



Energy Fuels Resources (USA) Inc.
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January 29, 2025

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

Re: Pinyon Plain Mine, Individual Aquifer Protection Permit No. P-100333, Annual Report for 2024

Dear Sir or Madam:

Enclosed please find Energy Fuels Resources (USA) Inc.'s ("EFRI's") 2024 Annual Report for the Pinyon Plain Mine (the "Mine") in accordance with Section 2.7.4.1 of the Mine's Individual Aquifer Protection Permit No. P-100333 (the "APP").

Pumping Operational Summary

The attached Table 1 includes the daily volume of water pumped from underground mining areas for 2024. This includes the meter results for water pumped from the lined shaft sump and the water capture rings. Sump meter readings were reset and the system recalibrated on March 27th, April 3rd, June 28th, July 5th and December 20th. Ring meter readings were also reset, and the system recalibrated, on March 24th, April 3rd, June 28th, July 5th and December 20th. Events that caused meter outages or anomalous readings occurred during the following events: between June 16th to June 18th due to an underground pump upgrade project, October 5th due to pump maintenance, November 27th due to a pump breakage and replacement.

Sump Water Quality Analytical Results

The attached Table 2 includes a summary of the analytical results for the quarterly sump water quality samples. These samples are collected from the outfall point where mine water discharges from the underground sump into the non-storm water impoundment.

Groundwater Elevations

The attached Table 3 includes a summary of groundwater elevations for the three wells completed in the perched Coconino groundwater. These depth to water measurements were collected during quarterly ambient groundwater monitoring.

Groundwater Quality Summary

On July 31, 2024, the ADEQ approved a Minor Amendment of the APP to establish Alert Levels (“AL”) and Aquifer Quality Limits (“AQL”) for Point of Compliance Monitoring Wells 1, 2, 3, and 4. Table 4 includes data for the groundwater quality summary for the Monitoring Wells.

Water Budget Throughout Mine Operations

As shown in Table 1, the average flow rate of water pumped from the lined shaft sump and water capture rings during 2024 was approximately 7.49 and 7.42 gpm, respectively, with a combined rate of approximately 14.91 gpm. Water from the lined shaft sump is either pumped directly to the non-stormwater impoundment or to one of two water storage tanks. Water from the capture rings is pumped directly to a water storage tank. All water pumped into the impoundment was effectively managed through natural and enhanced evaporation and freeboard levels were maintained throughout the year. Water from the capture rings was either treated using the water treatment system prior to use for dust control on site, hauled off-site for beneficial use by ranchers, or managed through direct evaporation.

Development Rock Stockpile Construction Update

The Development Rock Stockpile (“DRS”) was constructed as of December 31, 2022.

Intermediate Ore Stockpile Construction Update

The Intermediate Ore Stockpile (“IOS”) was constructed as of December 31, 2023. The “As Built” report was submitted on December 14, 2023, in accordance with Section 3.0, Compliance Schedule Item 9 of Aquifer Protection Permit No. P-100333. The Project Report was submitted on January 16, 2024.

Please feel free to contact me at 303-389-4132 or Jordan App at 303-389-4131 if you have any questions or concerns.

Sincerely,



ENERGY FUELS RESOURCES (USA) INC.

Scott A. Bakken

Vice President, Regulatory Affairs

Att: Table 1: Pumping Operational Summary
Table 2: Sump Water Quality Analytical Results
Table 3: Groundwater Elevations
Table 4: Groundwater Quality Summary
Attachment 1: Sump Analytical Data

cc: Kathy Weinel, Travis Chiotti, Race Fisher, Nick Martin, Matt Germansen, Jordan App,
Barb Bechstein (EFRI) Travis Ralston (ADEQ)

SIGNATURE AND CERTIFICATION

This document was prepared by Energy Fuels Resources (USA) Inc. based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.



1/29/25

Signature of Responsible Official
Scott A. Bakken
Vice President, Regulatory Affairs

Date

TABLES

TABLE 1

Pinyon Plain Mine Daily Volume of Water Pumped from Underground Mining Areas during 2024

Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)	Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)	Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)		
First Quarter 2024																			
January 2024						February 2024						March 2024							
1/1/2024	254,044	16,189	163,202	10,100	26,289	2/1/2024	653,909	21,459	459,479	19,160	40,619	3/1/2024	979,776	33,482	719,902	18,752	52,234		
1/2/2024	268,654	14,610	173,193	9,991	24,601	2/2/2024	653,974	65	459,583	104	169	3/2/2024	991,938	12,162	729,440	9,538	21,700		
1/3/2024	278,431	9,777	183,308	10,115	19,892	2/3/2024	665,724	11,750	468,459	8,876	20,626	3/3/2024	1,005,422	13,484	738,844	9,404	22,888		
1/4/2024	301,714	23,283	196,100	12,792	36,075	2/4/2024	671,091	5,367	478,095	9,636	15,003	3/4/2024	1,021,890	16,468	748,328	9,484	25,952		
1/5/2024	310,723	9,009	206,147	10,047	19,056	2/5/2024	677,551	6,460	487,452	9,357	15,817	3/5/2024	1,035,278	13,388	757,754	9,426	22,814		
1/6/2024	320,074	9,351	213,088	6,941	16,292	2/6/2024	696,873	19,322	497,000	9,548	28,870	3/6/2024	1,043,597	8,319	767,136	9,382	17,701		
1/7/2024	339,710	19,636	223,088	10,000	29,636	2/7/2024	716,590	19,717	506,616	9,616	29,333	3/7/2024	1,050,038	6,441	776,607	9,471	15,912		
1/8/2024	351,852	12,142	233,028	9,940	22,082	2/8/2024	728,065	11,475	516,105	9,489	20,964	3/8/2024	1,053,714	3,676	786,064	9,457	13,133		
1/9/2024	356,140	4,288	242,853	9,825	14,113	2/9/2024	739,290	11,225	525,490	9,385	20,610	3/9/2024	1,070,369	16,655	795,279	9,215	25,870		
1/10/2024	361,421	5,281	252,904	10,051	15,332	2/10/2024	753,437	14,147	534,899	9,409	23,556	3/10/2024	1,094,711	24,342	804,628	9,349	33,691		
1/11/2024	365,968	4,547	262,730	9,826	14,373	2/11/2024	760,830	7,393	544,243	9,344	16,737	3/11/2024	1,105,335	10,624	813,800	9,172	19,796		
1/12/2024	369,088	3,120	272,497	9,767	12,887	2/12/2024	765,099	4,269	553,667	9,424	13,693	3/12/2024	1,121,970	16,635	823,072	9,272	25,907		
1/13/2024	370,187	1,099	282,441	9,944	11,043	2/13/2024	767,997	2,898	562,964	9,297	12,195	3/13/2024	1,135,001	13,031	832,522	9,450	22,481		
1/14/2024	370,579	392	292,382	9,941	10,333	2/14/2024	772,255	4,258	572,330	9,366	13,624	3/14/2024	1,147,678	12,677	841,861	9,339	22,016		
1/15/2024	389,720	19,141	302,069	9,687	28,828	2/15/2024	781,657	9,402	581,706	9,376	18,778	3/15/2024	1,157,482	9,804	851,106	9,245	19,049		
1/16/2024	419,164	29,444	311,939	9,870	39,314	2/16/2024	792,049	10,392	590,772	9,066	19,458	3/16/2024	1,159,391	1,909	860,560	9,454	11,363		
1/17/2024	447,659	28,495	321,726	9,787	38,282	2/17/2024	796,196	4,147	600,148	9,376	13,523	3/17/2024	1,166,461	7,070	869,948	9,388	16,458		
1/18/2024	476,641	28,982	331,698	9,972	38,954	2/18/2024	800,919	4,723	609,520	9,372	14,095	3/18/2024	1,193,852	27,391	879,166	9,218	36,609		
1/19/2024	489,745	13,104	341,658	9,960	23,064	2/19/2024	803,254	2,335	618,880	9,360	11,695	3/19/2024	1,220,975	27,123	888,353	9,187	36,310		
1/20/2024	490,568	823	351,678	10,020	10,843	2/20/2024	807,927	4,673	628,234	9,354	14,027	3/20/2024	1,240,016	19,041	897,760	9,407	28,448		
1/21/2024	493,159	2,591	360,244	8,566	11,157	2/21/2024	831,732	23,805	637,655	9,421	33,226	3/21/2024	1,247,728	7,712	907,079	9,319	17,031		
1/22/2024	511,129	17,970	363,342	3,098	21,068	2/22/2024	858,619	26,887	646,871	9,216	36,103	3/22/2024	1,265,980	18,252	916,204	9,125	27,377		
1/23/2024	540,101	28,972	373,321	9,979	38,951	2/23/2024	882,222	23,603	655,750	8,879	32,482	3/23/2024	1,271,509	5,529	1,588,336	9,000	14,529		
1/24/2024	559,768	19,667	383,172	9,851	29,518	2/24/2024	896,584	14,362	664,798	9,048	23,410	3/24/2024	1,287,349	15,840	1,597,474	9,138	24,978		
1/25/2024	564,047	4,279	393,051	9,879	14,158	2/25/2024	913,165	16,581	673,767	8,969	25,550	3/25/2024	1,295,367	8,018	1,606,935	9,461	17,479		
1/26/2024	579,675	15,628	397,199	4,148	19,776	2/26/2024	915,285	2,120	682,781	9,014	11,134	3/26/2024	1,302,781	7,414	1,616,221	9,286	16,700		
1/27/2024	592,790	13,115	403,181	5,982	19,097	2/27/2024	929,248	13,963	691,799	9,018	22,981	3/27/2024	13,042	13,042	1,625,643	9,422	22,464		
1/28/2024	592,872	82	412,746	9,565	9,647	2/28/2024	946,294	17,046	701,150	9,351	26,397	3/28/2024	26,775	13,733	1,635,257	9,614	23,347		
1/29/2024	610,131	17,259	421,262	8,516	25,775	2/29/2024	960,363	14,069	710,550	9,400	23,469	3/29/2024	36,857	10,082	1,644,101	8,844	18,926		
1/30/2024	622,831	12,700	430,954	9,692	22,392							3/30/2024	44,268	7,411	1,653,955	9,854	17,265		
1/31/2024	632,450	9,619	440,319	9,365	18,984							3/31/2024	59,601	15,333	1,662,980	9,025	24,358		
Total Gallons Pumped for Jan.		394,595		287,217	681,812	Total Gallons Pumped for February		327,913		270,231	598,144	Total Gallons Pumped for March		416,088		298,698	714,786		
Daily Gallons Pumped		12,729		9,265	21,994	Daily Gallons Pumped		11,307		9,318	20,626	Daily Gallons Pumped		13,422		9,635	23,058		
Hourly Gallons Pumped		530		386	916	Hourly Gallons Pumped		471		388	859	Hourly Gallons Pumped		559		401	961		
GPM for January		8.84		6.43	15.27	GPM for February		7.85		6.47	14.32	GPM for March		9.32		6.69	16.01		
														Total for the Quarter		1,138,596		856,146	1,994,742

*3/24/2024: Ring flow meter changed

*3/27/2024: Sump flow meter changed

Table 1

Pinyon Plain Mine Daily Volume of Water Pumped from Underground Mining Areas during 2024

Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)	Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)	Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)
Second Quarter 2024																	
April 2024						May 2024						June 2024					
4/1/2024	70,799	11,198	1,672,328	9,348	20,546	5/1/2024	411,787	20,132	252,702	9,839	29,971	6/1/2024	801,284	12,412	583,910	10,397	22,809
4/2/2024	82,036	11,237	1,681,845	9,517	20,754	5/2/2024	429,802	18,015	262,429	9,727	27,742	6/2/2024	815,912	14,628	594,494	10,584	25,212
4/3/2024	8,648	8,648	5,604	5,604	14,252	5/3/2024	443,658	13,856	275,356	12,927	26,783	6/3/2024	829,240	13,328	604,654	10,160	23,488
4/4/2024	22,074	13,426	14,607	9,003	22,429	5/4/2024	454,986	11,328	287,468	12,112	23,440	6/4/2024	835,401	6,161	614,790	10,136	16,297
4/5/2024	32,824	10,750	23,707	9,100	19,850	5/5/2024	467,881	12,895	300,702	13,234	26,129	6/5/2024	846,148	10,747	625,186	10,396	21,143
4/6/2024	43,519	10,695	32,734	9,027	19,722	5/6/2024	486,753	18,872	313,248	12,546	31,418	6/6/2024	865,130	18,982	635,226	10,040	29,022
4/7/2024	64,652	21,133	41,574	8,840	29,973	5/7/2024	496,535	9,782	325,865	12,617	22,399	6/7/2024	878,241	13,111	645,098	9,872	22,983
4/8/2024	78,003	13,351	50,332	8,758	22,109	5/8/2024	507,862	11,327	338,417	12,552	23,879	6/8/2024	886,015	7,774	655,111	10,013	17,787
4/9/2024	92,347	14,344	58,911	8,579	22,923	5/9/2024	510,247	2,385	351,427	13,010	15,395	6/9/2024	899,869	13,854	665,062	9,951	23,805
4/10/2024	106,514	14,167	67,710	8,799	22,966	5/10/2024	511,985	1,738	363,748	12,321	14,059	6/10/2024	909,929	10,060	674,792	9,730	19,790
4/11/2024	120,384	13,870	76,731	9,021	22,891	5/11/2024	523,607	11,622	375,577	11,829	23,451	6/11/2024	924,119	14,190	684,876	10,084	24,274
4/12/2024	133,096	12,712	85,503	8,772	21,484	5/12/2024	539,313	15,706	380,507	4,930	20,636	6/12/2024	936,211	12,092	693,173	8,297	20,389
4/13/2024	146,433	13,337	94,482	8,979	22,316	5/13/2024	553,463	14,150	387,208	6,701	20,851	6/13/2024	949,239	13,028	700,408	7,235	20,263
4/14/2024	160,103	13,670	103,270	8,788	22,458	5/14/2024	567,449	13,986	398,735	11,527	25,513	6/14/2024	959,700	10,461	709,226	8,818	19,279
4/15/2024	174,215	14,112	112,041	8,771	22,883	5/15/2024	578,460	11,011	408,351	9,616	20,627	6/15/2024	962,200	2,500	718,904	9,678	12,178
4/16/2024	189,041	14,826	120,851	8,810	23,636	5/16/2024	592,411	13,951	419,994	11,643	25,594	6/16/2024	962,200	0	728,021	9,117	9,117
4/17/2024	203,331	14,290	128,114	7,263	21,553	5/17/2024	601,917	9,506	431,990	11,996	21,502	6/17/2024	962,200	0	738,114	10,093	10,093
4/18/2024	219,522	16,191	136,593	8,479	24,670	5/18/2024	612,168	10,251	443,796	11,806	22,057	6/18/2024	962,201	1	746,583	8,469	8,470
4/19/2024	234,824	15,302	145,098	8,505	23,807	5/19/2024	622,552	10,384	455,616	11,820	22,204	6/19/2024	971,880	9,679	757,047	10,464	20,143
4/20/2024	247,178	12,354	153,742	8,644	20,998	5/20/2024	633,071	10,519	467,374	11,758	22,277	6/20/2024	1,000,211	28,331	767,029	9,982	38,313
4/21/2024	256,641	9,463	162,176	8,434	17,897	5/21/2024	645,300	12,229	478,716	11,342	23,571	6/21/2024	1,026,817	26,606	775,412	8,383	34,989
4/22/2024	273,038	16,397	170,596	8,420	24,817	5/22/2024	658,488	13,188	490,552	11,836	25,024	6/22/2024	1,051,604	24,787	778,702	3,290	28,077
4/23/2024	289,003	15,965	178,965	8,369	24,334	5/23/2024	672,672	14,184	500,594	10,042	24,226	6/23/2024	1,078,818	27,214	781,286	2,584	29,798
4/24/2024	300,206	11,203	187,421	8,456	19,659	5/24/2024	690,035	17,363	509,834	9,240	26,603	6/24/2024	1,102,368	23,550	787,954	6,668	30,218
4/25/2024	306,035	5,829	195,713	8,292	14,121	5/25/2024	702,735	12,700	510,832	998	13,698	6/25/2024	1,117,019	14,651	796,327	8,373	23,024
4/26/2024	324,468	18,433	204,040	8,327	26,760	5/26/2024	715,443	12,708	522,319	11,487	24,195	6/26/2024	1,128,641	11,622	806,006	9,679	21,301
4/27/2024	341,861	17,393	213,492	9,452	26,845	5/27/2024	733,568	18,125	531,307	8,988	27,113	6/27/2024	1,138,860	10,219	816,742	10,736	20,955
4/28/2024	357,462	15,601	223,674	10,182	25,783	5/28/2024	748,352	14,784	542,028	10,721	25,505	6/28/2024	1,138,860	0	826,462	9,720	9,720
4/29/2024	376,812	19,350	233,285	9,611	28,961	5/29/2024	759,284	10,932	552,390	10,362	21,294	6/29/2024	1,166,016	27,156	835,479	9,017	36,173
4/30/2024	391,655	14,843	242,863	9,578	24,421	5/30/2024	771,562	12,278	562,912	10,522	22,800	6/30/2024	1,184,210	18,194	839,897	4,418	22,612
						5/31/2024	788,872	17,310	573,513	10,601	27,911						
Total Gallons Pumped for April		414,890		261,728	675,818	Total Gallons Pumped for May		397,317		330,658	727,867	Total Gallons Pumped for June		395,338		366,384	661,722
Daily Gallons Pumped		13,803		8,724	22,527	Daily Gallons Pumped		12,813		10,666	23,480	Daily Gallons Pumped		13,178		8,879	22,057
Hourly Gallons Pumped		575		364	939	Hourly Gallons Pumped		534		444	978	Hourly Gallons Pumped		549		370	919
GPM for April		9.59		6.06	15.64	GPM for May		8.90		7.41	16.31	GPM for June		9.15		6.17	15.32
Total for the Quarter														1,206,645		858,762	2,065,407

*4/3/2024: Flow meters reset and recalibrated

*6/16 - 6/18/2024: Underground Pump Upgrade Project

*6/28/2024: Flow meters reset and recalibrated

Table 1

Pinyon Plain Mine Daily Volume of Water Pumped from Underground Mining Areas During 2024

Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)	Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)	Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)
July 2024						August 2024						September 2024					
7/1/2024	1,199,900	15,690	852,586	12,689	28,379	8/1/2024	208,555	9,560	392,551	12,199	21,759	9/1/2024	484,803	19,102	842,450	15,228	34,330
7/2/2024	1,207,854	7,954	868,246	15,660	23,614	8/2/2024	217,480	8,925	408,831	16,280	25,205	9/2/2024	497,298	12,495	857,831	15,381	27,876
7/3/2024	1,214,262	6,408	882,704	14,458	20,866	8/3/2024	225,045	7,565	423,460	14,629	22,194	9/3/2024	503,410	6,112	870,855	13,024	19,136
7/4/2024	1,221,736	7,474	897,608	14,904	22,378	8/4/2024	233,333	8,288	437,019	13,559	21,847	9/4/2024	510,067	6,657	885,827	14,972	21,629
7/5/2024	0	0	4,740	4,740	4,740	8/5/2024	240,804	7,471	451,886	14,867	22,338	9/5/2024	523,977	13,910	900,390	14,563	28,473
7/6/2024	10,836	10,836	19,765	15,025	25,861	8/6/2024	249,464	8,660	466,488	14,602	23,262	9/6/2024	532,350	8,373	914,275	13,885	22,258
7/7/2024	18,566	7,730	33,678	13,913	21,643	8/7/2024	258,049	8,585	480,614	14,126	22,711	9/7/2024	543,009	10,659	927,457	13,182	23,841
7/8/2024	24,767	6,201	47,487	13,809	20,010	8/8/2024	265,146	7,097	495,831	15,217	22,314	9/8/2024	551,777	8,768	940,625	13,168	21,936
7/9/2024	31,594	6,827	62,745	15,258	22,085	8/9/2024	277,131	11,985	508,960	13,129	25,114	9/9/2024	558,320	6,543	953,475	12,850	19,393
7/10/2024	39,189	7,595	76,518	13,773	21,368	8/10/2024	285,190	8,059	523,110	14,150	22,209	9/10/2024	568,985	10,665	966,319	12,844	23,509
7/11/2024	46,297	7,108	90,742	14,224	21,332	8/11/2024	290,319	5,129	537,407	14,297	19,426	9/11/2024	576,949	7,964	981,113	14,794	22,758
7/12/2024	53,713	7,416	104,142	13,400	20,816	8/12/2024	299,488	9,169	552,139	14,732	23,901	9/12/2024	580,767	3,818	996,170	15,057	18,875
7/13/2024	60,849	7,136	118,760	14,618	21,754	8/13/2024	307,888	8,400	567,485	15,346	23,746	9/13/2024	581,483	716	1,012,145	15,975	16,691
7/14/2024	67,966	7,117	132,707	13,947	21,064	8/14/2024	318,804	10,916	582,807	15,322	26,238	9/14/2024	606,879	25,396	1,027,645	15,500	40,896
7/15/2024	75,742	7,776	147,339	14,632	22,408	8/15/2024	330,121	11,317	598,160	15,353	26,670	9/15/2024	617,445	10,566	1,040,466	12,821	23,387
7/16/2024	84,193	8,451	161,854	14,515	22,966	8/16/2024	338,622	8,501	611,937	13,777	22,278	9/16/2024	630,082	12,637	1,050,123	9,657	22,294
7/17/2024	92,618	8,425	176,497	14,643	23,068	8/17/2024	346,769	8,147	626,377	14,440	22,587	9/17/2024	642,688	12,606	1,060,909	10,786	23,392
7/18/2024	102,056	9,438	190,717	14,220	23,658	8/18/2024	355,219	8,450	640,712	14,335	22,785	9/18/2024	654,471	11,783	1,069,313	8,404	20,187
7/19/2024	108,428	6,372	204,941	14,224	20,596	8/19/2024	362,553	7,334	656,293	15,581	22,915	9/19/2024	668,889	14,418	1,083,111	13,798	28,216
7/20/2024	110,442	2,014	220,361	15,420	17,434	8/20/2024	371,627	9,074	672,228	15,935	25,009	9/20/2024	678,807	9,918	1,094,024	10,913	20,831
7/21/2024	111,335	893	234,793	14,432	15,325	8/21/2024	378,418	6,791	684,277	12,049	18,840	9/21/2024	682,796	3,989	1,101,250	7,226	11,215
7/22/2024	112,074	739	249,727	14,934	15,673	8/22/2024	385,539	7,121	700,134	15,857	22,978	9/22/2024	696,180	13,384	1,116,919	15,669	29,053
7/23/2024	139,161	27,087	264,197	14,470	41,557	8/23/2024	394,776	9,237	715,792	15,658	24,895	9/23/2024	703,071	6,891	1,130,280	13,361	20,252
7/24/2024	144,920	5,759	279,079	14,882	20,641	8/24/2024	406,585	11,809	731,389	15,597	27,406	9/24/2024	714,811	11,740	1,143,373	13,093	24,833
7/25/2024	155,890	10,970	294,120	15,041	26,011	8/25/2024	413,157	6,572	746,219	14,830	21,402	9/25/2024	728,950	14,139	1,155,919	12,546	26,685
7/26/2024	164,112	8,222	308,120	14,000	22,222	8/26/2024	428,111	14,954	755,783	9,564	24,518	9/26/2024	736,275	7,325	1,169,487	13,568	20,893
7/27/2024	171,431	7,319	323,998	15,878	23,197	8/27/2024	441,452	13,341	767,266	11,483	24,824	9/27/2024	745,142	8,867	1,174,320	4,833	13,700
7/28/2024	177,887	6,456	337,551	13,553	20,009	8/28/2024	451,041	9,589	782,798	15,532	25,121	9/28/2024	761,193	16,051	1,184,218	9,898	25,949
7/29/2024	185,272	7,385	351,920	14,369	21,754	8/29/2024	460,272	9,231	797,677	14,879	24,110	9/29/2024	774,488	13,295	1,195,107	10,889	24,184
7/30/2024	191,517	6,245	366,467	14,547	20,792	8/30/2024	464,881	4,609	812,121	14,444	19,053	9/30/2024	785,661	11,173	1,211,178	16,071	27,244
7/31/2024	198,995	7,478	380,352	13,885	21,363	8/31/2024	465,701	820	827,222	15,101	15,921						
Total Gallons Pumped for July		236,521	438,063		674,584	Total Gallons Pumped for August		266,706	446,870		713,576	Total Gallons Pumped for Sept.		319,960	383,956		703,916
Daily Gallons Pumped		7,630	14,131		21,761	Daily Gallons Pumped		8,603	14,415		23,019	Daily Gallons Pumped		10,665	12,799		23,464
Hourly Gallons Pumped		318	589		907	Hourly Gallons Pumped		358	601		959	Hourly Gallons Pumped		444	533		978
GPM for July		5.30	9.81		15.11	GPM for August		5.97	10.01		15.99	GPM for September		7.41	8.89		16.29
												Total for the Quarter		823,187	1,268,889		2,092,076

*7/5/2024: Flow meters reset and recalibrated

Table 1

Pinyon Plain Mine Daily Volume of Water Pumped from Underground Mining Areas During 2024

Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)	Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)	Date	Sump Meter Reading	Gallons Pumped (GA/D)	Ring Meter Reading	Gallons Pumped (GA/D)	Total Gallons Pumped (GA/D)
Fourth Quarter 2024																	
October 2024						November 2024						December 2024					
10/1/2024	794,323	8,662	1,224,217	13,039	21,701	11/1/2024	1,119,305	9,843	1,527,255	9,564	19,407	12/1/2024	1,322,507	9,963	1,831,470	11,478	21,441
10/2/2024	804,093	9,770	1,238,342	14,125	23,895	11/2/2024	1,126,560	7,255	1,538,576	11,321	18,576	12/2/2024	1,328,466	5,959	1,843,560	12,090	18,049
10/3/2024	812,915	8,822	1,253,968	15,626	24,448	11/3/2024	1,132,400	5,840	1,548,475	9,899	15,739	12/3/2024	1,336,179	7,713	1,849,357	5,797	13,510
10/4/2024	817,423	4,508	1,266,854	12,886	17,394	11/4/2024	1,135,673	3,273	1,558,131	9,656	12,929	12/4/2024	1,348,944	12,765	1,856,037	6,680	19,445
10/5/2024	817,423	0	1,274,397	7,543	7,543	11/5/2024	1,145,760	10,087	1,562,948	4,817	14,904	12/5/2024	1,357,855	8,911	1,867,196	11,159	20,070
10/6/2024	827,375	9,952	1,283,201	8,804	18,756	11/6/2024	1,151,142	5,382	1,574,918	11,970	17,352	12/6/2024	1,363,306	5,451	1,878,114	10,918	16,369
10/7/2024	840,817	13,442	1,290,415	7,214	20,656	11/7/2024	1,161,977	10,835	1,586,294	11,376	22,211	12/7/2024	1,370,060	6,754	1,888,845	10,731	17,485
10/8/2024	854,604	13,787	1,304,781	14,366	28,153	11/8/2024	1,167,468	5,491	1,598,018	11,724	17,215	12/8/2024	1,379,363	9,303	1,899,084	10,239	19,542
10/9/2024	864,492	9,888	1,316,931	12,150	22,038	11/9/2024	1,177,617	10,149	1,606,735	8,717	18,866	12/9/2024	1,385,393	6,030	1,904,883	5,799	11,829
10/10/2024	872,671	8,179	1,331,011	14,080	22,259	11/10/2024	1,178,937	1,320	1,617,851	11,116	12,436	12/10/2024	1,395,238	9,845	1,908,758	3,875	13,720
10/11/2024	880,159	7,488	1,343,028	12,017	19,505	11/11/2024	1,187,049	8,112	1,628,584	10,733	18,845	12/11/2024	1,406,999	11,761	1,914,612	5,854	17,615
10/12/2024	889,832	9,673	1,352,547	9,519	19,192	11/12/2024	1,197,718	10,669	1,640,312	11,728	22,397	12/12/2024	1,414,717	7,718	1,925,338	10,726	18,444
10/13/2024	899,274	9,442	1,361,968	9,421	18,863	11/13/2024	1,204,300	6,582	1,652,312	12,600	18,582	12/13/2024	1,425,871	11,154	1,936,719	11,381	22,535
10/14/2024	908,867	9,593	1,371,589	9,621	19,214	11/14/2024	1,209,613	5,313	1,663,487	11,175	16,488	12/14/2024	1,433,570	7,699	1,946,640	9,921	17,620
10/15/2024	919,963	11,096	1,381,311	9,722	20,818	11/15/2024	1,220,927	11,314	1,672,535	9,048	20,362	12/15/2024	1,442,873	9,303	1,958,613	11,973	21,276
10/16/2024	933,146	13,183	1,388,457	7,146	20,329	11/16/2024	1,227,587	6,660	1,682,892	10,357	17,017	12/16/2024	1,449,351	6,478	1,964,783	6,170	12,648
10/17/2024	944,895	11,749	1,397,110	8,653	20,402	11/17/2024	1,235,432	7,845	1,693,696	10,804	18,649	12/17/2024	1,460,996	11,645	1,973,574	8,791	20,436
10/18/2024	952,860	7,965	1,402,205	5,095	13,060	11/18/2024	1,240,023	4,591	1,704,700	11,004	15,595	12/18/2024	1,469,173	8,177	1,985,255	11,681	19,858
10/19/2024	969,761	16,901	1,407,579	5,374	22,275	11/19/2024	1,247,389	7,366	1,715,562	10,862	18,228	12/19/2024	1,476,896	7,723	1,997,915	12,660	20,383
10/20/2024	980,342	10,581	1,417,133	9,554	20,135	11/20/2024	1,254,430	7,041	1,725,967	10,405	17,446	12/20/2024	3,760	3,760	7,068	7,068	10,828
10/21/2024	992,423	12,081	1,428,058	10,925	23,006	11/21/2024	1,257,541	3,111	1,735,978	10,011	13,122	12/21/2024	11,031	7,271	19,170	12,102	19,373
10/22/2024	1,000,769	8,346	1,437,493	9,435	17,781	11/22/2024	1,267,731	10,190	1,745,865	9,887	20,077	12/22/2024	13,625	2,594	31,764	12,594	15,188
10/23/2024	1,017,161	16,392	1,444,765	7,272	23,664	11/23/2024	1,271,256	3,525	1,757,520	11,655	15,180	12/23/2024	20,527	6,902	43,811	12,047	18,949
10/24/2024	1,025,214	8,053	1,455,349	10,584	18,637	11/24/2024	1,278,649	7,393	1,765,548	8,028	15,421	12/24/2024	30,052	9,525	56,311	12,500	22,025
10/25/2024	1,037,639	12,425	1,465,293	9,944	22,369	11/25/2024	1,285,383	6,734	1,777,170	11,622	18,356	12/25/2024	34,478	4,426	68,716	12,405	16,831
10/26/2024	1,051,680	14,041	1,474,168	8,875	22,916	11/26/2024	1,288,684	3,301	1,786,230	9,060	12,361	12/26/2024	44,972	10,494	81,226	12,510	23,004
10/27/2024	1,064,771	13,091	1,482,427	8,259	21,350	11/27/2024	1,288,684	0	1,797,296	11,066	11,066	12/27/2024	54,634	9,662	93,259	12,033	21,695
10/28/2024	1,080,195	15,424	1,488,312	5,885	21,309	11/28/2024	1,290,919	2,235	1,808,599	11,303	13,538	12/28/2024	62,628	7,994	105,945	12,686	20,680
10/29/2024	1,089,703	9,508	1,499,279	10,967	20,475	11/29/2024	1,297,488	6,569	1,812,927	4,328	10,897	12/29/2024	70,252	7,624	117,829	11,884	19,508
10/30/2024	1,099,213	9,510	1,509,993	10,714	20,224	11/30/2024	1,312,544	15,056	1,819,992	7,065	22,121	12/30/2024	78,072	7,820	128,152	10,323	18,143
10/31/2024	1,109,462	10,249	1,517,091	7,698	17,947							12/31/2024	87,961	9,889	139,807	11,655	21,544
Total Gallons Pumped for Oct.		323,801		386,513	630,314	Total Gallons Pumped for Nov.		203,982		307,381	505,363	Total Gallons Pumped for Dec.		252,313		317,730	570,043
Daily Gallons Pumped		10,445		9,888	20,333	Daily Gallons Pumped		6,769		10,077	16,846	Daily Gallons Pumped		8,139		10,249	18,388
Hourly Gallons Pumped		435		412	847	Hourly Gallons Pumped		282		420	702	Hourly Gallons Pumped		339		427	766
GPM for October		7.25		6.87	14.12	GPM for November		4.70		7.00	11.70	GPM for December		5.65		7.12	12.77
												Total for the Quarter		779,196		926,544	1,705,740
												Total for the Year		3,947,624		3,910,341	7,857,965
												GPM for the Year		7.49		7.42	14.91

*10/5/2024: Pump maintenance

*11/27/24: Flow meter broke and had to be replaced

*12/20/2024: Reset due to power issue

Table 2
Pinyon Plain Mine Non-Stormwater Impoundment Sample Summary

Analytes	Units	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Metals (Total)					
Antimony	mg/L	0.00761	0.0161	0.0110	0.00321
Arsenic	mg/L	0.446	14.4	8.49	4.13
Barium	mg/L	0.0402	0.0855	1.42	0.196
Beryllium	mg/L	<0.000330	0.00231	0.00177	0.00134
Cadmium	mg/L	<0.000479	0.0414	0.0118	0.00367
Chromium	mg/L	0.00201	0.0215	0.0606	0.0256
Copper	mg/L	0.0463	10.4	18.6	6.67
Iron	mg/L	4.33	18.6	22.4	14.3
Lead	mg/L	0.0601	8.86	4.90	3.34
Manganese	mg/L	0.0756	0.954	0.310	0.651
Mercury	mg/L	<0.0001	0.000125	<0.0001	<0.0000700
Nickel	mg/L	0.479	9.69	3.48	3.23
Selenium	mg/L	<0.00735	<0.00735	<0.00735	<0.00735
Thallium	mg/L	0.00496	0.0307	0.0140	0.0102
Uranium	mg/L	0.130	54.5	55.3	14.4
Vanadium	mg/L	0.00250	0.0843	0.0452	0.0417
Zinc	mg/L	0.393	5.69	2.73	1.18
Radionuclides (Total)					
Gross Alpha	pCi/L	261 (± 16.4)	79800 (± 482)	89600 (± 423)	43600 (± 407)
Adjusted Gross Alpha	pCi/L	117	65700	51600	40400
Radium 226	pCi/L	9.44 (± 1.15)	4280 (± 18.0)	69.5 (± 3.72)	2310 (± 14.6)
Radium 228	pCi/L	0.649 (± 0.255)	37.4 (± 1.03)	25.4 (± 1.07)	12.6 (± 1.02)
Uranium 234	pCi/L	95.3 (± 4.45)	13000 (± 215)	20800 (± 554)	1470 (± 113)
Uranium 235	pCi/L	2.73 (± 0.761)	152 (± 23.2)	559 (± 92.1)	41.0 (± 22.9)
Uranium 238	pCi/L	49.0 (± 3.19)	1100 (± 62.4)	17200 (± 503)	1740 (± 123)
Major Ions (Total)					
Alkalinity	mg/L	<8.45	<8.45	<8.45	<8.45
Calcium	mg/L	149	364	181	327
Fluoride	mg/L	0.256	0.395	0.365	0.260
Magnesium	mg/L	72.1	178	92.1	144
Nitrate-Nitrite	mg/L	1.54	32.4	32.1	18.1
Potassium	mg/L	4.01	20.7	21.3	13.7
Sodium	mg/L	33.3	43.1	32.5	28.9
Sulfate	mg/L	436	512	404	401
Physical Properties					
Conductivity	umhos/cm	1200	1510	1360	1270
pH (field)	S.U.	7.14	7.66	8.24	7.62
TDS	mg/L	847	920	911	869

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

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

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

NA - Not Applicable

** New lab reported as Carbonate Alkalinity

*Pursuant to negotiations with ADEQ regarding the individual APP, EFRI agreed to begin implementing the new sampling requirements for the sump prior to the final approval and issuance of the individual APP Permit. These samples were analyzed as total recoverable pursuant to that agreement.

Table 3

Pinyon Plain Quarterly Groundwater Elevations

	MW-01		MW-02		MW-03	
Quarter	DTW (from Surface)	GW Elevation	DTW (from Surface)	GW Elevation	DTW (from Surface)	GW Elevation
Q1 2024	999.8	5509.74	991.4	5521.99	954.4	5547.63
Q2 2024	990.0	5519.54	986.0	5527.39	951.0	5551.03
Q3 2024	962.0	5547.54	978.5	5534.89	946.5	5555.53
Q4 2024	1000.2	5509.34	992.4	5520.99	958.2	5543.88

Pinyon Plain Monitor Well TOC Elevation (ft.)

MW-01	MW-02	MW-03
6509.5	6513.4	6502.0

Table 4
Pinyon Plain Mine POC #1 MW-01

Analytes	AL Permit 100333 July 2024	AQL Permit 100333 July 2024	Units	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Metals (Dissolved)							
Antimony	NA	0.013	mg/L	NR	NR	NR	0.00304
Arsenic	NA	0.218	mg/L	NR	NR	NR	0.00920
Barium	1.6	2	mg/L	NR	NR	NR	0.0309
Beryllium	0.0032	0.004	mg/L	NR	NR	NR	<0.000330
Cadmium	0.004	0.005	mg/L	NR	NR	NR	<0.000479
Chromium	0.08	0.1	mg/L	NR	NR	NR	<0.00140
Lead	0.04	0.05	mg/L	NR	NR	NR	<0.00299
Mercury	0.0016	0.002	mg/L	NR	NR	NR	<0.0000700
Nickel	NA	0.3	mg/L	NR	NR	NR	0.0336
Selenium	0.04	0.05	mg/L	NR	NR	NR	<0.00735
Thallium	NA	0.0043	mg/L	NR	NR	NR	0.000681
Uranium	M	0.044	mg/L	NR	NR	NR	0.00775
Radionuclides (Dissolved)							
Adjusted Gross Alpha	NA	58.58	pCi/L	NR	NR	NR	8.93
Radium 226+228	NA	6.78	pCi/L	NR	NR	NR	5.22
Uranium Isotopes	Monitor		pCi/L	NR	NR	NR	12.005
Major Ions (Dissolved)							
Alkalinity	Monitor		mg/L	NR	NR	NR	<8.45
Calcium	Monitor		mg/L	NR	NR	NR	112
Fluoride	3.2	4	mg/L	NR	NR	NR	0.126
Magnesium	Monitor		mg/L	NR	NR	NR	55.6
Nitrate-Nitrite	8	10	mg/L	NR	NR	NR	<0.0500
Potassium	Monitor		mg/L	NR	NR	NR	1.68
Sodium	Monitor		mg/L	NR	NR	NR	2.98
Sulfate	Monitor		mg/L	NR	NR	NR	226
Physical Properties							
Dissolved Oxygen (field)	Monitor		mg/L	NR	NR	NR	2.51
Oxidation Reduction Potential (field)	Monitor		MV	NR	NR	NR	165
Specific Conductance	Monitor		umhos/cm	NR	NR	NR	893
pH (field)	6.5 - 8.5		S.U.	NR	NR	NR	7.40
TDS	Monitor		mg/L	NR	NR	NR	576

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

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

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

NA - Not Applicable

NR - Not Reported

Monitor = Analysis is required but an AQL and/or AL is not established at the time of permit issuance.

** New lab reported as Carbonate Alkalinity

Table 4
Pinyon Plain Mine POC #2 MW-02

Analytes	AL Permit 100333 July 2024	AQL Permit 100333 July 2024	Units	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Metals							
Antimony	0.0048	0.006	mg/L	NR	NR	NR	<0.000310
Arsenic	0.04	0.05	mg/L	NR	NR	NR	0.0300
Barium	1.6	2.0	mg/L	NR	NR	NR	0.0498
Beryllium	0.0032	0.004	mg/L	NR	NR	NR	<0.000330
Cadmium	0.004	0.005	mg/L	NR	NR	NR	<0.000479
Chromium	0.08	0.1	mg/L	NR	NR	NR	<0.00140
Lead	0.04	0.05	mg/L	NR	NR	NR	0.00299
Mercury	0.0016	0.002	mg/L	NR	NR	NR	<0.0000700
Nickel	0.08	0.1	mg/L	NR	NR	NR	0.0152
Selenium	0.04	0.05	mg/L	NR	NR	NR	<0.00735
Thallium	0.0019	0.002	mg/L	NR	NR	NR	0.000597 J
Uranium	Monitor	0.03	mg/L	NR	NR	NR	0.00508
Radionuclides							
Adjusted Gross Alpha	NA	20.5	pCi/L	NR	NR	NR	6.54
Radium 226+228	NA	5.43	pCi/L	NR	NR	NR	2.67
Uranium Isotopes	Monitor	Monitor	pCi/L	NR	NR	NR	5.63
Major Ions							
Alkalinity	Monitor		mg/L	NR	NR	NR	<8.45
Calcium	Monitor		mg/L	NR	NR	NR	85.8
Fluoride	3.2	4	mg/L	NR	NR	NR	0.263
Magnesium	Monitor		mg/L	NR	NR	NR	41.4
Nitrate-Nitrite	8	10	mg/L	NR	NR	NR	<0.0500
Potassium	Monitor		mg/L	NR	NR	NR	1.81 J
Sodium	Monitor		mg/L	NR	NR	NR	2.50 J
Sulfate	Monitor		mg/L	NR	NR	NR	125
Physical Properties							
Dissolved Oxygen (field)	Monitor		mg/L	NR	NR	NR	5.53
Oxidation Reduction Potential (field)	Monitor		MV	NR	NR	NR	175
Specific Conductance	Monitor		umhos/cm	NR	NR	NR	692
pH (field)	6.5 - 8.5		S.U.	NR	NR	NR	7.32
TDS	Monitor		mg/L	NR	NR	NR	416

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

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

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

NA - Not Applicable

NR - Not Reported

Monitor = Analysis is required but an AQL and/or AL is not established at the time of permit issuance.

