	Found	Error	LLD	Rec%	Lower	Upper	RPD/RER	Limit	Qual
WG549555																
WG547532PBS	PBS	09/14/22						.01	0.17	1			2			
WG547532LCSS	LCSS	09/14/22	PCN64374	40				32	1.1	1.2	80	43	148			
L74672-01MS	MS	09/14/22	PCN64374	40.82	2.8	0.37	1.2	46	1.3	1.1	106	43	148			
L74672-04DUP	DUP-RPD	09/14/22			7.1	0.49	0.81	5.4	0.46	0.95				27	20	RC
L74774-01DUP	DUP-RPD	09/14/22			0.35	0.2	1.1	.79	0.22	0.96				77	20	RG
L74774-01DUP	DUP-RER	09/14/22			0.35	0.2	1.1	.79	0.22	0.96				1.48	2	

Energy Fuels Resources (USA) Inc.

ACZ Project ID: **L74673**

ACZ ID	WORKNUM	PARAMETER	METHOD	QUAL	DESCRIPTION
L74673-01	WG549555	Radium 226 (3050)	M903.1	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
L74673-02	WG549555	Radium 226 (3050)	M903.1	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
L74673-03	WG549555	Radium 226 (3050)	M903.1	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
L74673-04	WG549555	Radium 226 (3050)	M903.1	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
L74673-05	WG549555	Radium 226 (3050)	M903.1	RC	For a solid matrix, the matrix duplicate precision assessment (RPD or RER) exceeded the control limit, which is attributable to the non-homogeneity of the sample.
L74673-06	WG549555	Radium 226 (3050)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.
L74673-07	WG549555	Radium 226 (3050)	M903.1	RG	Sample concentration is less than 5x LLD; RPD was not used for data validation. Replicate Error Ratio (RER) is less than 2. Precision judged to be in control.

Energy Fuels Resources (USA) Inc.

ACZ Project ID: **L74673**

Soil Analysis

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

Solids, Percent

D2216-80

Energy Fuels Resources (USA) Inc.

ACZ Project ID: L74673

Date Received: 07/20/2022 11:38

Received By: mjj

Date Printed: 7/21/2022

Receipt Verification

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

Samples/Containers

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

NA indicates Not Applicable

Chain of Custody Related Remarks

Client Contact Remarks

Shipping Containers

Cooler Id	Temp (°C)	Temp Criteria (°C)	Rad (µR/Hr)	Custody Seal Intact?
NA38020	25.9	NA	15	Yes

Was ice present in the shipment container(s)?

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

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

Energy Fuels Resources (USA) Inc.

ACZ Project ID: L74673

Date Received: 07/20/2022 11:38

Received By: mjj

Date Printed: 7/21/2022

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



CHAIN OF CUSTODY

Samples Shipped to:

ACZ Laboratories

2773 Downhill Drive

Steamboat Springs, CO 80487

Contact:



Kathy Weinel

Ph: 303.389.4134

kweinel@energyfuels.com

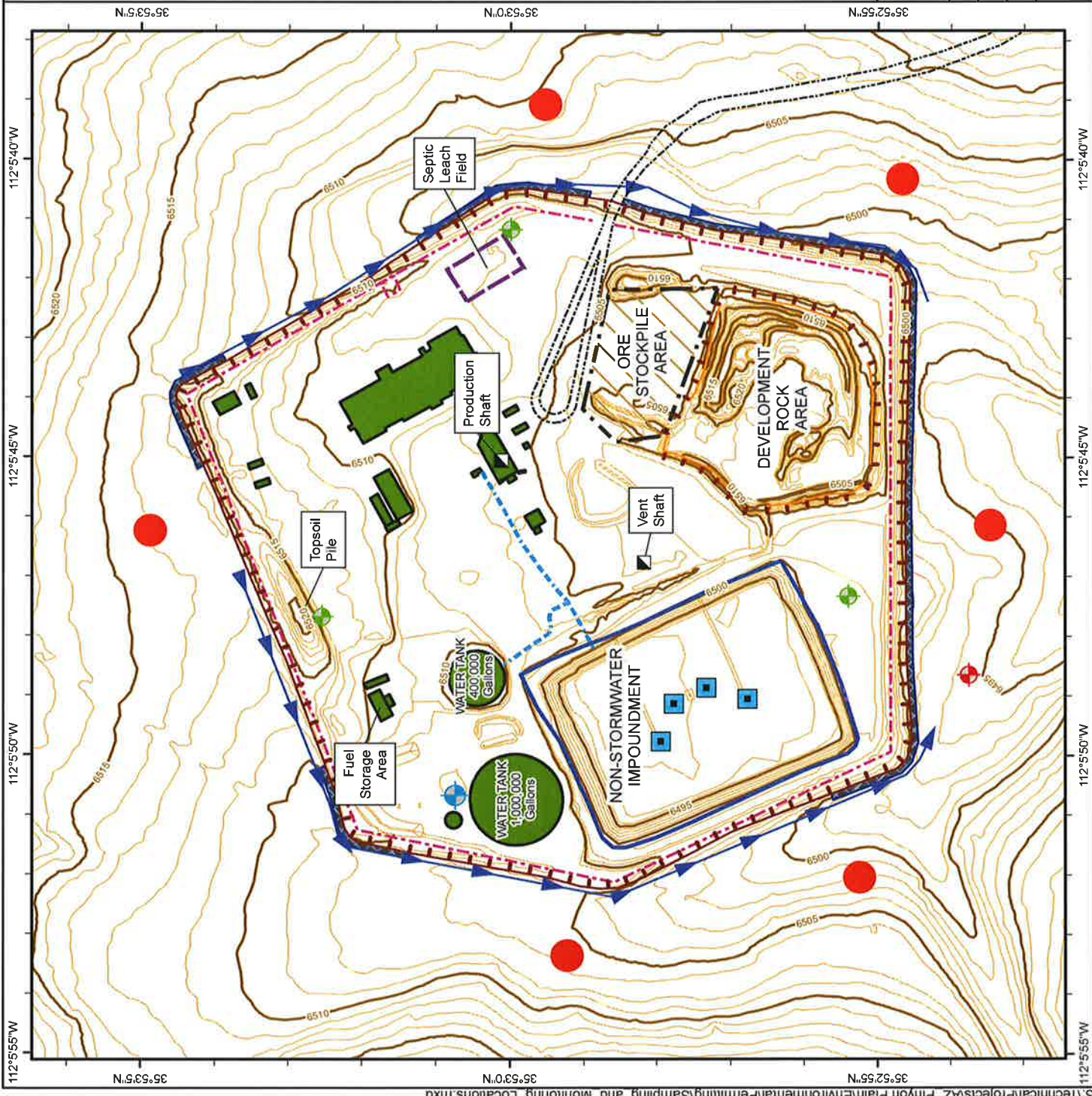
Chain of Custody/Sampling Analysis Request

[illegible]

Relinquished By:(Signature) 	Date/Time 7-18-22 1130	Received By:(Signature) 	Date/Time 7/20/22 1130
Relinquished By:(Signature)	Date/Time	Received By:(Signature)	Date/Time



FIGURE



Legend

- Soil Sample and Gamma Monitoring Location
- Evaporative Water System
- Redwall-Muav Water Supply/Monitoring Well
- Coconino Monitoring Well
- USGS Coconino Well
- Surface Water Diversion
- Berm
- 4" PVC Discharge
- Fence Line - Facility Area
- Rip Rap
- Building/Structure
- Major Contour - 5 ft
- Minor Contour - 1 ft



Feet



Meters



Pinyon Plain Mine

T29N, R03E, Section 20, Coconino County, AZ

Sampling and Monitoring Location Map