** New lab reported as Carbonate Alkalinity

Table 4
Pinyon Plain Mine POC #3 MW-03

Analytes	AL Permit 100333 July 2024	AQL Permit 100333 July 2024	Units	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Metals							
Antimony	0.0048	0.006	mg/L	NR	NR	NR	0.000485 J
Arsenic	0.043	0.05	mg/L	NR	NR	NR	0.0145
Barium	1.6	2	mg/L	NR	NR	NR	0.00924
Beryllium	0.0032	0.004	mg/L	NR	NR	NR	0.000589 J
Cadmium	0.004	0.005	mg/L	NR	NR	NR	0.000493 J
Chromium	0.08	0.1	mg/L	NR	NR	NR	<0.00140
Lead	0.04	0.05	mg/L	NR	NR	NR	0.00546 J
Mercury	0.0016	0.002	mg/L	NR	NR	NR	<0.0000700
Nickel	NA	0.43	mg/L	NR	NR	NR	0.230
Selenium	0.04	0.05	mg/L	NR	NR	NR	0.00829 J
Thallium	0.0016	0.002	mg/L	NR	NR	NR	0.000661 J
Uranium	Monitor	0.03	mg/L	NR	NR	NR	0.00858
Radionuclides							
Adjusted Gross Alpha	NA	23.9	pCi/L	NR	NR	NR	19.4
Radium 226+228	4	5	pCi/L	NR	NR	NR	1.74
Uranium Isotopes	Monitor		pCi/L	NR	NR	NR	8.861
Major Ions							
Alkalinity	Monitor		mg/L	NR	NR	NR	<8.45
Calcium	Monitor		mg/L	NR	NR	NR	205
Fluoride	3.2	4	mg/L	NR	NR	NR	<0.761
Magnesium	Monitor		mg/L	NR	NR	NR	95.9
Nitrate-Nitrite	8	10	mg/l.	NR	NR	NR	<0.0500
Potassium	Monitor		mg/l.	NR	NR	NR	3.47
Sodium	Monitor		mg/L	NR	NR	NR	4.53
Sulfate	Monitor		mg/L	NR	NR	NR	776
Physical Properties							
Dissolved Oxygen (field)	Monitor		mg/L	NR	NR	NR	0.16
Oxidation Reduction Potential (field)	Monitor		MV	NR	NR	NR	30
Specific Conductance	Monitor		umhos/cm	NR	NR	NR	1520
pH (field)	6.5 - 8.5		S.U.	NR	NR	NR	6.95
TDS	Monitor		mg/l.	NR	NR	NR	1140

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

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

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

NA - Not Applicable

NR - Not Reported

Monitor = Analysis is required but an AQL and/or AL is not established at the time of permit issuance.

** New lab reported as Carbonate Alkalinity

Table 4
Pinyon Plain Mine POC #4 RW-01

Analytes	AL Permit 100333 July 2024	AQL Permit 100333 July 2024	Units	Q1 2024	Q2 2024	Q3 2024	Q4 2024
Metals							
Antimony	0.0048	0.006	mg/L	NR	NR	NR	<0.000310
Arsenic	0.04	0.05	mg/L	<0.00440	<0.00440	<0.00440	<0.00440
Barium	1.6	2	mg/L	NR	NR	NR	0.0861
Beryllium	0.0032	0.004	mg/L	NR	NR	NR	<0.000330
Cadmium	0.004	0.005	mg/L	NR	NR	NR	<0.000479
Chromium	0.08	0.1	mg/L	NR	NR	NR	<0.00140
Lead	0.04	0.05	mg/L	NR	NR	NR	<0.00299
Mercury	0.0016	0.002	mg/L	NR	NR	NR	<0.0000700
Nickel	0.08	0.1	mg/L	NR	NR	NR	0.00892 J
Selenium	0.04	0.05	mg/L	NR	NR	NR	0.00795 J
Thallium	0.0016	0.002	mg/L	NR	NR	NR	<0.000130
Uranium	Monitor	0.03	mg/L	0.0143	0.0147	0.0161	0.0137
Radionuclides							
Adjusted Gross Alpha	NA	15.38	pCi/L	NR	NR	NR	12.7
Radium 226+228	NA	8.22	pCi/L	NR	NR	NR	2.40
Uranium Isotopes	Monitor		pCi/L	NR	NR	NR	15.437
Major Ions							
Alkalinity	Monitor		mg/L	NR	NR	NR	<8.45
Calcium	Monitor		mg/L	NR	NR	NR	42.5
Fluoride	3.2	4	mg/L	NR	NR	NR	0.284
Magnesium	Monitor		mg/L	NR	NR	NR	29.8
Nitrate-Nitrite	8	10	mg/L	NR	NR	NR	0.147
Potassium	Monitor		mg/L	NR	NR	NR	4.50
Sodium	Monitor		mg/L	NR	NR	NR	8.78
Sulfate	Monitor		mg/L	NR	NR	NR	19.3
Physical Properties							
Dissolved Oxygen (field)	Monitor		mg/L	NR	NR	NR	4.05
Oxidation Reduction Potential (field)	Monitor		MV	NR	NR	NR	193
Specific Conductance	Monitor		umhos/cm	NR	NR	NR	457
pH (field)	6.5 - 8.5		S.U.	NR	NR	NR	7.22
TDS	Monitor		mg/L	NR	NR	NR	235

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

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

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

NA - Not Applicable

NR - Not Reported

Monitor = Analysis is required but an AQL and/or AI is not established at the time of permit issuance.

** New lab reported as Carbonate Alkalinity

ATTACHMENT 1

SUMP-1470_02092024

Collected date/time: 02/09/24 17:22

SAMPLE RESULTS - 01

L1705235

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	847		13.3	1	02/14/2024 18:00	WG2226275

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity,Carbonate	U		8.45	20.0	1	02/15/2024 11:01	WG2226045

Sample Narrative:

L1705235-01 WG2226045: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	1.54		0.0500	0.100	1	02/15/2024 00:14	WG2226236

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.70	T8	1	02/15/2024 10:10	WG2226348

Sample Narrative:

L1705235-01 WG2226348: 7.7 at 18.7C

Wet Chemistry by Method 9050A

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1200		10.0	1	02/14/2024 16:40	WG2225096

Sample Narrative:

L1705235-01 WG2225096: at 25C

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Fluoride	0.256		0.0640	0.150	1	02/14/2024 16:09	WG2226032
Sulfate	436		5.94	50.0	10	02/14/2024 16:23	WG2226032

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	02/15/2024 09:16	WG2225943

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic	0.446		0.00440	0.0100	1	02/20/2024 10:33	WG2227225
Barium	0.0402		0.000736	0.00500	1	02/20/2024 10:33	WG2227225
Beryllium	U		0.000330	0.00200	1	02/20/2024 10:33	WG2227225
Cadmium	U		0.000479	0.00200	1	02/20/2024 10:33	WG2227225
Calcium	149		0.0793	1.00	1	02/20/2024 10:33	WG2227225
Chromium	0.00201	J	0.00140	0.0100	1	02/20/2024 10:33	WG2227225
Copper	0.0463		0.00368	0.0100	1	02/20/2024 10:33	WG2227225

SUMP-1470_02092024

Collected date/time: 02/09/24 17:22

SAMPLE RESULTS - 01

L1705235

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Iron	4.33		0.0180	0.100	1	02/20/2024 10:33	WG2227225
Lead	0.0601		0.00299	0.00600	1	02/20/2024 10:33	WG2227225
Magnesium	72.1		0.0853	1.00	1	02/20/2024 10:33	WG2227225
Manganese	0.0756		0.000934	0.0100	1	02/20/2024 10:33	WG2227225
Nickel	0.479		0.00161	0.0100	1	02/20/2024 10:33	WG2227225
Potassium	4.01		0.261	2.00	1	02/20/2024 10:33	WG2227225
Selenium	U		0.00735	0.0100	1	02/20/2024 10:33	WG2227225
Sodium	33.3		0.504	3.00	1	02/20/2024 10:33	WG2227225

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	mg/l		mg/l	mg/l		date / time	
Antimony	0.00761		0.00103	0.00400	1	02/16/2024 00:10	WG2226654
Thallium	0.00496		0.000121	0.00200	1	02/15/2024 22:55	WG2226654
Uranium	0.130		0.0000789	0.00100	1	02/15/2024 22:55	WG2226654
Vanadium	0.00250	J	0.000664	0.00500	1	02/15/2024 22:55	WG2226654
Zinc	0.393		0.00302	0.0250	1	02/15/2024 22:55	WG2226654

Cp

Tc

Ss

Cn

Sr

Qc

Gl

A

Sc

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	261		16.4	27.5	4.84	2.81	02/19/2024 16:48	WG2225879

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	9.44		1.15		0.280		02/22/2024 00:27	WG2226810
(T) Barium	102					30.0-143	02/22/2024 00:27	WG2226810

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.649		0.255	1.07	0.457	0.239	03/12/2024 19:28	WG2235353
(T) Barium	103					30.0-143	03/12/2024 19:28	WG2235353
(T) Yttrium	103					30.0-136	03/12/2024 19:28	WG2235353

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	117				02/23/2024 23:41	WG2225879

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	95.3		4.45	3.41	0.250	0.206	02/23/2024 23:41	WG2229223
URANIUM-235	2.73		0.761	0.292	0.286	0.224	02/23/2024 23:41	WG2229223
URANIUM-238	49.0		3.19	1.93	0.250	0.206	02/23/2024 23:41	WG2229223
(T) URANIUM-232	72.2					30.0-110	02/23/2024 23:41	WG2229223

RW-01_02182024

Collected date/time: 02/18/24 12:39

SAMPLE RESULTS - 05

L1705225

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	237		10.0	1	02/21/2024 00:14	WG2230336

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity, Carbonate	U		8.45	20.0	1	02/25/2024 10:51	WG2232039

Sample Narrative:

L1705225-05 WG2232039: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.123		0.0500	0.100	1	02/21/2024 23:44	WG2228133

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.89	T8	1	02/28/2024 10:00	WG2233723

Sample Narrative:

L1705225-05 WG2233723: 7.89 at 19.6C

Wet Chemistry by Method 9050A

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	460		10.0	1	02/24/2024 14:00	WG2233339

Sample Narrative:

L1705225-05 WG2233339: at 25C

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Fluoride	0.303		0.0640	0.150	1	02/29/2024 15:12	WG2232569
Sulfate	22.2		0.594	5.00	1	02/29/2024 15:12	WG2232569

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury, Dissolved	U		0.000100	0.000200	1	02/22/2024 11:44	WG2230165

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic, Dissolved	U		0.00440	0.0100	1	02/25/2024 10:57	WG2231526
Barium, Dissolved	0.0857		0.000736	0.00500	1	02/25/2024 10:57	WG2231526
Beryllium, Dissolved	U		0.000330	0.00200	1	02/25/2024 10:57	WG2231526
Cadmium, Dissolved	U		0.000479	0.00200	1	02/25/2024 10:57	WG2231526
Calcium, Dissolved	42.4		0.0793	1.00	1	02/25/2024 10:57	WG2231526
Chromium, Dissolved	U		0.00140	0.0100	1	02/25/2024 10:57	WG2231526
Lead, Dissolved	U		0.00299	0.00600	1	02/25/2024 10:57	WG2231526

RW-01_02182024

SAMPLE RESULTS - 05

Collected date/time: 02/18/24 12:39

L1705225

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Magnesium,Dissolved	31.3		0.0853	1.00	1	02/25/2024 10:57	WG2231526
Nickel,Dissolved	0.0132		0.00161	0.0100	1	02/25/2024 10:57	WG2231526
Potassium,Dissolved	2.65		0.261	2.00	1	02/25/2024 10:57	WG2231526
Selenium,Dissolved	0.00964	J	0.00735	0.0100	1	02/25/2024 10:57	WG2231526
Sodium,Dissolved	8.17		0.504	3.00	1	02/25/2024 10:57	WG2231526

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	U		0.00103	0.00400	1	02/22/2024 23:11	WG2230983
Thallium,Dissolved	U		0.000121	0.00200	1	02/22/2024 23:11	WG2230983
Uranium,Dissolved	0.0143		0.0000789	0.00100	1	02/22/2024 23:11	WG2230983

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

RW-01_02082024

Collected date/time: 02/18/24 12:39

SAMPLE RESULTS - 05

L1705226

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	22.9	J6	2.37	2.60	0.896	0.540	02/29/2024 12:46	WG2232346
GROSS BETA	4.18		1.49	0.615	1.63	0.857	02/29/2024 12:46	WG2232346

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	2.81		0.700		0.336		03/14/2024 20:42	WG2236782
(T) Barium	105					30.0-143	03/14/2024 20:42	WG2236782

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.309	J	0.254	1.56	0.455	0.238	03/13/2024 17:03	WG2238285
(T) Barium	112					30.0-143	03/13/2024 17:03	WG2238285
(T) Yttrium	104					30.0-136	03/13/2024 17:03	WG2238285

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	6.21				02/29/2024 12:46	WG2232346

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	10.7		1.24	0.632	0.260	0.186	02/28/2024 00:23	WG2234410
URANIUM-235	0.454		0.290	0.115	0.283	0.198	02/28/2024 00:23	WG2234410
URANIUM-238	6.02		0.942	0.439	0.303	0.208	02/28/2024 00:23	WG2234410
(T) URANIUM-232	80.5					30.0-110	02/28/2024 00:23	WG2234410

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	920	<u>T8</u>	20.0	1	07/18/2024 17:33	WG2325389

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity, Carbonate	U	<u>T8</u>	8.45	20.0	1	07/18/2024 12:28	WG2325514

Sample Narrative:

L1752547-01 WG2325514: Endpoint pH 4.5 Headspace:

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	32.4	<u>T8</u>	0.500	1.00	10	07/18/2024 15:52	WG2325593

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.33	<u>T8</u>	1	07/18/2024 10:10	WG2325256

Sample Narrative:

L1752547-01 WG2325256: 7.33 at 20.7C

Wet Chemistry by Method 9050A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	1510	<u>T8</u>	10.0	1	07/18/2024 21:30	WG2325487

Sample Narrative:

L1752547-01 WG2325487: at 25C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Fluoride	0.395	<u>T8</u>	0.0640	0.150	1	07/30/2024 16:00	WG2332688
Sulfate	512	<u>T8</u>	2.97	25.0	5	07/30/2024 16:13	WG2332688

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	0.000125	<u>J</u>	0.000100	0.000200	1	07/11/2024 17:13	WG2321310

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	14.4		0.00440	0.0100	1	07/12/2024 08:47	WG2321057
Barium	0.0855		0.000736	0.00500	1	07/12/2024 08:47	WG2321057
Beryllium	0.00231		0.000330	0.00200	1	07/12/2024 08:47	WG2321057
Cadmium	0.0414		0.000479	0.00200	1	07/12/2024 16:22	WG2321057
Calcium	364		0.0793	1.00	1	07/12/2024 08:47	WG2321057
Chromium	0.0215		0.00140	0.0100	1	07/12/2024 08:47	WG2321057
Copper	10.4		0.00368	0.0100	1	07/12/2024 08:47	WG2321057

SUMP-1470_04212024

SAMPLE RESULTS - 01

Collected date/time: 04/21/24 14:50

L1752547

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Iron	18.6		0.0180	0.100	1	07/12/2024 08:47	WG2321057
Lead	8.86		0.00299	0.00600	1	07/12/2024 08:47	WG2321057
Magnesium	178		0.0853	1.00	1	07/12/2024 08:47	WG2321057
Manganese	0.954		0.000934	0.0100	1	07/12/2024 08:47	WG2321057
Nickel	9.69		0.00161	0.0100	1	07/12/2024 08:47	WG2321057
Potassium	20.7		0.261	2.00	1	07/12/2024 08:47	WG2321057
Selenium	U		0.00735	0.0100	1	07/12/2024 08:47	WG2321057
Sodium	43.1		0.504	3.00	1	07/12/2024 08:47	WG2321057

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony	0.0161		0.00103	0.00400	1	07/31/2024 19:42	WG2327761
Thallium	0.0307		0.000121	0.00200	1	07/31/2024 01:28	WG2327761
Uranium	54.5		0.00158	0.0200	20	07/31/2024 12:58	WG2327761
Vanadium	0.0843		0.000664	0.00500	1	07/31/2024 01:28	WG2327761
Zinc	5.69		0.00302	0.0250	1	07/31/2024 01:28	WG2327761

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	79800		482	482	11.2	4.47	07/10/2024 14:21	WG2317801

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	4280		18.0	598	0.264	0.103	07/25/2024 16:19	WG2317774
(T) Borium	103					30.0-143	07/25/2024 16:19	WG2317774

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	37.4		1.03	114	1.03	0.545	07/23/2024 19:22	WG2317917
(T) Borium	140					30.0-143	07/23/2024 19:22	WG2317917
(T) Yttrium	86.9					30.0-136	07/23/2024 19:22	WG2317917

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	65700				07/10/2024 23:52	WG2317801

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	13000		215	215	6.97	4.88	07/10/2024 23:52	WG2315459
URANIUM-235	152		23.2	23.7	4.26	3.51	07/10/2024 23:52	WG2315459
URANIUM-238	1100		62.4	62.9	4.87	3.82	07/10/2024 23:52	WG2315459
(T) URANIUM-232	21.1	C2				30.0-110	07/10/2024 23:52	WG2315459

RW-01_06242024

Collected date/time: 06/24/24 13:36

SAMPLE RESULTS - 01

L1750291

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	mg/l		mg/l			
	230		10.0	1	06/27/2024 14:40	WG2313097

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity, Carbonate	mg/l		mg/l	mg/l			
	U		8.45	20.0	1	06/26/2024 10:45	WG2312301

Sample Narrative:

L1750291-01 WG2312301: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	mg/l		mg/l	mg/l			
	0.0592	J	0.0500	0.100	1	06/28/2024 16:15	WG2312488

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	su				
	7.81	T8	1	06/26/2024 15:15	WG2312391

Sample Narrative:

L1750291-01 WG2312391: 7.81 at 21.6C

Wet Chemistry by Method 9050A

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	umhos/cm		umhos/cm			
	463		10.0	1	06/25/2024 17:53	WG2312021

Sample Narrative:

L1750291-01 WG2312021: at 25C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Fluoride	mg/l		mg/l	mg/l			
	0.262		0.0640	0.150	1	07/13/2024 04:54	WG2321900
Sulfate							
	19.2		0.594	5.00	1	07/13/2024 04:54	WG2321900

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury, Dissolved	mg/l		mg/l	mg/l			
	U		0.000100	0.000200	1	06/26/2024 21:23	WG2312065

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic, Dissolved	mg/l		mg/l	mg/l			
	U		0.00440	0.0100	1	07/07/2024 09:12	WG2314183
Barium, Dissolved							
	0.0826		0.000736	0.00500	1	07/07/2024 09:12	WG2314183
Beryllium, Dissolved							
	U		0.000330	0.00200	1	07/07/2024 09:12	WG2314183
Cadmium, Dissolved							
	U		0.000479	0.00200	1	07/07/2024 09:12	WG2314183
Calcium, Dissolved							
	41.1		0.0793	1.00	1	07/07/2024 09:12	WG2314183
Chromium, Dissolved							
	U		0.00140	0.0100	1	07/07/2024 09:12	WG2314183
Lead, Dissolved							
	U		0.00299	0.00600	1	07/07/2024 09:12	WG2314183

RW-01_06242024

SAMPLE RESULTS - 01

Collected date/time: 06/24/24 13:36

L1750291

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Magnesium,Dissolved	29.6		0.0853	1.00	1	07/07/2024 09:12	WG2314183
Nickel,Dissolved	0.0150		0.00161	0.0100	1	07/07/2024 09:12	WG2314183
Potassium,Dissolved	2.86		0.261	2.00	1	07/07/2024 09:12	WG2314183
Selenium,Dissolved	0.0121		0.00735	0.0100	1	07/07/2024 09:12	WG2314183
Sodium,Dissolved	8.00		0.504	3.00	1	07/07/2024 09:12	WG2314183

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	U		0.00103	0.00400	1	07/13/2024 14:04	WG2315452
Thallium,Dissolved	U		0.000121	0.00200	1	07/13/2024 14:04	WG2315452
Uranium,Dissolved	0.0147		0.0000789	0.00100	1	07/13/2024 14:04	WG2315452

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

RW-01_06242024

Collected date/time: 06/24/24 13:36

SAMPLE RESULTS - 01

L1750295

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	30.4		5.54	5.57	3.77	1.57	07/10/2024 14:21	WG2312794
GROSS BETA	10.4		4.48	4.52	5.21	2.47	07/10/2024 14:21	WG2312794

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	2.55		0.647	0.736	0.433	0.158	07/10/2024 15:11	WG2317774
(T) Barium	101					30.0-143	07/10/2024 15:11	WG2317774

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.153	<u>U</u>	0.281	0.383	0.555	0.293	07/16/2024 17:59	WG2313415
(T) Barium	138					30.0-143	07/16/2024 17:59	WG2313415
(T) Yttrium	94.5					30.0-136	07/16/2024 17:59	WG2313415

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	16.0				07/24/2024 22:24	WG2312794

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	9.37		1.12	1.25	0.159	0.131	07/24/2024 22:24	WG2327890
URANIUM-235	0.328		0.216	0.348	0.159	0.131	07/24/2024 22:24	WG2327890
URANIUM-238	4.96		0.812	0.943	0.159	0.131	07/24/2024 22:24	WG2327890
(T) URANIUM-232	93.5					30.0-110	07/24/2024 22:24	WG2327890

SUMP-1470_08112024

Collected date/time: 08/11/24 08:51

SAMPLE RESULTS - 01

L1766740

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	911		13.3	1	08/15/2024 16:51	WG2343060

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity, Carbonate	U		8.45	20.0	1	08/14/2024 14:15	WG2342487

Sample Narrative:

L1766740-01 WG2342487; Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	32.1		0.500	1.00	10	08/13/2024 21:49	WG2342087

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.84	T8	1	08/14/2024 11:22	WG2342258

Sample Narrative:

L1766740-01 WG2342258; 7.84 at 20.8C

Wet Chemistry by Method 9050A

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1360		10.0	1	08/13/2024 22:15	WG2341634

Sample Narrative:

L1766740-01 WG2341634; at 25C

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Fluoride	0.365	P1	0.0761	0.150	1	08/23/2024 13:32	WG2344417
Sulfate	404		6.37	50.0	10	08/23/2024 14:23	WG2344417

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury	U		0.000100	0.000200	1	08/15/2024 21:45	WG2342730

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic	8.49		0.00440	0.0100	1	09/17/2024 21:10	WG2357388
Barium	1.42		0.000736	0.00500	1	09/17/2024 21:10	WG2357388
Beryllium	0.00177	J	0.000330	0.00200	1	09/17/2024 21:10	WG2357388
Cadmium	0.0118		0.000479	0.00200	1	09/17/2024 21:10	WG2357388
Calcium	181		0.0793	1.00	1	09/17/2024 21:10	WG2357388
Chromium	0.0606		0.00140	0.0100	1	09/17/2024 21:10	WG2357388
Copper	18.6		0.00368	0.0100	1	09/17/2024 21:10	WG2357388

Cp

Tc

3 Ss

4 Cn

5 Sr

5 Qc

Gl

Al

5 Sc

SUMP-1470_08112024

Collected date/time: 08/11/24 08:51

SAMPLE RESULTS - 01

L1766740

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Iron	22.4		0.0180	0.100	1	09/17/2024 21:10	WG2357388
Lead	4.90		0.00299	0.00600	1	09/17/2024 21:10	WG2357388
Magnesium	92.1		0.0853	1.00	1	09/17/2024 21:10	WG2357388
Manganese	0.310		0.000934	0.0100	1	09/17/2024 21:10	WG2357388
Nickel	3.48		0.00161	0.0100	1	09/17/2024 21:10	WG2357388
Potassium	21.3		0.261	2.00	1	09/17/2024 21:10	WG2357388
Selenium	U		0.00735	0.0100	1	09/17/2024 21:10	WG2357388
Sodium	32.5		0.504	3.00	1	09/17/2024 21:10	WG2357388

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony	0.0110		0.00103	0.00400	1	09/18/2024 05:20	WG2357415
Thallium	0.0140		0.000121	0.00200	1	09/18/2024 05:20	WG2357415
Uranium	55.3		0.0158	0.200	200	09/18/2024 11:08	WG2357415
Vanadium	0.0452		0.000664	0.00500	1	09/18/2024 05:20	WG2357415
Zinc	2.73		0.00302	0.0250	1	09/18/2024 05:20	WG2357415

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	89600		423	423	9.04	3.75	08/20/2024 16:58	WG2344360

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	69.5		3.72	3.99	0.688	0.268	09/03/2024 13:03	WG2342504
(T) Barium	39.7					30.0-143	09/03/2024 13:03	WG2342504

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	25.4		1.07	1.59	1.32	0.689	08/26/2024 14:44	WG2346919
(T) Barium	109					30.0-143	08/26/2024 14:44	WG2346919
(T) Yttrium	81.5					30.0-136	08/26/2024 14:44	WG2346919

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	51600				08/22/2024 22:36	WG2344360

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	20800		554	555	34.6	23.1	08/22/2024 22:36	WG2346249
URANIUM-235	559		92.1	93.1	32.0	21.8	08/22/2024 22:36	WG2346249
URANIUM-238	17200		503	504	32.9	22.2	08/22/2024 22:36	WG2346249
(T) URANIUM-232	9.81	C2				30.0-110	08/22/2024 22:36	WG2346249

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

RW-01_07262024

Collected date/time: 07/26/24 12:26

SAMPLE RESULTS - 02

L1762181

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	251		10.0	1	08/01/2024 11:29	WG2334026

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity, Carbonate	U		8.45	20.0	1	08/01/2024 11:47	WG2333788

Sample Narrative:

L1762181-02 WG2333788: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.109		0.0500	0.100	1	08/01/2024 16:32	WG2333771

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	8.32	T8	1	08/01/2024 18:30	WG2333891

Sample Narrative:

L1762181-02 WG2333891: 8.32 at 23.1C

Wet Chemistry by Method 9050A

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	454		10.0	1	08/01/2024 21:30	WG2334224

Sample Narrative:

L1762181-02 WG2334224: at 25C

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Fluoride	0.210		0.0761	0.150	1	08/03/2024 20:59	WG2334259
Sulfate	18.8		0.637	5.00	1	08/03/2024 20:59	WG2334259

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury, Dissolved	U		0.000100	0.000200	1	08/02/2024 18:54	WG2334082

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic, Dissolved	U		0.00440	0.0100	1	08/07/2024 22:45	WG2336561
Barium, Dissolved	0.0873		0.000736	0.00500	1	08/07/2024 22:45	WG2336561
Beryllium, Dissolved	U		0.000330	0.00200	1	08/07/2024 22:45	WG2336561
Cadmium, Dissolved	U		0.000479	0.00200	1	08/07/2024 22:45	WG2336561
Calcium, Dissolved	42.2		0.0793	1.00	1	08/07/2024 22:45	WG2336561
Chromium, Dissolved	U		0.00140	0.0100	1	08/07/2024 22:45	WG2336561
Lead, Dissolved	0.00370	B J	0.00299	0.00600	1	08/07/2024 22:45	WG2336561



RW-01_07262024

SAMPLE RESULTS - 02

Collected date/time: 07/26/24 12:26

L1762181

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Magnesium, Dissolved	29.8		0.0853	1.00	1	08/07/2024 22:45	WG2336561
Nickel, Dissolved	0.0116		0.00161	0.0100	1	08/07/2024 22:45	WG2336561
Potassium, Dissolved	2.61		0.261	2.00	1	08/07/2024 22:45	WG2336561
Selenium, Dissolved	U		0.00735	0.0100	1	08/07/2024 22:45	WG2336561
Sodium, Dissolved	7.13		0.504	3.00	1	08/07/2024 22:45	WG2336561

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony, Dissolved	U		0.00103	0.00400	1	09/04/2024 16:31	WG2335306
Thallium, Dissolved	U		0.000121	0.00200	1	09/04/2024 16:31	WG2335306
Uranium, Dissolved	0.0161		0.0000789	0.00100	1	09/04/2024 16:31	WG2335306

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc

Gl

⁷Al⁸Sc

RW-01_07282024

Collected date/time: 07/28/24 12:26

SAMPLE RESULTS - 02

L1762184

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	21.0		2.32	2.33	1.06	0.441	08/07/2024 19:41	WG2334907
GROSS BETA	5.54		1.41	1.42	1.44	0.682	08/07/2024 19:41	WG2334907

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	4.74		0.628	0.771	0.278	0.108	08/20/2024 18:32	WG2334539
(T) Barium	104					30.0-143	08/20/2024 18:32	WG2334539

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.386	J	0.286	0.498	0.524	0.273	08/27/2024 19:43	WG2334369
(T) Barium	107					30.0-143	08/27/2024 19:43	WG2334369
(T) Yttrium	87.8					30.0-136	08/27/2024 19:43	WG2334369

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	4.93				08/07/2024 21:14	WG2334907

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	10.8		1.23	1.36	0.308	0.208	08/07/2024 21:14	WG2335416
URANIUM-235	0.427		0.296	0.431	0.324	0.216	08/07/2024 21:14	WG2335416
URANIUM-238	5.33		0.875	1.01	0.339	0.223	08/07/2024 21:14	WG2335416
(T) URANIUM-232	92.0					30.0-110	08/07/2024 21:14	WG2335416

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc

SUMP-1470_10092024

Collected date/time: 10/09/24 13:00

SAMPLE RESULTS - 01

L1787552

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	mg/l		mg/l			
	869		13.3	1	10/11/2024 16:00	WG2380279

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity, Carbonate	mg/l		mg/l	mg/l			
	U		8.45	20.0	1	10/17/2024 09:25	WG2383910

Sample Narrative:

L1787552-01 WG2383910: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	mg/l		mg/l	mg/l			
	18.1		0.200	0.400	4	10/17/2024 16:48	WG2384026

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	su				
	7.87	T8	1	10/15/2024 14:52	WG2382169

Sample Narrative:

L1787552-01 WG2382169: 7.87 at 18.2C

Wet Chemistry by Method 9050A

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance							
	1270	umhos/cm		10.0	1	10/18/2024 14:01	WG2384953

Sample Narrative:

L1787552-01 WG2384953: at 25C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Fluoride	mg/l		mg/l	mg/l			
	0.260		0.0761	0.150	1	10/14/2024 17:06	WG2379932
Sulfate							
	401		6.37	50.0	10	10/14/2024 17:23	WG2379932

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury	mg/l		mg/l	mg/l			
	U		0.0000700	0.000200	1	10/18/2024 01:02	WG2380359

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic	mg/l		mg/l	mg/l			
	4.13		0.00440	0.0100	1	11/09/2024 14:39	WG2395850
Barium							
	0.196		0.000736	0.00500	1	11/09/2024 14:39	WG2395850
Beryllium							
	0.00134	J	0.000330	0.00200	1	11/09/2024 14:39	WG2395850
Cadmium							
	0.00367		0.000479	0.00200	1	11/09/2024 14:39	WG2395850
Calcium							
	327		0.0793	1.00	1	11/09/2024 14:39	WG2395850
Chromium							
	0.0256		0.00140	0.0100	1	11/09/2024 14:39	WG2395850
Copper							
	6.67		0.00368	0.0100	1	11/09/2024 14:39	WG2395850



SUMP-1470_10092024

Collected date/time: 10/09/24 13:00

SAMPLE RESULTS - 01

L1787552

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Iron	14.3		0.0180	0.100	1	11/09/2024 14:39	WG2395850
Lead	3.34		0.00299	0.00600	1	11/09/2024 14:39	WG2395850
Magnesium	144		0.0853	1.00	1	11/09/2024 14:39	WG2395850
Manganese	0.651		0.000934	0.0100	1	11/09/2024 14:39	WG2395850
Nickel	3.23		0.00161	0.0100	1	11/09/2024 14:39	WG2395850
Potassium	13.7		0.261	2.00	1	11/09/2024 14:39	WG2395850
Selenium	U		0.00735	0.0100	1	11/09/2024 14:39	WG2395850
Sodium	28.9		0.504	3.00	1	11/09/2024 14:39	WG2395850

Metals (ICPMS) by Method 6020B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony	0.00321	J	0.000310	0.00400	1	11/09/2024 01:14	WG2395886
Thallium	0.0102		0.000130	0.00200	1	11/09/2024 01:14	WG2395886
Uranium	14.4		0.00650	0.0500	50	11/09/2024 02:22	WG2395886
Vanadium	0.0417		0.000520	0.00500	1	11/09/2024 01:14	WG2395886
Zinc	118	J	0.200	1.25	50	11/09/2024 02:22	WG2395886

Cp

Tc

3
Ss4
Cn6
Sr5
Qc7
Gl2
Al8
Sc

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	43600		407	408	16.4	6.75	10/24/2024 23:47	WG2385898

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	2310		14.6	14.7	0.230	0.0794	10/30/2024 02:51	WG2384044
(T) Barium	99.3					30.0-143	10/30/2024 02:51	WG2384044

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	12.6		1.02	1.57	1.61	0.837	11/01/2024 15:40	WG2387326
(T) Barium	73.8					30.0-143	11/01/2024 15:40	WG2387326
(T) Yttrium	105					30.0-136	11/01/2024 15:40	WG2387326

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	40400				11/13/2024 17:43	WG2385898

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	1470		113	113	12.5	9.63	11/13/2024 17:43	WG2381917
URANIUM-235	41.0		22.9	23.2	16.8	3.83	11/13/2024 17:43	WG2381917
URANIUM-238	1740		123	123	12.5	9.63	11/13/2024 17:43	WG2381917
(T) URANIUM-232	30.9					30.0-110	11/13/2024 17:43	WG2381917



MW-01_10092024

Collected date/time: 10/09/24 09:47

SAMPLE RESULTS - 01

L1787559

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Dissolved Solids	576		10.0	1	10/11/2024 16:00	WG2380279

Wet Chemistry by Method 2320 B-2011

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Alkalinity, Carbonate	U		8.45	20.0	1	10/16/2024 10:34	WG2383084

Sample Narrative:

L1787559-01 WG2383084: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.0500	0.100	1	10/17/2024 16:13	WG2384026

Wet Chemistry by Method 9040C

Analyte	Result su	Qualifier	Dilution	Analysis date / time	Batch
pH	7.66	T8	1	10/15/2024 12:23	WG2382166

Sample Narrative:

L1787559-01 WG2382166: 7.66 at 18.4C

Wet Chemistry by Method 9050A

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	893	umhos/cm		10.0	1	10/15/2024 15:15	WG2382588

Sample Narrative:

L1787559-01 WG2382588: at 25C

Wet Chemistry by Method 9056A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Fluoride	0.126	J	0.0761	0.150	1	10/14/2024 17:41	WG2379932
Sulfate	226		6.37	50.0	10	10/14/2024 17:58	WG2379932

Mercury by Method 7470A

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Mercury, Dissolved	U		0.0000700	0.000200	1	10/27/2024 18:27	WG2387879

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Arsenic, Dissolved	0.00920	J	0.00440	0.0100	1	11/11/2024 09:24	WG2395823
Barium, Dissolved	0.0309		0.000736	0.00500	1	11/11/2024 09:24	WG2395823
Beryllium, Dissolved	U		0.000330	0.00200	1	11/11/2024 09:24	WG2395823
Cadmium, Dissolved	U		0.000479	0.00200	1	11/11/2024 09:24	WG2395823
Calcium, Dissolved	112		0.0793	1.00	1	11/11/2024 09:24	WG2395823
Chromium, Dissolved	U		0.00140	0.0100	1	11/11/2024 09:24	WG2395823
Lead, Dissolved	U		0.00299	0.00600	1	11/11/2024 09:24	WG2395823

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

MW-01_10092024

SAMPLE RESULTS - 01

Collected date/time: 10/09/24 09:47

L1787559

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch	Cp
Magnesium, Dissolved	55.6		0.0853	1.00	1	11/11/2024 09:24	WG2395823	Tc
Nickel, Dissolved	0.0336		0.00161	0.0100	1	11/11/2024 09:24	WG2395823	Ss
Potassium, Dissolved	1.68	B J	0.261	2.00	1	11/11/2024 09:24	WG2395823	Cn
Selenium, Dissolved	U		0.00735	0.0100	1	11/11/2024 09:24	WG2395823	Sr
Sodium, Dissolved	2.98	J	0.504	3.00	1	11/11/2024 09:24	WG2395823	Qc

Metals (ICPMS) by Method 6020B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch	Gl
Antimony, Dissolved	0.00304	J	0.000310	0.00400	1	11/11/2024 17:56	WG2395838	Al
Thallium, Dissolved	0.000681	J	0.000130	0.00200	1	11/11/2024 17:56	WG2395838	Sc
Uranium, Dissolved	0.00775		0.000130	0.00100	1	11/11/2024 17:56	WG2395838	

MW-01_10092024

Collected date/time: 10/09/24 09:47

SAMPLE RESULTS - 01

L1787561

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	20.7		3.84	3.86	2.70	1.13	10/24/2024 23:47	WG2385898
GROSS BETA	6.41		3.05	3.08	3.64	1.74	10/24/2024 23:47	WG2385898

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	4.48		0.650	0.792	0.231	0.0794	11/01/2024 02:22	WG2384072
(T) Barium	98.9					30.0-143	11/01/2024 02:22	WG2384072

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.740		0.237	0.435	0.425	0.223	10/27/2024 13:40	WG2387326
(T) Barium	100					30.0-143	10/27/2024 13:40	WG2387326
(T) Yttrium	105					30.0-136	10/27/2024 13:40	WG2387326

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	8.93				10/24/2024 23:47	WG2385898

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	8.23		1.09	1.23	0.347	0.229	10/21/2024 17:48	WG2381917
URANIUM-235	0.215	J	0.298	0.438	0.426	0.139	10/21/2024 17:48	WG2381917
URANIUM-238	3.56		0.725	0.865	0.307	0.209	10/21/2024 17:48	WG2381917
(T) URANIUM-232	103					30.0-110	10/21/2024 17:48	WG2381917

MW-02_10092024

Collected date/time: 10/09/24 13:30

SAMPLE RESULTS - 02

L1787559

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	416		10.0	1	10/14/2024 15:52	WG2380262

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity,Carbonate	U		8.45	20.0	1	10/16/2024 10:23	WG2383084

Sample Narrative:

L1787559-02 WG2383084: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	U		0.0500	0.100	1	10/17/2024 16:18	WG2384026

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.90	T8	1	10/19/2024 11:15	WG2385129

Sample Narrative:

L1787559-02 WG2385129: 7.9 at 19.8C

Wet Chemistry by Method 9050A

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	692	umhos/cm		10.0	1	10/17/2024 14:58	WG2384068

Sample Narrative:

L1787559-02 WG2384068: at 25C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Fluoride	0.263		0.0761	0.150	1	10/14/2024 18:16	WG2379932
Sulfate	125		0.637	5.00	1	10/14/2024 18:16	WG2379932

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury,Dissolved	U		0.0000700	0.000200	1	10/27/2024 18:42	WG2387879

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic,Dissolved	0.0300		0.00440	0.0100	1	11/11/2024 09:17	WG2395823
Barium,Dissolved	0.0498		0.000736	0.00500	1	11/11/2024 09:17	WG2395823
Beryllium,Dissolved	U		0.000330	0.00200	1	11/11/2024 09:17	WG2395823
Cadmium,Dissolved	U		0.000479	0.00200	1	11/11/2024 09:17	WG2395823
Calcium,Dissolved	85.8		0.0793	1.00	1	11/11/2024 09:17	WG2395823
Chromium,Dissolved	U		0.00140	0.0100	1	11/11/2024 09:17	WG2395823
Lead,Dissolved	U		0.00299	0.00600	1	11/11/2024 09:17	WG2395823

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

MW-02_10092024

SAMPLE RESULTS - 02

Collected date/time: 10/09/24 13:30

L1787559

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Magnesium, Dissolved	41.4		0.0853	1.00	1	11/11/2024 09:17	WG2395823
Nickel, Dissolved	0.0152		0.00161	0.0100	1	11/11/2024 09:17	WG2395823
Potassium, Dissolved	1.81	<u>B</u>	0.261	2.00	1	11/11/2024 09:17	WG2395823
Selenium, Dissolved	U		0.00735	0.0100	1	11/11/2024 09:17	WG2395823
Sodium, Dissolved	2.50	<u>J</u>	0.504	3.00	1	11/11/2024 09:17	WG2395823

Metals (ICPMS) by Method 6020B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony, Dissolved	U		0.000310	0.00400	1	11/11/2024 18:00	WG2395838
Thallium, Dissolved	0.000597	<u>J</u>	0.000130	0.00200	1	11/11/2024 18:00	WG2395838
Uranium, Dissolved	0.00508		0.000130	0.00100	1	11/11/2024 18:00	WG2395838

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

MW-02_10092024

Collected date/time: 10/09/24 13:20

SAMPLE RESULTS - 02

L1787561

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	12.2		2.27	2.29	1.54	0.635	10/24/2024 20:09	WG2385898
GROSS BETA	1.51	<u>J</u>	1.48	1.50	1.82	0.861	10/24/2024 20:09	WG2385898

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	2.67		0.504	0.644	0.261	0.0953	11/01/2024 03:22	WG2384072
(T) Barium	101					30.0-143	11/01/2024 03:22	WG2384072

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-0.360	<u>U</u>	0.553	1.02	1.06	0.551	11/02/2024 15:57	WG2387331
(T) Barium	116					30.0-143	11/02/2024 15:57	WG2387331
(T) Yttrium	96.5					30.0-136	11/02/2024 15:57	WG2387331

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	6.54				10/24/2024 20:09	WG2385898

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	4.31		0.760	0.897	0.296	0.198	10/21/2024 17:48	WG2381917
URANIUM-235	0.0228	<u>U</u>	0.202	0.339	0.378	0.121	10/21/2024 17:48	WG2381917
URANIUM-238	1.32		0.439	0.576	0.296	0.198	10/21/2024 17:48	WG2381917
(T) URANIUM-232	102					30.0-110	10/21/2024 17:48	WG2381917

MW-03_10082024

Collected date/time: 10/09/24 12:27

SAMPLE RESULTS - 03

L1787559

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l			
Dissolved Solids	1140		20.0	1	10/11/2024 16:00	WG2380279

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Alkalinity, Carbonate	U		8.45	20.0	1	10/14/2024 09:40	WG2381630

Sample Narrative:

L1787559-03 WG2381630: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Nitrate-Nitrite	U		0.0500	0.100	1	10/17/2024 16:23	WG2384026

Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	6.91	T8	1	10/15/2024 12:23	WG2382166

Sample Narrative:

L1787559-03 WG2382166: 6.91 at 18.4C

Wet Chemistry by Method 9050A

	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte							
Specific Conductance	1520	umhos/cm		10.0	1	10/15/2024 15:15	WG2382588

Sample Narrative:

L1787559-03 WG2382588: at 25C

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Fluoride	U		0.76i	1.50	10	10/12/2024 04:22	WG2379934
Sulfate	776		6.37	50.0	10	10/12/2024 04:22	WG2379934

Sample Narrative:

L1787559-03 WG2379934: Dilution due to matrix impact on instrumentation at lower dilution

Mercury by Method 7470A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Mercury, Dissolved	U		0.0000700	0.000200	1	10/27/2024 18:44	WG2387879

Metals (ICP) by Method 6010D

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Arsenic, Dissolved	0.0145		0.00440	0.0100	1	11/11/2024 09:25	WG2395823
Barium, Dissolved	0.00924		0.000736	0.00500	1	11/11/2024 09:25	WG2395823
Beryllium, Dissolved	0.000589	J	0.000330	0.00200	1	11/11/2024 09:25	WG2395823
Cadmium, Dissolved	0.000493	B J	0.000479	0.00200	1	11/11/2024 09:25	WG2395823

MW-03_10082024

SAMPLE RESULTS - 03

Collected date/time: 10/09/24 12:27

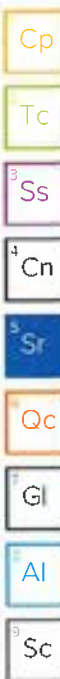
L1787559

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Calcium,Dissolved	205		0.0793	1.00	1	11/11/2024 09:25	WG2395823
Chromium,Dissolved	U		0.00140	0.0100	1	11/11/2024 09:25	WG2395823
Lead,Dissolved	0.00546	J	0.00299	0.00600	1	11/11/2024 09:25	WG2395823
Magnesium,Dissolved	95.9		0.0853	1.00	1	11/11/2024 09:25	WG2395823
Nickel,Dissolved	0.230		0.00161	0.0100	1	11/11/2024 09:25	WG2395823
Potassium,Dissolved	3.47	B	0.261	2.00	1	11/11/2024 09:25	WG2395823
Selenium,Dissolved	0.00829	J	0.00735	0.0100	1	11/11/2024 09:25	WG2395823
Sodium,Dissolved	4.53		0.504	3.00	1	11/11/2024 09:25	WG2395823

Metals (ICPMS) by Method 6020B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	0.000485	J	0.000310	0.00400	1	11/11/2024 18:03	WG2395838
Thallium,Dissolved	0.000661	J	0.000130	0.00200	1	11/11/2024 18:03	WG2395838
Uranium,Dissolved	0.00858		0.000130	0.00100	1	11/11/2024 18:03	WG2395838



MW-03_10082024

Collected date/time: 10/09/24 12:27

SAMPLE RESULTS - 03

L1787561

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	28.1		5.80	5.83	4.20	1.73	10/24/2024 23:47	WG2385898
GROSS BETA	10.6		3.13	3.15	3.45	1.64	10/24/2024 23:47	WG2385898

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	174		0.426	0.568	0.301	0.114	11/01/2024 03:22	WG2384072
(T) Barium	98.1					30.0-143	11/01/2024 03:22	WG2384072

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-0.0298	<u>U</u>	0.247	0.445	0.465	0.243	11/02/2024 15:57	WG2387331
(T) Barium	101					30.0-143	11/02/2024 15:57	WG2387331
(T) Yttrium	101					30.0-136	11/02/2024 15:57	WG2387331

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	19.4				10/24/2024 23:47	WG2385898

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	4.55		0.829	0.967	0.333	0.223	10/21/2024 17:48	WG2381917
URANIUM-235	0.211	<u>J</u>	0.309	0.447	0.449	0.148	10/21/2024 17:48	WG2381917
URANIUM-238	4.10		0.788	0.926	0.324	0.219	10/21/2024 17:48	WG2381917
(T) URANIUM-232	98.1					30.0-110	10/21/2024 17:48	WG2381917

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

MW-65_10082024

Collected date/time: 10/09/24 12:27

SAMPLE RESULTS - 04

L1787559

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l			
Dissolved Solids	1200		20.0	1	10/11/2024 16:00	WG2380279

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Alkalinity, Carbonate	U		8.45	20.0	1	10/14/2024 09:31	WG2381630

Sample Narrative:

L1787559-04 WG2381630: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Nitrate-Nitrite	U		0.0500	0.100	1	10/17/2024 16:25	WG2384026

Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	6.92	T8	1	10/15/2024 12:23	WG2382166

Sample Narrative:

L1787559-04 WG2382166: 6.92 at 18.5C

Wet Chemistry by Method 9050A

	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte							
Specific Conductance	1500	umhos/cm		10.0	1	10/15/2024 15:15	WG2382588

Sample Narrative:

L1787559-04 WG2382588: at 25C

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Fluoride	U		0.761	1.50	10	10/12/2024 04:44	WG2379934
Sulfate	779		6.37	50.0	10	10/12/2024 04:44	WG2379934

Sample Narrative:

L1787559-04 WG2379934: Dilution due to matrix impact on instrumentation at lower dilution

Mercury by Method 7470A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Mercury, Dissolved	U		0.0000700	0.000200	1	11/02/2024 19:22	WG2391328

Metals (ICP) by Method 6010D

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Arsenic, Dissolved	0.0146		0.00440	0.0100	1	11/11/2024 09:27	WG2395823
Barium, Dissolved	0.00842		0.000736	0.00500	1	11/11/2024 09:27	WG2395823
Beryllium, Dissolved	U		0.000330	0.00200	1	11/11/2024 09:27	WG2395823
Cadmium, Dissolved	U		0.000479	0.00200	1	11/11/2024 09:27	WG2395823

MW-65_10082024

Collected date/time: 10/09/24 12:27

SAMPLE RESULTS - 04

L1787559

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Calcium,Dissolved	206		0.0793	1.00	1	11/11/2024 09:27	WG2395823
Chromium,Dissolved	U		0.00140	0.0100	1	11/11/2024 09:27	WG2395823
Lead,Dissolved	0.00567	J	0.00299	0.00600	1	11/11/2024 09:27	WG2395823
Magnesium,Dissolved	96.0		0.0853	1.00	1	11/11/2024 09:27	WG2395823
Nickel,Dissolved	0.227		0.00161	0.0100	1	11/11/2024 09:27	WG2395823
Potassium,Dissolved	2.49	B	0.261	2.00	1	11/11/2024 09:27	WG2395823
Selenium,Dissolved	U		0.00735	0.0100	1	11/11/2024 09:27	WG2395823
Sodium,Dissolved	4.44		0.504	3.00	1	11/11/2024 09:27	WG2395823

Metals (ICPMS) by Method 6020B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	U		0.000310	0.00400	1	11/11/2024 18:06	WG2395838
Thallium,Dissolved	0.000137	J	0.000130	0.00200	1	11/11/2024 18:06	WG2395838
Uranium,Dissolved	0.00806		0.000130	0.00100	1	11/11/2024 18:06	WG2395838

Cp

Tc

Ss

4 Cn

6 Sr

5 Qc

Gl

Al

8 Sc

MW-65_10082024

Collected date/time: 10/09/24 12:27

SAMPLE RESULTS - 04

L1787561

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	26.1		4.95	4.97	3.50	1.46	10/24/2024 23:47	WG2385898
GROSS BETA	13.7		2.82	2.84	2.89	1.37	10/24/2024 23:47	WG2385898

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	1.83		0.420	0.560	0.228	0.0785	11/01/2024 03:22	WG2384072
(T) Barium	100					30.0-143	11/01/2024 03:22	WG2384072

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	0.518	J	0.290	0.498	0.530	0.276	11/02/2024 15:57	WG2387331
(T) Barium	105					30.0-143	11/02/2024 15:57	WG2387331
(T) Yttrium	90.9					30.0-136	11/02/2024 15:57	WG2387331

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	18.5				10/24/2024 23:47	WG2385898

Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	4.48		0.769	0.921	0.292	0.196	10/21/2024 17:48	WG2381917
URANIUM-235	0.112	U	0.235	0.387	0.373	0.120	10/21/2024 17:48	WG2381917
URANIUM-238	3.05		0.642	0.794	0.306	0.203	10/21/2024 17:48	WG2381917
(T) URANIUM-232	95.9					30.0-110	10/21/2024 17:48	WG2381917

RW-01_10082024

Collected date/time: 10/09/24 15:51

SAMPLE RESULTS - 05

L1787559

Gravimetric Analysis by Method 2540 C-2011

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Dissolved Solids	235		10.0	1	10/11/2024 16:00	WG2380279

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity, Carbonate	U		8.45	20.0	1	10/14/2024 09:44	WG2381630

Sample Narrative:

L1787559-05 WG2381630: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Nitrate-Nitrite	0.147		0.0500	0.100	1	10/17/2024 16:26	WG2384026

Wet Chemistry by Method 9040C

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	7.67	T8	1	10/15/2024 14:52	WG2382169

Sample Narrative:

L1787559-05 WG2382169: 7.67 at 18C

Wet Chemistry by Method 9050A

Analyte	Result	Units	Qualifier	RDL	Dilution	Analysis date / time	Batch
Specific Conductance	457	umhos/cm		10.0	1	10/17/2024 14:58	WG2384068

Sample Narrative:

L1787559-05 WG2384068: at 25C

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Fluoride	0.284		0.0761	0.150	1	10/12/2024 05:06	WG2379934
Sulfate	19.3		0.637	5.00	1	10/12/2024 05:06	WG2379934

Mercury by Method 7470A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Mercury, Dissolved	U		0.0000700	0.000200	1	11/02/2024 19:24	WG2391328

Metals (ICP) by Method 6010D

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Arsenic, Dissolved	U		0.00440	0.0100	1	11/11/2024 09:28	WG2395823
Barium, Dissolved	0.0861		0.000736	0.00500	1	11/11/2024 09:28	WG2395823
Beryllium, Dissolved	U		0.000330	0.00200	1	11/11/2024 09:28	WG2395823
Cadmium, Dissolved	U		0.000479	0.00200	1	11/11/2024 09:28	WG2395823
Calcium, Dissolved	42.5		0.0793	1.00	1	11/11/2024 09:28	WG2395823
Chromium, Dissolved	U		0.00140	0.0100	1	11/11/2024 09:28	WG2395823
Lead, Dissolved	U		0.00299	0.00600	1	11/11/2024 09:28	WG2395823

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

Al

Sc

RW-01_10082024

SAMPLE RESULTS - 05

Collected date/time: 10/09/24 15:51

L1787559

Metals (ICP) by Method 6010D

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Magnesium, Dissolved	29.8		0.0853	1.00	1	11/11/2024 09:28	WG2395823
Nickel, Dissolved	0.00892	J	0.00161	0.0100	1	11/11/2024 09:28	WG2395823
Potassium, Dissolved	4.50	B	0.261	2.00	1	11/11/2024 09:28	WG2395823
Selenium, Dissolved	0.00795	J	0.00735	0.0100	1	11/11/2024 09:28	WG2395823
Sodium, Dissolved	8.78		0.504	3.00	1	11/11/2024 09:28	WG2395823

Metals (ICPMS) by Method 6020B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony, Dissolved	U		0.000310	0.00400	1	11/11/2024 18:23	WG2395838
Thallium, Dissolved	U		0.000130	0.00200	1	11/11/2024 18:23	WG2395838
Uranium, Dissolved	0.0137		0.000130	0.00100	1	11/11/2024 18:23	WG2395838

Cp

Tc

3
Ss4
Cn6
Sr5
Qc7
Gl8
Al9
Sc

RW-01_10082024

Collected date/time: 10/09/24 15:51

SAMPLE RESULTS - 05

L1787561

Radiochemistry by Method 900

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
GROSS ALPHA	27.9		3.01	3.03	1.43	0.603	10/24/2024 23:47	WG2385898
GROSS BETA	9.51		1.86	1.87	1.79	0.849	10/24/2024 23:47	WG2385898

Radiochemistry by Method 903.0/9315

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
Radium-226	2.40		0.477	0.617	0.228	0.0784	11/01/2024 03:22	WG2384072
(T) Barium	102					30.0-143	11/01/2024 03:22	WG2384072

Radiochemistry by Method 904/9320

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-228	-0.347	U	0.284	0.493	0.545	0.284	11/02/2024 15:57	WG2387331
(T) Barium	106					30.0-143	11/02/2024 15:57	WG2387331
(T) Yttrium	90.3					30.0-136	11/02/2024 15:57	WG2387331

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Adjusted Gross Alpha	12.7				10/24/2024 23:47	WG2385898

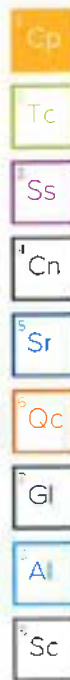
Radiochemistry by Method D3972 U-02

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
URANIUM-234	10.0		1.14	1.32	0.308	0.204	10/21/2024 17:48	WG2381917
URANIUM-235	0.247	J	0.282	0.457	0.375	0.121	10/21/2024 17:48	WG2381917
URANIUM-238	5.19		0.827	1.00	0.278	0.189	10/21/2024 17:48	WG2381917
(T) URANIUM-232	87.0					30.0-110	10/21/2024 17:48	WG2381917



ANALYTICAL REPORT

February 22, 2024



Energy Fuels Resources

Sample Delivery Group: L1705235
Samples Received: 02/13/2024
Project Number:
Description: PINYON PLAIN SUMP DISCHARGE

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Haley Torrence
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
Sc

SAMPLE SUMMARY

SUMP-1470_02092024 L1705235-01 GW

Collected by: Matt Germansen
Collected date/time: 02/09/24 17:22
Received date/time: 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2226275	1	02/14/24 14:06	02/14/24 18:00	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226045	1	02/15/24 11:01	02/15/24 11:01	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2226236	1	02/15/24 00:14	02/15/24 00:14	CAT	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2226348	1	02/15/24 10:10	02/15/24 10:10	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2225096	1	02/14/24 16:40	02/14/24 16:40	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 16:09	02/14/24 16:09	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	10	02/14/24 16:23	02/14/24 16:23	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2225943	1	02/14/24 19:48	02/15/24 09:46	NOL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2227225	1	02/19/24 04:12	02/20/24 10:33	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2226654	1	02/15/24 13:36	02/15/24 22:55	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2226654	1	02/15/24 13:36	02/16/24 00:10	LD	Mt. Juliet, TN

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Haley Torrence
Project Manager

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁵Qc

⁷Gl

⁸Al

Sc

WG2226275

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1705235-01](#)

Method Blank (MB)

(MB) R4034347-1 02/14/24 18:00

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1705225-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705225-01 02/14/24 18:00 • (DUP) R4034347-3 02/14/24 18:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	575	586	1	1.89		10

Laboratory Control Sample (LCS)

(LCS) R4034347-2 02/14/24 18:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8450	96.0	85.0-115	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2226045

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

L1705235-01

Method Blank (MB)

(MB) R4034233-2 02/15/24 09:15

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705435-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705435-01 02/15/24 11:29 • (DUP) R4034233-3 02/15/24 11:35

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1705005-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1705005-15 02/15/24 09:28 • (DUP) R4034233-4 02/15/24 13:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

³Ss⁴Cn⁶Sr⁸Qc⁷Gl³Al⁸Sc

WG2226236

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L1705235-01

Method Blank (MB)

(MB) R4034032-1 02/14/24 22:59

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1705085-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705085-01 02/14/24 23:14 • (DUP) R4034032-4 02/14/24 23:16

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.133	0.0580	1	78.5	J P1	20

L1705148-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705148-01 02/15/24 00:06 • (DUP) R4034032-7 02/15/24 00:08

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.0580	0.0560	1	3.51	J	20

Laboratory Control Sample (LCS)

(LCS) R4034032-2 02/14/24 23:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Nitrate-Nitrite	2.50	2.47	99.0	90.0-110	

L1705085-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705085-01 02/14/24 23:14 • (MS) R4034032-5 02/14/24 23:18 • (MSD) R4034032-6 02/14/24 23:32

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	2.50	0.133	2.58	2.59	97.8	98.4	1	90.0-110			0.658	20

L1705148-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705148-01 02/15/24 00:06 • (MS) R4034032-8 02/15/24 00:10

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	2.50	0.0580	2.65	104	1	90.0-110	

Cp

Tc

Ss

⁴Cn

Sr

⁶Qc⁷Gl

Al

⁹Sc

WG2226348

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

[L1705235-01](#)

L1704490-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1704490-01 02/15/24 10:10 • (DUP) R4034103-2 02/15/24 10:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	7.45	7.48	1	0.402		1

Sample Narrative:

OS: 7.45 at 19.7C

DUP: 7.48 at 19.5C

L1705356-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705356-01 02/15/24 10:10 • (DUP) R4034103-3 02/15/24 10:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	6.74	6.69	1	0.745		1

Sample Narrative:

OS: 6.74 at 18.6C

DUP: 6.69 at 18.8C

Laboratory Control Sample (LCS)

(LCS) R4034103-1 02/15/24 10:10

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10.01 at 19.9C

Cp

Tc

Ss

Cn

Sr

Qt

Gl

Al

Sc

WG2225096

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

[L1705235-01](#)

Method Blank (MB)

(MB) R4033856-1 02/14/24 16:40

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1703335-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1703335-01 02/14/24 16:40 • (DUP) R4033856-3 02/14/24 16:40

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	765	767	1	0.261		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1705235-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705235-01 02/14/24 16:40 • (DUP) R4033856-4 02/14/24 16:40

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	1200	1200	1	0.167		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4033856-2 02/14/24 16:40

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	327	335	102	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Gc

7 Gl

8 Al

9 Sc

WG2226032

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1705235-01](#)

Method Blank (MB)

(MB) R4035442-1 02/14/24 11:29

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1705223-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705223-02 02/14/24 17:44 • (DUP) R4035442-3 02/14/24 17:58

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.110	0.116	1	5.94	<u>J</u>	15
Sulfate	66.6	66.6	1	0.0842		15

L1705261-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705261-01 02/14/24 17:03 • (DUP) R4035442-5 02/15/24 01:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.292	0.270	1	8.11		15
Sulfate	21.2	21.2	1	0.0777		15

Laboratory Control Sample (LCS)

(LCS) R4035442-2 02/14/24 11:43

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	8.92	112	80.0-120	
Sulfate	40.0	41.5	104	80.0-120	

Sample Narrative:

LCS: LCS for Fluoride DOD/DW is out of range, but in range for regular samples. No DOD/DW Fluoride in WG

L1705223-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705223-02 02/14/24 17:44 • (MS) R4035442-4 02/14/24 18:38

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	8.00	0.110	8.88	110	1	80.0-120	
Sulfate	40.0	66.6	94.2	69.0	1	80.0-120	<u>J6</u>

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2226032

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1705235-01

L1705223-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705223-02 02/14/24 17:44 • (MS) R4035442-4 02/14/24 18:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
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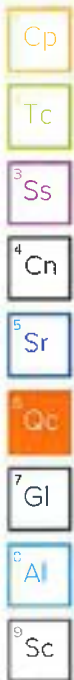
Sample Narrative:

MS: Cl/SO4 spike failed due to sample matrix

L1705261-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705261-01 02/14/24 17:03 • (MS) R4035442-6 02/15/24 01:40 • (MSD) R4035442-7 02/15/24 01:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Fluoride	8.00	0.292	9.28	9.22	112	112	1	80.0-120			0.674	15
Sulfate	40.0	21.2	59.0	59.2	94.5	94.8	1	80.0-120			0.234	15



WG2225943

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

[L1705235-01](#)

Method Blank (MB)

(MB) R4034132-1 02/15/24 09:12

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R4034132-2 02/15/24 09:14

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Mercury	0.00300	0.00325	108	80.0-120	

L1705409-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705409-01 02/15/24 09:17 • (MS) R4034132-3 02/15/24 09:19 • (MSD) R4034132-4 02/15/24 09:22

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	U	0.00126	0.00126	42.1	42.1	1	75.0-125	<u>J6</u>	<u>J6</u>	0.149	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2227225

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1705235-01](#)

Method Blank (MB)

(MB) R4035979-6 02/20/24 10:41

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00440	0.0100
Barium	U		0.000736	0.00500
Beryllium	U		0.000330	0.00200
Cadmium	U		0.000479	0.00200
Calcium	U		0.0793	1.00
Chromium	U		0.00140	0.0100
Copper	U		0.00368	0.0100
Iron	U		0.0180	0.100
Lead	U		0.00299	0.00600
Magnesium	U		0.0853	1.00
Manganese	U		0.000934	0.0100
Nickel	U		0.00161	0.0100
Potassium	U		0.261	2.00
Selenium	U		0.00735	0.0100
Sodium	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4035979-7 02/20/24 10:43

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	1.00	0.961	96.1	80.0-120	
Barium	1.00	1.00	100	80.0-120	
Beryllium	1.00	0.986	98.6	80.0-120	
Cadmium	1.00	0.949	94.9	80.0-120	
Calcium	10.0	9.92	99.2	80.0-120	
Chromium	1.00	1.01	101	80.0-120	
Copper	1.00	1.01	101	80.0-120	
Iron	10.0	9.77	97.7	80.0-120	
Lead	1.00	0.966	96.6	80.0-120	
Magnesium	10.0	10.4	104	80.0-120	
Manganese	1.00	1.03	103	80.0-120	
Nickel	1.00	0.964	96.4	80.0-120	
Potassium	10.0	9.94	99.4	80.0-120	
Selenium	1.00	0.960	96.0	80.0-120	
Sodium	10.0	10.2	102	80.0-120	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Ge⁷Gl⁸Al⁹Sc

WG2227225

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1705235-01](#)

L1705245-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705245-01 02/20/24 10:05 • (MS) R4035979-4 02/20/24 10:08 • (MSD) R4035979-5 02/20/24 10:10

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	U	0.954	0.960	95.4	96.0	1	75.0-125			0.636	20
Barium	1.00	0.110	1.07	1.08	96.3	97.4	1	75.0-125			1.03	20
Beryllium	1.00	U	0.971	0.982	97.1	98.2	1	75.0-125			1.12	20
Cadmium	1.00	U	0.926	0.935	92.6	93.5	1	75.0-125			0.949	20
Calcium	10.0	110	118	118	79.9	83.7	1	75.0-125			0.321	20
Chromium	1.00	U	0.975	0.979	97.5	97.9	1	75.0-125			0.386	20
Copper	1.00	U	0.982	0.993	98.2	99.3	1	75.0-125			1.09	20
Iron	10.0	0.0593	9.68	9.79	96.2	97.3	1	75.0-125			1.11	20
Lead	1.00	U	0.959	0.975	95.9	97.5	1	75.0-125			1.61	20
Magnesium	10.0	21.3	31.0	31.0	96.7	97.3	1	75.0-125			0.173	20
Manganese	1.00	0.0103	1.01	1.02	100	101	1	75.0-125			0.959	20
Nickel	1.00	U	0.971	0.974	97.1	97.4	1	75.0-125			0.298	20
Potassium	10.0	1.26	11.1	11.3	98.5	100	1	75.0-125			1.39	20
Selenium	1.00	U	0.991	0.999	99.1	99.9	1	75.0-125			0.813	20
Sodium	10.0	23.8	32.9	33.0	90.7	91.3	1	75.0-125			0.185	20

Cp

Tc

3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

WG2226654

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L1705235-01

Method Blank (MB)

(MB) R4034456-1 02/15/24 21:46

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony	U		0.00103	0.00400
Thallium	U		0.000121	0.00200
Uranium	U		0.0000789	0.00100
Vanadium	U		0.000664	0.00500
Zinc	U		0.00302	0.0250

Laboratory Control Sample (LCS)

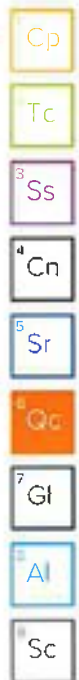
(LCS) R4034456-2 02/15/24 21:50

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	0.0500	0.0542	108	80.0-120	
Thallium	0.0500	0.0494	98.8	80.0-120	
Uranium	0.0500	0.0496	99.3	80.0-120	
Vanadium	0.0500	0.0492	98.5	80.0-120	
Zinc	0.0500	0.0499	99.7	80.0-120	

L1700650-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1700650-01 02/15/24 21:53 • (MS) R4034456-4 02/15/24 22:00 • (MSD) R4034456-5 02/15/24 22:03

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	U	0.0548	0.0562	110	112	1	75.0-125			2.39	20
Thallium	0.0500	U	0.0501	0.0514	100	103	1	75.0-125			2.45	20
Uranium	0.0500	U	0.0509	0.0508	102	102	1	75.0-125			0.00712	20
Vanadium	0.0500	U	0.0499	0.0504	99.9	101	1	75.0-125			0.893	20
Zinc	0.0500	U	0.0490	0.0498	97.9	99.6	1	75.0-125			1.73	20



GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCREDITATIONS & LOCATIONS

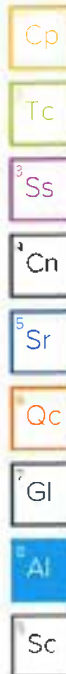
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

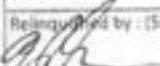
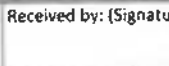
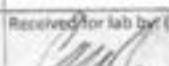
Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	OW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 4}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LA80152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

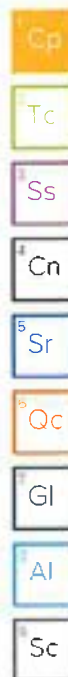


Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weinel			Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 (Email To: KWeinel@energyfuels.com)			Analysis / Container / Preservation Pres Chk: <u>U U U U U</u>			Chain of Custody Page <u> </u> of <u> </u>  MT JULIET, TN 12045 Labanon Rd. Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at http://info.pacelab.com/hubs/pace-standards-terms.pdf SDG # <u>U1705235</u> A028											
Project Description: PINYON PLAIN SUMP DISCHARGE		City/State: Collected:		Please Circle: PT MT CT ET		ALK, FL, PH, COND, SULF 125mlHDPE-NoPres AS/CP, BA/CP, BE/CP, CA 250mlHDPE-HNO3 GROSS ALPHA, ADJ 500mlHDPE-Add HNO3 NO2NO3 250mlHDPE-H2SO4 RA-226-903.0, U-ISO 1L-HDPE-Add HNO3 RA-228 1L-HDPE-Add HNO3 RA-228 1L-HDPE-Add-HNO3 TDS 1L-HDPE NoPres			Actnum: ENEFUELCO Template: T215492 Protocol: P1054332 PM: 732 - Donna Edison PB: Shipped Via: FedEX Ground Remarks: Sample # (if b only)											
Client Project # ENEFUELCO-PINYONMINE		Lab Project # ENEFUELCO-PINYONMINE		Quote #																
Site/Facility ID #		P.O. #		Date Results Needed																
Collected by (print): Matt Germanson		Collected by (signature): 		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day																
Phone:			Immediately Packed on Ice N ☐ Y ☒			No of Cntrs														
Sample ID			Comp/Grab			Matrix *			Depth			Date			Time					
Sump-1470_02092024			Grab			GW			---			2/9/2024			1722					
PreWTP			GW			GW			GW			GW			GW					
PostWTPTank			GW			GW			GW			GW			GW					
PostWTP			GW			GW			GW			GW			GW					
Sump-1470_02092024			Grab			NPW			---			2/9/24			1722					
PreWTP			NPW			NPW			NPW			NPW			NPW					
PostWTPTank			NPW			NPW			NPW			NPW			NPW					
PostWTP			NPW			NPW			NPW			NPW			NPW					
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Wastewater DW - Drinking Water OT - Other			Remarks:						pH _____ Temp _____ Flow _____ Other _____											
Relinquished by: (Signature) 			Date: 2/9/2024			Time: 1755			Received by: (Signature) 			Trip Blank Received: Yes/No HCL / Meets TBR			Temp: 51.05			Bottles Received: 7		
Relinquished by: (Signature)			Date:			Time:			Received by: (Signature)			Date:			Time:					
Relinquished by: (Signature)			Date:			Time:			Received by: (Signature) 			Date: 2/13/24			Time: 11:00					
PH-10BDH6021 TRC-2352r, CR0-20221V			Hold			Condition: NCF / OK														



ANALYTICAL REPORT

March 15, 2024



Energy Fuels Resources

Sample Delivery Group: L1705237
Samples Received: 02/13/2024
Project Number:
Description: PINYON PLAIN SUMP DISCHARGE

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
Sc

SAMPLE SUMMARY

SUMP-1470_02092024 L1705237-01 Non-Potable Water

Collected by
Matt Germanson

Collected datetime
02/09/24 17:22

Received datetime
02/13/24 11:05

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2225879	1	02/14/24 10:06	02/19/24 16:48	SNR	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2226810	1	02/15/24 12:47	02/22/24 00:27	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2235353	1	02/29/24 10:48	03/12/24 19:28	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2225879	1	02/14/24 10:06	02/23/24 23:41	RGT	Mt. Juliet, TN
Radiochemistry by Method 03972 U-02	WG2229223	1	02/20/24 22:04	02/23/24 23:41	RGT	Mt. Juliet, TN

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁵Qc

⁶Gl

⁶Al

⁶Sc

WG2225879

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

[L1705237-01](#)

Method Blank (MB)

(MB) R4035996-1 02/19/24 12:53

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
GROSS ALPHA	0.233	<u>U</u>	0.706	1.00	0.559

L1705237-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705237-01 02/19/24 16:48 • (DUP) R4035996-3 02/19/24 12:53

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
GROSS ALPHA	261	16.4	4.84	2.81	281	16.6	5.01	2.88	7.05	0.819		20	3

Laboratory Control Sample (LCS)

(LCS) R4035996-2 02/19/24 12:53

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
GROSS ALPHA	15.0	13.8	91.9	80.0-120	

L1704294-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704294-01 02/19/24 12:53 • (MS) R4035996-6 02/20/24 14:28 • (MSD) R4035996-7 02/20/24 14:28

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
GROSS ALPHA	60.0	34.6	105	79.0	117	74.0	1	70.0-130		<u>J3</u>	28.1		20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2226810

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

[L1705237-01](#)

Method Blank (MB)

(MB) R4045722-1 02/21/24 19:25

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	0.609		0.220	0.169	
(T) Barium	102		102		

L1705087-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705087-02 02/21/24 23:26 • (DUP) R4045722-5 02/21/24 20:25

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-226	0.359	0.281	0.335		1.77	0.764	0.534		133	1.73		20	3
(T) Barium	101				99.5	99.5							

Laboratory Control Sample (LCS)

(LCS) R4045722-2 02/21/24 19:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.00	5.07	101	80.0-120	
(T) Barium			102		

L1703627-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1703627-05 02/21/24 20:25 • (MS) R4045722-3 02/21/24 19:25 • (MSD) R4045722-4 02/21/24 19:25

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.820	19.6	20.4	93.8	98.1	1	75.0-125			4.30		20
(T) Barium		103			103	103							

Cp

Tc

Ss

⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2235353

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

L1705237-01

Method Blank (MB)

(MB) R4045290-1 03/12/24 19:28

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.653		0.155	0.268	0.141
(T) Barium	107		107		
(T) Yttrium	120		120		

L1705328-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705328-02 03/12/24 19:28 • (DUP) R4045290-5 03/12/24 19:28

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.968	0.342	0.609	0.319	0.502	0.388	0.709	0.370	63.5	0.902	J	20	3
(T) Barium	112				110	110							
(T) Yttrium	97.8				96.4	96.4							

Laboratory Control Sample (LCS)

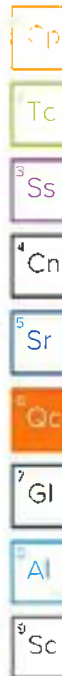
(LCS) R4045290-2 03/12/24 19:28

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.47	109	80.0-120	
(T) Barium			113		
(T) Yttrium			102		

L1705249-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705249-03 03/12/24 19:28 • (MS) R4045290-3 03/12/24 19:28 • (MSD) R4045290-4 03/12/24 19:28

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	1.31	18.3	16.2	102	89.1	1	70.0-130			12.1		20
(T) Barium		112			105	107							
(T) Yttrium		105			97.0	96.6							



WG2229223

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

[L1705237-01](#)

Method Blank (MB)

(MB) R4039541-1 02/23/24 23:41

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.0931		0.0376	0.0222	0.0168
URANIUM-235	0.0109	J	0.0158	0.0222	0.0168
URANIUM-238	0.0437		0.0263	0.0222	0.0168
(T) URANIUM-232	90.2		90.2		

L1706355-01 Original Sample (OS) - Duplicate (DUP)

(OS) L1706355-01 02/23/24 23:41 • (DUP) R4039541-5 02/23/24 23:41

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	0.824	0.411	0.240	0.199	0.0795	0.128	0.204	0.168	165	1.73	NI	20	3
URANIUM-235	0.0319	0.112	0.240	0.199	0.0697	0.128	0.204	0.168	74.3	0.222		20	3
URANIUM-238	0.355	0.274	0.240	0.199	0.212	0.197	0.204	0.168	50.4	0.423		20	3
(T) URANIUM-232	72.7				77.1	77.1							

Laboratory Control Sample (LCS)

(LCS) R4039541-2 02/23/24 23:41

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	5.00	99.4	80.0-120	
URANIUM-238	4.90	5.33	109	80.0-120	
(T) URANIUM-232			85.7		

L1705226-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705226-01 02/23/24 23:41 • (MS) R4039541-7 02/25/24 16:58 • (MSD) R4039541-6 02/24/24 15:26

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	20.1	6.67	27.7	27.7	105	104	1	75.0-125			0.217		20
URANIUM-238	19.6	3.65	22.3	23.9	95.1	103	1	75.0-125			6.80		20
(T) URANIUM-232		90.2			83.7	84.9							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl²Al⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

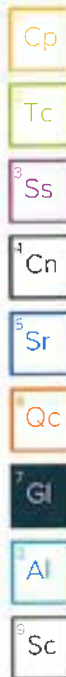
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
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Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
U	Below Detectable Limits; Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

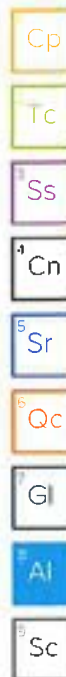
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-05-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁶	LA80152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA - ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA - ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

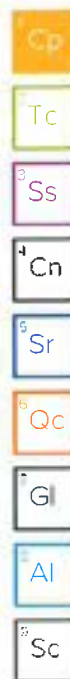


Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weinel Project Description: PINYON PLAIN SUMP DISCHARGE City/State Collected: Please Circle: PT MT CT ET						Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeinel@energyfuels.com						Analysis / Containers / Preservation						Chain of Custody Page ____ of ____ MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via the chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://url.pacelabs.com/multi-spec-standard-form.pdf							
Phone:		Client Project #		Lab Project #																SOG # U705237 A028					
Collected by (print): Matt Germansen		Site/Facility ID #		P.O. #																Acctnum: ENEFUELCO Template: T215492 Prelogin: P1054332 PM: 732 - Donna Eldson PB: Shipped Via: FedEX Ground <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th style="width: 50%;">Remarks</th> <th style="width: 50%;">Sample # (lab only)</th> </tr> </table>		Remarks	Sample # (lab only)		
Remarks	Sample # (lab only)																								
Collected by (signature): 		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Fnc Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		Quote #																					
Immediately Packed on Ice N ___ Y ☒				Date Results Needed		No. of Ctrs.																			
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time																				
Sump-1470_02092024	Grab	GW	---	2/9/2024	1722	4	X	X		X					X										
PreWTP		GW				4	X	X		X					X										
PostWTPTank		GW				4	X	X		X					X										
PostWTP		GW				4	X	X		X					X										
		GW				4	X	X		X					X										
		GW				4	X	X		X					X										
Sump-1470_02092024	Grab	NPW	-	2/9/24	1722	3			X		X	X								-01					
PreWTP		NPW				3			X		X	X													
PostWTPTank		NPW				3			X		X	X													
PostWTP		NPW				3			X		X	X													
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____						Remarks: pH _____ Temp _____ Flow _____ Other _____						Sample Receipt Checklist CDC Seal Present/Intact: NP ☒ N CDC Signed/Accurate: ☒ N Bottles arrive intact: ☒ N Correct bottles used: ☒ N Sufficient volume sent: ☒ N If Applicable VOA Zero Headspace: ☒ N Preservation Correct/Checked: ☒ N RAD Screen <0.5 mR/hr: ☒ N													
Samples returned via: ___ UPS ___ FedEx ___ Courier _____						Tracking #						Trip Blank Received: Yes ☐ No ☒ HQ / Mechl TBR Temp: 5.1305 °C Bottles Received: 7 Date: 2/12/24 Time: 11:00													
Relinquished by: (Signature)		Date: 2/9/2024 Time: 1755		Received by: (Signature)																					
Relinquished by: (Signature)		Date: Time:		Received by: (Signature)																					
Relinquished by: (Signature)		Date: Time:		Received for lab by: (Signature)																Condition: NCF OK					



ANALYTICAL REPORT

March 01, 2024



Energy Fuels Resources

Sample Delivery Group: L1705225
Samples Received: 02/13/2024
Project Number:
Description: Pinyon Plain Mine GW Sampling

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

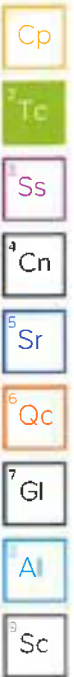
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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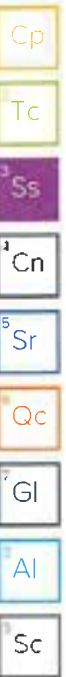


SAMPLE SUMMARY

MW-01_02072024 L1705225-01 GW

Collected by: Collected date/time: Received date/time:
02/07/24 10:54 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2226275	1	02/14/24 14:06	02/14/24 18:00	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2229068	1	02/19/24 14:59	02/19/24 14:59	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2228133	1	02/21/24 23:19	02/21/24 23:19	AEC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2227299	1	02/19/24 15:00	02/19/24 15:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2225096	1	02/14/24 16:40	02/14/24 16:40	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 13:55	02/14/24 13:55	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	10	02/14/24 14:09	02/14/24 14:09	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2227865	1	02/18/24 12:36	02/18/24 19:53	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2226648	1	02/15/24 13:52	02/16/24 21:01	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2226378	1	02/15/24 05:13	02/15/24 16:02	JPD	Mt. Juliet, TN



MW-02_02072024 L1705225-02 GW

Collected by: Collected date/time: Received date/time:
02/07/24 14:57 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2226275	1	02/14/24 14:06	02/14/24 18:00	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2229068	1	02/19/24 15:33	02/19/24 15:33	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2228133	1	02/21/24 23:21	02/21/24 23:21	AEC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2227299	1	02/19/24 15:00	02/19/24 15:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2225096	1	02/14/24 16:40	02/14/24 16:40	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 14:23	02/14/24 14:23	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2227865	1	02/18/24 12:36	02/18/24 20:01	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2226648	1	02/15/24 13:52	02/16/24 21:03	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2226378	1	02/15/24 05:13	02/15/24 16:06	JPD	Mt. Juliet, TN

MW-03_02062024 L1705225-03 GW

Collected by: Collected date/time: Received date/time:
02/06/24 14:24 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2226275	1	02/14/24 14:06	02/14/24 18:00	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2226045	1	02/15/24 10:54	02/15/24 10:54	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2228133	1	02/21/24 23:24	02/21/24 23:24	AEC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2227299	1	02/19/24 15:00	02/19/24 15:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2225096	1	02/14/24 16:40	02/14/24 16:40	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	10	02/14/24 14:50	02/14/24 14:50	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2227865	1	02/18/24 12:36	02/18/24 20:04	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2226648	1	02/15/24 13:52	02/16/24 21:08	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2226378	1	02/15/24 05:13	02/15/24 16:09	JPD	Mt. Juliet, TN

MW-65_02072024 L1705225-04 GW

Collected by: Collected date/time: Received date/time:
02/07/24 10:54 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2226275	1	02/14/24 14:06	02/14/24 18:00	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2229068	1	02/19/24 15:39	02/19/24 15:39	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2228133	1	02/21/24 23:26	02/21/24 23:26	AEC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2227299	1	02/19/24 15:00	02/19/24 15:00	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2225096	1	02/14/24 16:40	02/14/24 16:40	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	1	02/14/24 15:16	02/14/24 15:16	GEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2226032	10	02/14/24 15:55	02/14/24 15:55	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2227865	1	02/18/24 12:36	02/18/24 20:06	AKB	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2226648	1	02/15/24 13:52	02/16/24 21:09	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2226378	1	02/15/24 05:13	02/15/24 16:12	JPD	Mt. Juliet, TN

SAMPLE SUMMARY

RW-01_02182024 L1705225-05 GW

Collected by

Collected date/time

Received date/time

02/18/24 12:39

02/20/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2230336	1	02/20/24 21:10	02/21/24 00:14	DLS	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2232039	1	02/25/24 10:51	02/25/24 10:51	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2228133	1	02/21/24 23:44	02/21/24 23:44	AEC	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2233723	1	02/28/24 10:00	02/28/24 10:00	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2233339	1	02/24/24 14:00	02/24/24 14:00	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2232569	1	02/29/24 15:12	02/29/24 15:12	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2230165	1	02/21/24 19:28	02/22/24 11:44	LAS	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2231526	1	02/23/24 09:57	02/25/24 10:57	ZSA	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2230983	1	02/22/24 07:54	02/22/24 23:11	JPD	Mt. Juliet, TN

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2226275

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1705225-01.02.03.04](#)

Method Blank (MB)

(MB) R4034347-1 02/14/24 18:00

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1705225-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705225-01 02/14/24 18:00 • (DUP) R4034347-3 02/14/24 18:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	575	586	1	1.89		10

Laboratory Control Sample (LCS)

(LCS) R4034347-2 02/14/24 18:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8450	96.0	85.0-115	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2230336

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1705225-05](#)

Method Blank (MB)

(MB) R4037923-1 02/21/24 00:14

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1707372-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1707372-06 02/21/24 00:14 • (DUP) R4037923-3 02/21/24 00:14

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	89.0	89.0	1	0.000		10

L1707372-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1707372-07 02/21/24 00:14 • (DUP) R4037923-4 02/21/24 00:14

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	104	106	1	1.90		10

Laboratory Control Sample (LCS)

(LCS) R4037923-2 02/21/24 00:14

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8740	99.3	85.0-115	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2226045

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

[L1705225-03](#)

Method Blank (MB)

(MB) R4034233-2 02/15/24 09:15

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity, Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705435-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705435-01 02/15/24 11:29 • (DUP) R4034233-3 02/15/24 11:35

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Alkalinity, Carbonate	U	U	1	0.000		% 20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1705005-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1705005-15 02/15/24 09:28 • (DUP) R4034233-4 02/15/24 13:21

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Alkalinity, Carbonate	U	U	1	0.000		% 20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2229068

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

L1705225-01.02.04

Method Blank (MB)

(MB) R4035559-2 02/19/24 13:08

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity, Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705796-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705796-01 02/19/24 14:17 • (DUP) R4035559-3 02/19/24 14:23

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity, Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1705873-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705873-01 02/19/24 16:43 • (DUP) R4035559-4 02/19/24 16:48

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity, Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2232039

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

[L1705225-05](#)

Method Blank (MB)

(MB) R4038005-2 02/25/24 09:54

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1705225-05 Original Sample (OS) - Duplicate (DUP)

(OS) L1705225-05 02/25/24 10:51 - (DUP) R4038005-3 02/25/24 10:56

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1707801-01 Original Sample (OS) - Duplicate (DUP)

(OS) L1707801-01 02/25/24 13:02 - (DUP) R4038005-4 02/25/24 13:09

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	109	105	1	2.83		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

³Ss⁴Cn⁵Sr⁶Gc⁷Gl⁸Al⁹Sc

Method Blank (MB)

(MB) R4036747-1 02/21/24 23:06

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1705225-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1705225-04 02/21/24 23:26 • (DUP) R4036747-4 02/21/24 23:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	U	U	1	0.000		20

L1706108-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1706108-09 02/21/24 23:59 • (DUP) R4036747-6 02/22/24 00:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.110	0.115	1	4.44		20

Laboratory Control Sample (LCS)

(LCS) R4036747-2 02/21/24 23:08

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Nitrate-Nitrite	2.50	2.49	99.6	90.0-110	

Laboratory Control Sample (LCS)

(LCS) R4036747-3 02/21/24 23:10

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Nitrate-Nitrite	2.50	2.51	100	90.0-110	

L1705225-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705225-04 02/21/24 23:26 • (MS) R4036747-5 02/21/24 23:42

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	2.50	U	2.26	90.4	1	90.0-110	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl^cAl⁹Sc

WG2228133

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

[L1705225-01.02.03.04.05](#)

L1706108-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706108-09 02/21/24 23:59 • (MS) R4036747-7 02/22/24 00:16 • (MSD) R4036747-8 02/22/24 00:17

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitric	2.50	0.110	2.35	2.47	89.4	94.5	1	90.0-110	<u>J6</u>		5.27	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Gc⁷Gl⁸Al⁹Sc

WG2227299

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

[L1705225-01,02,03,04](#)

L1705225-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705225-01 02/19/24 15:00 • (DUP) R4035516-2 02/19/24 15:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.81	7.80	1	0.128		1

Sample Narrative:

OS: 7.81 at 19.6C

DUP: 7.8 at 19.6C

L1705865-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705865-01 02/19/24 15:00 • (DUP) R4035516-3 02/19/24 15:00

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	su	su		%		%
pH	7.74	7.75	1	0.129		1

Sample Narrative:

OS: 7.74 at 18.9C

DUP: 7.75 at 19.1C

Laboratory Control Sample (LCS)

(LCS) R4035516-1 02/19/24 15:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	su	su	%	%	
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 19.6C

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2233723

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

[L1705225-05](#)

L1706885-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1706885-01 02/28/24 10:00 • (DUP) R4039172-2 02/28/24 10:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.04	7.05	1	0.142		1

Sample Narrative:

OS: 7.04 at 19.8C

DUP: 7.05 at 19.8C

L1708668-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1708668-05 02/28/24 10:00 • (DUP) R4039172-3 02/28/24 10:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.20	7.19	1	0.139		1

Sample Narrative:

OS: 7.2 at 19.8C

DUP: 7.19 at 19.6C

Laboratory Control Sample (LCS)

(LCS) R4039172-1 02/28/24 10:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10.01 at 20.6C

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2225096

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

[L1705225-01,02,03,04](#)

Method Blank (MB)

(MB) R4033856-1 02/14/24 16:40

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1703335-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1703335-01 02/14/24 16:40 • (DUP) R4033856-3 02/14/24 16:40

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	765	767	1	0.261		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1705235-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705235-01 02/14/24 16:40 • (DUP) R4033856-4 02/14/24 16:40

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1200	1200	1	0.167		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4033856-2 02/14/24 16:40

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	327	335	102	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

WG2233339

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

[L1705225-05](#)

Method Blank (MB)

(MB) R4037862-1 02/24/24 14:00

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1705225-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1705225-05 02/24/24 14:00 • (DUP) R4037862-3 02/24/24 14:00

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	460	467	1	1.51		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1708308-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1708308-03 02/24/24 14:00 • (DUP) R4037862-4 02/24/24 14:00

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	2400	2420	1	0.748		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4037862-2 02/24/24 14:00

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	327	333	102	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2226032

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1705225-01.02.03.04](#)

Method Blank (MB)

(MB) R4035442-1 02/14/24 11:29

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1705223-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1705223-02 02/14/24 17:44 • (DUP) R4035442-3 02/14/24 17:58

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.110	0.116	1	5.94	J	15
Sulfate	66.6	66.6	1	0.0842		15

L1705261-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705261-01 02/14/24 17:03 • (DUP) R4035442-5 02/15/24 01:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.292	0.270	1	8.11		15
Sulfate	21.2	21.2	1	0.0777		15

Laboratory Control Sample (LCS)

(LCS) R4035442-2 02/14/24 11:43

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	8.92	112	80.0-120	
Sulfate	40.0	41.5	104	80.0-120	

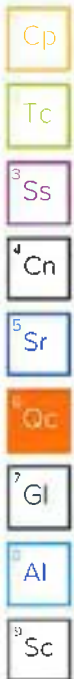
Sample Narrative:

LCS: LCS for Fluoride DOD/DW is out of range, but in range for regular samples. No DOD/DW Fluoride in WG

L1705223-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705223-02 02/14/24 17:44 • (MS) R4035442-4 02/14/24 18:38

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	8.00	0.110	8.88	110	1	80.0-120	
Sulfate	40.0	66.6	94.2	69.0	1	80.0-120	J6



WG2226032

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1705225-01,02,03,04](#)

L1705223-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1705223-02 02/14/24 17:44 • (MS) R4035442-4 02/14/24 18:38

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
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Sample Narrative:

MS: Cl/SO4 spike failed due to sample matrix

L1705261-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705261-01 02/14/24 17:03 • (MS) R4035442-6 02/15/24 01:40 • (MSD) R4035442-7 02/15/24 01:54

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Fluoride	8.00	0.292	9.28	9.22	112	112	1	80.0-120			0.674	15
Sulfate	40.0	21.2	59.0	59.2	94.5	94.8	1	80.0-120			0.234	15

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2232569

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1705225-05

Method Blank (MB)

(MB) R4040164-1 02/29/24 13:35

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1705225-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1705225-05 02/29/24 15:12 • (DUP) R4040164-3 02/29/24 15:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.303	0.318	1	5.12		15
Sulfate	22.2	22.3	1	0.191		15

L1707948-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1707948-06 02/29/24 21:13 • (DUP) R4040164-6 02/29/24 21:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.219	0.208	1	5.26		15
Sulfate	185	185	1	0.196		15

Laboratory Control Sample (LCS)

(LCS) R4040164-2 02/29/24 13:49

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	8.74	109	80.0-120	
Sulfate	40.0	40.0	99.9	80.0-120	

L1705225-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705225-05 02/29/24 15:12 • (MS) R4040164-4 02/29/24 15:39 • (MSD) R4040164-5 02/29/24 15:53

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	8.00	0.303	8.27	8.30	99.6	99.9	1	80.0-120			0.336	15
Sulfate	40.0	22.2	55.8	56.0	84.0	84.4	1	80.0-120			0.316	15

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2232569

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1705225-05

L1707948-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1707948-06 02/29/24 21:13 • (MS) R4040164-7 02/29/24 21:41

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	8.00	0.219	8.18	99.5	1	80.0-120	
Sulfate	40.0	185	188	8.30	1	80.0-120	<u>V</u>

Sample Narrative:

MS: Spike failure due to matrix interference

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

WG2227865

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L1705225-01.02.03.04

Method Blank (MB)

(MB) R4035145-1 02/18/24 19:48

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury,Dissolved	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R4035145-2 02/18/24 19:51

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Mercury,Dissolved	0.00300	0.00318	106	80.0-120	

L1705225-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705225-01 02/18/24 19:53 • (MS) R4035145-3 02/18/24 19:56 • (MSD) R4035145-4 02/18/24 19:58

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury,Dissolved	0.00300	U	0.00305	0.00301	102	100	1	75.0-125			1.19	20

Cp

Tc

³Ss⁴Cn⁵Sr

Qc

⁷Gl²Al⁹Sc

WG2230165

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L1705225-05

Method Blank (MB)

(MB) R4037010-1 02/22/24 11:39

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury,Dissolved	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R4037010-2 02/22/24 11:41

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Mercury,Dissolved	0.00300	0.00301	100	80.0-120	

L1705225-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705225-05 02/22/24 11:44 • (MS) R4037010-3 02/22/24 11:46 • (MSD) R4037010-4 02/22/24 11:49

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury,Dissolved	0.00300	U	0.00286	0.00280	95.2	93.3	1	75.0-125			1.94	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2226648

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L1705225-01,02,03,04

Method Blank (MB)

(MB) R4034917-1 02/16/24 20:48

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic, Dissolved	U		0.00440	0.0100
Barium, Dissolved	U		0.000736	0.00500
Beryllium, Dissolved	U		0.000330	0.00200
Cadmium, Dissolved	U		0.000479	0.00200
Calcium, Dissolved	U		0.0793	1.00
Chromium, Dissolved	U		0.00140	0.0100
Lead, Dissolved	U		0.00299	0.00600
Magnesium, Dissolved	U		0.0853	1.00
Nickel, Dissolved	U		0.00161	0.0100
Potassium, Dissolved	U		0.261	2.00
Selenium, Dissolved	U		0.00735	0.0100
Sodium, Dissolved	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4034917-2 02/16/24 20:49

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic, Dissolved	1.00	0.946	94.6	80.0-120	
Barium, Dissolved	1.00	1.01	101	80.0-120	
Beryllium, Dissolved	1.00	0.985	98.5	80.0-120	
Cadmium, Dissolved	1.00	0.957	95.7	80.0-120	
Calcium, Dissolved	10.0	9.88	98.8	80.0-120	
Chromium, Dissolved	1.00	1.00	100	80.0-120	
Lead, Dissolved	1.00	0.942	94.2	80.0-120	
Magnesium, Dissolved	10.0	9.85	98.5	80.0-120	
Nickel, Dissolved	1.00	0.939	93.9	80.0-120	
Potassium, Dissolved	10.0	9.56	95.6	80.0-120	
Selenium, Dissolved	1.00	0.941	94.1	80.0-120	
Sodium, Dissolved	10.0	9.80	98.0	80.0-120	

L1704988-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704988-02 02/16/24 20:51 • (MS) R4034917-4 02/16/24 20:54 • (MSD) R4034917-5 02/16/24 20:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic, Dissolved	1.00	0.0274	1.04	1.06	101	103	1	75.0-125			1.45	20
Barium, Dissolved	1.00	0.134	1.10	1.10	96.7	97.1	1	75.0-125			0.296	20
Beryllium, Dissolved	1.00	U	0.990	0.995	99.0	99.5	1	75.0-125			0.497	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2226648

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1705225-01.02.03.04](#)

L1704988-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704988-02 02/16/24 20:51 • (MS) R4034917-4 02/16/24 20:54 • (MSD) R4034917-5 02/16/24 20:56

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cadmium,Dissolved	1.00	U	0.970	0.987	97.0	98.7	1	75.0-125			1.68	20
Calcium,Dissolved	10.0	53.5	67.0	66.8	135	133	1	75.0-125	<u>V</u>	<u>V</u>	0.306	20
Chromium,Dissolved	1.00	0.00147	0.962	0.975	96.0	97.3	1	75.0-125			1.33	20
Lead,Dissolved	1.00	U	0.977	0.976	97.7	97.6	1	75.0-125			0.126	20
Magnesium,Dissolved	10.0	30.4	39.5	39.6	91.3	91.9	1	75.0-125			0.156	20
Nickel,Dissolved	1.00	0.0152	1.02	1.01	100	99.7	1	75.0-125			0.455	20
Potassium,Dissolved	10.0	4.18	13.8	14.0	96.6	98.0	1	75.0-125			0.988	20
Selenium,Dissolved	1.00	U	1.12	1.15	112	115	1	75.0-125			2.75	20
Sodium,Dissolved	10.0	1170	1160	1160	0.000	0.000	1	75.0-125	<u>E V</u>	<u>E V</u>	0.00816	20

Cp

Tc

Ss

⁴Cn⁵Sr⁸Qc⁷Gl⁶Al⁸Sc

WG2231526

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L1705225-05

Method Blank (MB)

(MB) R4038014-1 02/25/24 10:52

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic, Dissolved	U		0.00440	0.0100
Barium, Dissolved	U		0.000736	0.00500
Beryllium, Dissolved	U		0.000330	0.00200
Cadmium, Dissolved	U		0.000479	0.00200
Calcium, Dissolved	U		0.0793	1.00
Chromium, Dissolved	U		0.00140	0.0100
Lead, Dissolved	U		0.00299	0.00600
Magnesium, Dissolved	U		0.0853	1.00
Nickel, Dissolved	U		0.00161	0.0100
Potassium, Dissolved	U		0.261	2.00
Selenium, Dissolved	U		0.00735	0.0100
Sodium, Dissolved	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4038014-2 02/25/24 10:54

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic, Dissolved	1.00	0.987	98.7	80.0-120	
Barium, Dissolved	1.00	1.02	102	80.0-120	
Beryllium, Dissolved	1.00	1.05	105	80.0-120	
Cadmium, Dissolved	1.00	0.984	98.4	80.0-120	
Calcium, Dissolved	10.0	10.1	101	80.0-120	
Chromium, Dissolved	1.00	1.02	102	80.0-120	
Lead, Dissolved	1.00	0.984	98.4	80.0-120	
Magnesium, Dissolved	10.0	10.6	106	80.0-120	
Nickel, Dissolved	1.00	0.977	97.7	80.0-120	
Potassium, Dissolved	10.0	10.3	103	80.0-120	
Selenium, Dissolved	1.00	0.967	96.7	80.0-120	
Sodium, Dissolved	10.0	10.4	104	80.0-120	

L1705225-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705225-05 02/25/24 10:57 • (MS) R4038014-4 02/25/24 11:02 • (MSD) R4038014-5 02/25/24 11:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic, Dissolved	1.00	U	1.00	1.00	100	100	1	75.0-125			0.171	20
Barium, Dissolved	1.00	0.0857	1.09	1.09	101	101	1	75.0-125			0.289	20
Beryllium, Dissolved	1.00	U	1.04	1.04	104	104	1	75.0-125			0.0613	20

Cp

Tc

³ Ss⁴ Cn⁵ Sr⁶ Qc⁷ Gl⁸ Al⁹ Sc

WG2231526

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1705225-05](#)

L1705225-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705225-05 02/25/24 10:57 • (MS) R4038014-4 02/25/24 11:02 • (MSD) R4038014-5 02/25/24 11:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cadmium,Dissolved	1.00	U	0.990	0.987	99.0	98.7	1	75.0-125			0.262	20
Calcium,Dissolved	10.0	42.4	51.9	51.7	95.2	93.5	1	75.0-125			0.333	20
Chromium,Dissolved	1.00	U	1.01	1.02	101	102	1	75.0-125			0.453	20
Lead,Dissolved	1.00	U	0.984	0.978	98.4	97.8	1	75.0-125			0.583	20
Magnesium,Dissolved	10.0	31.3	41.1	40.9	98.3	96.4	1	75.0-125			0.454	20
Nickel,Dissolved	1.00	0.0132	0.986	0.985	97.3	97.2	1	75.0-125			0.0510	20
Potassium,Dissolved	10.0	2.65	12.8	12.8	102	101	1	75.0-125			0.127	20
Selenium,Dissolved	1.00	0.00964	0.992	0.991	98.3	98.1	1	75.0-125			0.147	20
Sodium,Dissolved	10.0	8.17	18.2	18.2	101	100	1	75.0-125			0.300	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2226378

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L1705225-01.02.03.04

Method Blank (MB)

(MB) R4034281-1 02/15/24 15:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony, Dissolved	0.00118		0.00103	0.00400
Thallium, Dissolved	U		0.000121	0.00200
Uranium, Dissolved	U		0.0000789	0.00100

Laboratory Control Sample (LCS)

(LCS) R4034281-2 02/15/24 15:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony, Dissolved	0.0500	0.0426	85.1	80.0-120	
Thallium, Dissolved	0.0500	0.0491	98.2	80.0-120	
Uranium, Dissolved	0.0500	0.0494	98.8	80.0-120	

L1704762-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704762-01 02/15/24 15:07 • (MS) R4034281-4 02/15/24 15:13 • (MSD) R4034281-5 02/15/24 15:17

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony, Dissolved	0.0500	U	0.0399	0.0426	79.8	85.2	1	75.0-125			6.56	20
Thallium, Dissolved	0.0500	U	0.0476	0.0480	95.3	96.0	1	75.0-125			0.797	20
Uranium, Dissolved	0.0500	0.00373	0.0523	0.0540	97.2	101	1	75.0-125			3.19	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2230983

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

[L1705225-05](#)

Method Blank (MB)

(MB) R4037335-1 02/22/24 22:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony,Dissolved	U		0.00103	0.00400
Thallium,Dissolved	U		0.000121	0.00200
Uranium,Dissolved	U		0.0000789	0.00100

Laboratory Control Sample (LCS)

(LCS) R4037335-2 02/22/24 22:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony,Dissolved	0.0500	0.0538	108	80.0-120	
Thallium,Dissolved	0.0500	0.0513	103	80.0-120	
Uranium,Dissolved	0.0500	0.0504	101	80.0-120	

L1707309-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1707309-02 02/22/24 22:28 • (MS) R4037335-4 02/22/24 22:31 • (MSD) R4037335-5 02/22/24 22:34

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony,Dissolved	0.0500	U	0.0577	0.0563	115	113	1	75.0-125			2.44	20
Thallium,Dissolved	0.0500	U	0.0497	0.0498	99.4	99.7	1	75.0-125			0.233	20
Uranium,Dissolved	0.0500	0.0114	0.0628	0.0623	103	102	1	75.0-125			0.689	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

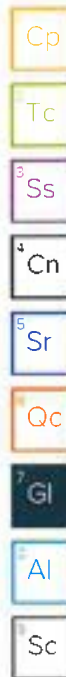
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

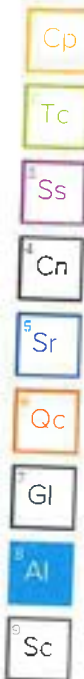


ACCREDITATIONS & LOCATIONS

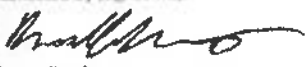
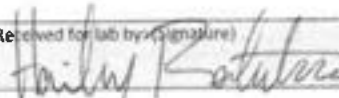
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ²	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 5}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{3 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA - ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA - ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable
^{*} Not all certifications held by the laboratory are applicable to the results reported in the attached report.
^{*} Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228						Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228						Pres Chk		Chain of Custody Page 1 of 1	
Report to: Kathy Weiner!						Email To: KWeiner@energyfuels.com									
Project Description: Pinyon Plain Mine GW Sampling			City/State Collected:			Please Circle: PT MT CT LT							MT JULIET, TN		
Phone:			Client Project #			Lab Project # ENEFUELCO-PINYONMINE							SDG # A027		
Collected by (print): Travis Boam			Site/Facility ID #			P.O. #							Acctnum: ENEFUELCO		
Collected by (signature):			Rush? (Lab MUST Be Notified)			Quote #							Template: T217177		
Immediately Packed on ice N Y X			Date Results Needed			No. of Cans							Preload: P1054318		
													PM 732 - Donna Eldson		
													PB:		
													Shipped Via: FedEx Ground		
Sample ID			Comp/Grab	Matrix *	Depth	Date	Time		*Diss Metals (FF) 250ml HDPE HNO3	ALK, FLUORIDE, PH, SULF 250ml HDPE No Pres	GROSS A/B, U-T-SO, ADI 1L-HDPE-Add-HNO3	NO2NO3 250ml HDPE-H2SO4	RA-226-903.0 1L-HDPE-Add-HNO3	RA-228 1L-HDPE-Add-HNO3	TDS 1L-HDPE No Pres
MW-01_02072024	Grab	GW	-	2/7/24	1054	4	X	X	X						-01
MW-02_02072024	Grab	GW	-	2/7/24	1452	4	X	X	X						-02
MW-03_02062024	Grab	GW	-	2/6/24	1424	4	X	X	X						-03
MW-65_02072024	Grab	GW	-	2/7/24	1054	4	X	X	X						-04
RW-01_02082024	Grab	GW	-	2/8/24	0938	4	X	X	X						-05
MW-01_02072024	Grab	NPW	-	2/7/24	1054	3			X	X	X				
MW-02_02072024	Grab	NPW	-	2/7/24	1452	3			X	X	X				
MW-03_02062024	Grab	NPW	-	2/6/24	1424	3			X	X	X				
MW-65-MW-65_02072024	Grab	NPW	-	2/7/24	1054	3			X	X	X				
RW-01_02082024	Grab	NPW	-	2/8/24	0938	3			X	X	X				
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Wastewater DW - Drinking Water OT - Other _____						Remarks: Field filtered dissolved metals						pH ____ Temp ____ Flow ____ Other ____		Sample Receipt Checklist COC Seal Present, Intact: ☒ COC Signed/Accurates: ☒ Bottom arrow intact: ☒ Correct bottles used: ☒ Sufficient volume sent: ☒ Lab Seen Headspace: ☒ Preservation correct/checked: ☒ PAB Screen <0.3 mkr/hr: ☒	
Samples returned via: UPS FedEx Courier						Tracking #									
Relinquished by: (Signature) Travis Boam			Date: 2/8/24	Time: 1700	Received by: (Signature)			Trip Blank Received: Yes/No TBR			Temp: °C		PH-10BDH5021 TRC-2021V CR6-20221V		
Relinquished by: (Signature)			Date:	Time:	Received by: (Signature)			Bottles Received: 18			Hold:		Condition: NCF / OK		
Relinquished by: (Signature)			Date:	Time:	Received for lab by: (Signature)			Date: 3/13/24			Time: 11:00				

Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weinel Project Description: Pinyon Plain Mine GW Sampling City/State: Collected: _____ Please Circle: PT MT CT ET				Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeinel@energyfuels.com				Analysis / Container / Preservative Pres Chk *Diss Metals (FF) 250mlHDPE HNO3 ALK, FLUORIDE, PH, SULF 250mlHDPE NoPres GROSS A/B, U-ISO, ADJ 1L-HDPE-Add-HNO3 NO2NO3 250mlHDPE-H2SO4 RA-226-903.0 1L-HDPE-Add-HNO3 RA-228 1L-HDPE-Add-HNO3 TDS 1L-HDPE NoPres				Chain of Custody Page ____ of ____  MT JULIET, TN 12065 Lebanon Rd. Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://www.pacewater.com/multiflex-standard-terms.pdf			
Phone: _____		Client Project # _____		Lab Project # ENEFUELCO-PINYONMINE		SGD # <u>L1705225</u> Tail <u>A034</u>									
Collected by (print): <u>Russell M. Weinel</u>		Site/Facility ID # _____		P.O. # _____		Account: ENEFUELCO Template: T217177 Prelogin: P1054318 PM: 732 - Donna Eidson PR: _____									
Collected by (signature):  Immediately Packed on Ice N <u>Y</u> <u>X</u>		Rush? (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day		Quote # _____ Date Results Needed _____		Shipped Via: FedEX Ground									
Sample ID		Comp/Grab		Matrix *		Depth									
Date		Time		No of Cntrs		Remarks									
MW-01_		GW		4		X X									
MW-02_		GW		4		X X									
MW-03_		GW		4		X X									
MW-65_		GW		4		X X									
RW-01_ <u>02182024</u>		GW		<u>2/18/24</u> <u>1239</u>		4 X X									
MW-01_		NPW		3		X X X									
MW-02_		NPW		3		X X X									
MW-03_		NPW		3		X X X									
MW-65_		NPW		3		X X X									
RW-01_ <u>02182024</u>		<u>Grab</u> NPW		<u>2/18/24</u> <u>1239</u>		3 X X X									
* Matrix: SS - Soil Air - Air F - Filter GW - Groundwater B - Bioassay WW - Wastewater DW - Drinking Water OT - Other _____				Remarks: For SGD #s L1705225 and L1705226, re-sample of RW-01 Field filtered dissolved metals pH _____ Temp _____ Flow _____ Other _____											
Samples returned via: UPS FedEx Courier				Tracking # _____											
Relinquished by: (Signature) 		Date: <u>2/18/24</u>		Time: <u>1400</u>		Received by: (Signature) Trip Blank Received: Yes <u>No</u> HCL / Meq/L TSS									
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature) Temp: <u>DP 17C</u> Bottles Received: <u>7</u> <u>5.050-50</u>									
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) 									
Date:		Date:		Date: <u>2/20/24</u>		Time: <u>1000</u>									
Hold:				Condition: NCF / OK											

Sample Receipt Checklist	
COC Seal Present/Intact: <u>NP</u>	<u>11</u>
COC Signed/Accurate:	<u>11</u>
Bottles arrive intact:	<u>11</u>
Correct bottles used:	<u>11</u>
Sufficient volume sent:	<u>11</u>
If Applicable	
VOA Zero Headspace:	<u>11</u>
Preservation Correct/Checked:	<u>11</u>
BAD Screen <0.5 mV/hr:	<u>11</u>

If preservation required by Log: Date/Time	
Hold:	Condition: NCF / OK

2/14-NCF-L1705225/L1705226 ENEFUELCO

R5

Time estimate: oh

Time spent: oh

Members



Hailey Robertson (responsible)



Donna Eidson

Due on 17 February 2024 8:00 AM for target Done

- ☒ Login Clarification needed
- ☐ Chain of custody is incomplete
- ☐ Please specify Metals requested
- ☐ Please specify TCLP requested
- ☐ Received additional samples not listed on COC
- ☐ Sample IDs on containers do not match IDs on COC
- ☐ Client did not "X" analysis
- ☐ Chain of Custody is missing
- ☐ If no COC: Received by: _____
- ☐ If no COC: Date/Time: _____
- ☐ If no COC: Temp./Cont.Rec./pH: _____
- ☐ If no COC: Carrier: _____
- ☐ If no COC: Tracking #: _____
- ☐ Client informed by call
- ☐ Client informed by Email
- ☐ Client informed by Voicemail
- ☐ Date/Time: _____
- ☐ PM initials: _____
- ☐ Client Contact: _____

Comments

Hailey Robertson

14 February 2024 9:16 AM

Missing ID: RW-01_02082024

Donna Eidson

14 February 2024 3:28 PM

RW-01 will be resampled and received next week. Please keep in original L#

Hailey Robertson

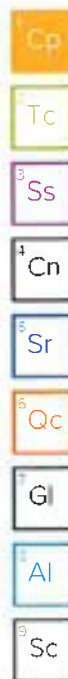
20 February 2024 12:47 PM

Samples received and added



ANALYTICAL REPORT

March 19, 2024



Energy Fuels Resources

Sample Delivery Group: L1705226
Samples Received: 02/13/2024
Project Number:
Description: Pinyon Plain Mine GW Sampling

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

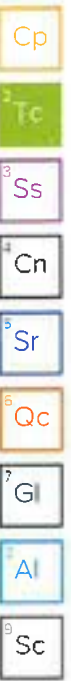
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd. Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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SAMPLE SUMMARY

MW-01_02072024 L1705226-01 Non-Potable Water

Collected by: Travis B
Collected date/time: 02/07/24 10:54
Received date/time: 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2225879	1	02/14/24 10:06	02/19/24 12:53	SNR	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 03:21	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2235352	1	02/28/24 09:59	03/13/24 21:40	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2225879	1	02/14/24 10:06	02/23/24 23:41	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2229223	1	02/20/24 22:04	02/23/24 23:41	RGT	Mt. Juliet, TN

MW-02_02072024 L1705226-02 Non-Potable Water

Collected by: Travis B
Collected date/time: 02/07/24 10:52
Received date/time: 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2225879	1	02/14/24 10:06	02/19/24 12:53	SNR	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 03:21	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2235352	1	02/28/24 09:59	03/13/24 21:40	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2225879	1	02/14/24 10:06	02/23/24 23:41	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2229223	1	02/20/24 22:04	02/23/24 23:41	RGT	Mt. Juliet, TN

MW-03_02062024 L1705226-03 Non-Potable Water

Collected by: Travis B
Collected date/time: 02/06/24 14:24
Received date/time: 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2225879	1	02/14/24 10:06	02/19/24 12:53	SNR	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 04:21	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2235352	1	02/28/24 09:59	03/13/24 21:40	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2225879	1	02/14/24 10:06	02/23/24 23:41	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2229223	1	02/20/24 22:04	02/23/24 23:41	RGT	Mt. Juliet, TN

MW-65_02072024 L1705226-04 Non-Potable Water

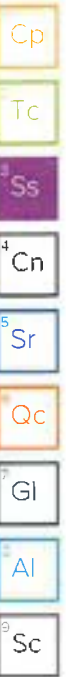
Collected by: Travis B
Collected date/time: 02/07/24 10:54
Received date/time: 02/13/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2225879	1	02/14/24 10:06	02/19/24 16:48	SNR	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2231511	1	02/22/24 15:44	03/02/24 04:21	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2235352	1	02/28/24 09:59	03/13/24 21:40	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2225879	1	02/14/24 10:06	02/23/24 23:41	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2229223	1	02/20/24 22:04	02/23/24 23:41	RGT	Mt. Juliet, TN

RW-01_02082024 L1705226-05 Non-Potable Water

Collected by: Travis B
Collected date/time: 02/18/24 12:39
Received date/time: 02/20/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2232346	1	02/23/24 08:10	02/29/24 12:46	SNR	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2236782	1	03/04/24 12:03	03/14/24 20:42	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2238285	1	03/04/24 19:25	03/13/24 17:03	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2232346	1	02/23/24 08:10	02/29/24 12:46	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2234410	1	02/26/24 19:28	02/28/24 00:23	RGT	Mt. Juliet, TN



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Project Narrative

-05 containers were not included in the first shipment so were re-sampled at a later date.

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc

WG2225879

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

L1705226-01.02.03.04

Method Blank (MB)

(MB) R4035996-1 02/19/24 12:53

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
GROSS ALPHA	0.233	<u>U</u>	0.706	1.00	0.559
GROSS BETA	0.205	<u>U</u>	0.973	1.30	0.685

L1705237-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1705237-01 02/19/24 16:48 • (DUP) R4035996-3 02/19/24 12:53

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
GROSS ALPHA	261	16.4	4.84	2.81	281	16.6	5.01	2.88	7.05	0.819		20	3
GROSS BETA	35.0	5.32	4.60	2.40	40.9	5.48	4.65	2.42	15.4	0.767		20	3

Laboratory Control Sample (LCS)

(LCS) R4035996-2 02/19/24 12:53

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
GROSS ALPHA	15.0	13.8	91.9	80.0-120	
GROSS BETA	40.6	38.8	95.5	80.0-120	

L1704294-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704294-01 02/19/24 12:53 • (MS) R4035996-6 02/20/24 14:28 • (MSD) R4035996-7 02/20/24 14:28

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
GROSS ALPHA	60.0	34.6	105	79.0	117	74.0	1	70.0-130		<u>J3</u>	28.1		20
GROSS BETA	162	12.6	163	163	93.0	92.8	1	70.0-130			0.245		20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2232346

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

L1705226-05

Method Blank (MB)

(MB) R4040450-1 02/29/24 12:46

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
GROSS ALPHA	-0.340	<u>U</u>	0.494	0.836	0.482
GROSS BETA	0.405	<u>U</u>	1.20	1.61	0.844

L1708100-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1708100-01 02/29/24 12:47 • (DUP) R4040450-3 02/29/24 12:46

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
GROSS ALPHA	270	356	487	281	324	292	379	226	18.1	0.117	<u>J</u>	20	3
GROSS BETA	205	423	559	296	339	440	576	304	49.2	0.219	<u>J</u>	20	3

Laboratory Control Sample (LCS)

(LCS) R4040450-2 02/29/24 12:46

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
GROSS ALPHA	15.0	15.5	103	80.0-120	
GROSS BETA	40.6	39.8	98.0	80.0-120	

L1705226-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705226-05 02/29/24 12:46 • (MS) R4040450-6 02/29/24 20:08 • (MSD) R4040450-7 02/29/24 20:08

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
GROSS ALPHA	15.0	22.9	31.0	35.8	54.1	85.8	1	70.0-130	<u>J6</u>		14.3		20
GROSS BETA	40.6	4.18	44.9	45.1	100	101	1	70.0-130			0.533		20

Cp

Tc

Ss

⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2231511

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

L1705226-01,02,03,04

Metnod Blank (MB)

(MB) R4042859-1 03/02/24 02:20

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.209		0.107	0.124	
(T) Barium	103		103		

L1706881-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1706881-06 03/02/24 07:22 • (DUP) R4042859-5 03/02/24 03:21

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	1.10	0.328	0.203		1.67	0.575	0.343		41.2	0.861		20	3
(T) Barium	101				104	104							

Laboratory Control Sample (LCS)

(LCS) R4042859-2 03/02/24 02:20

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.90	118	80.0-120	
(T) Barium			103		

L1705781-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705781-01 03/02/24 04:21 • (MS) R4042859-3 03/02/24 02:20 • (MSD) R4042859-4 03/02/24 02:20

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.877	21.5	22.0	103	106	1	75.0-125			2.58		20
(T) Barium		100			92.0	99.8							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2236782

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

L1705226-05

Method Blank (MB)

(MB) R4046646-1 03/14/24 20:12

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.142	J	0.117	0.170	
(T) Barium	103		103		

Laboratory Control Sample (LCS)

(LCS) R4046646-2 03/14/24 20:12

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.54	111	80.0-120	
(T) Barium			102		

L1706883-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706883-04 03/14/24 21:13 • (MS) R4046646-3 03/14/24 20:12 • (MSD) R4046646-5 03/14/24 20:42

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.630	23.2	20.5	113	99.2	1	75.0-125			12.5		20
(T) Barium		104			102	103							

L1706901-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1706901-06 03/14/24 22:43 • (MS) R4046646-4 03/14/24 20:12 • (MSD) R4046646-6 03/14/24 20:42

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.152	21.5	22.1	107	110	1	75.0-125			2.89		20
(T) Barium		104			103	104							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl

Al

Sc

WG2235352

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

L1705226-01.02.03.04

Method Blank (MB)

(MB) R4047038-1 03/13/24 21:40

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	0.222	J	0.138	0.251	0.133
(T) Barium	117		117		
(T) Yttrium	110		110		

L1705226-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1705226-04 03/13/24 21:40 • (DUP) R4047038-5 03/13/24 21:40

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-228	0.775	0.343	0.617	0.323	0.252	0.369	0.679	0.354	102	1.04	U	20	3
(T) Barium	123				135	135							
(T) Yttrium	107				107	107							

Laboratory Control Sample (LCS)

(LCS) R4047038-2 03/13/24 21:40

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
Radium-228	5.00	4.37	87.4	80.0-120	
(T) Barium			90.9		
(T) Yttrium			92.2		

L1704502-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1704502-06 03/13/24 21:40 • (MS) R4047038-3 03/13/24 21:40 • (MSD) R4047038-4 03/13/24 21:40

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	0.0443	14.9	12.6	89.0	75.1	1	70.0-130			17.0		20
(T) Barium		139			136	89.3							
(T) Yttrium		108			107	90.3							

Cp

Tc

3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

WG2238285

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

L1705226-05

Method Blank (MB)

(MB) R4047078-1 03/13/24 17:03

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	0.497		0.145	0.251	0.132
(T) Barium	124		124		
(T) Yttrium	111		111		

L1707769-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1707769-02 03/13/24 17:03 • (DUP) R4047078-5 03/13/24 17:03

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-228	1.92	0.374	0.625	0.328	1.34	0.390	0.676	0.352	35.9	1.08		20	3
(T) Barium	134				109	109							
(T) Yttrium	100				106	106							

Laboratory Control Sample (LCS)

(LCS) R4047078-2 03/13/24 17:03

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
Radium-228	5.00	5.67	113	80.0-120	
(T) Barium			130		
(T) Yttrium			110		

L1710452-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1710452-01 03/13/24 17:03 • (MS) R4047078-3 03/13/24 17:03 • (MSD) R4047078-4 03/13/24 17:03

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	-0.188	17.5	18.3	104	110	1	70.0-130			4.97		20
(T) Barium		126			124	116							
(T) Yttrium		99.2			119	108							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2229223

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

L1705226-01,02,03,04

Method Blank (MB)

(MB) R4039541-1 02/23/24 23:41

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.0931		0.0376	0.0222	0.0168
URANIUM-235	0.0109	J	0.0158	0.0222	0.0168
URANIUM-238	0.0437		0.0263	0.0222	0.0168
(T) URANIUM-232	90.2		90.2		

L1706355-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1706355-01 02/23/24 23:41 • (DUP) R4039541-5 02/23/24 23:41

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	0.824	0.411	0.240	0.199	0.0795	0.128	0.204	0.168	165	1.73	J	20	3
URANIUM-235	0.0319	0.112	0.240	0.199	0.0697	0.128	0.204	0.168	74.3	0.222	J	20	3
URANIUM-238	0.355	0.274	0.240	0.199	0.212	0.197	0.204	0.168	50.4	0.423		20	3
(T) URANIUM-232	72.7				77.1	77.1							

Laboratory Control Sample (LCS)

(LCS) R4039541-2 02/23/24 23:41

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	5.00	99.4	80.0-120	
URANIUM-238	4.90	5.33	109	80.0-120	
(T) URANIUM-232			85.7		

L1705226-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1705226-01 02/23/24 23:41 • (MS) R4039541-7 02/25/24 16:58 • (MSD) R4039541-6 02/24/24 15:26

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	20.1	6.67	27.7	27.7	105	104	1	75.0-125			0.217		20
URANIUM-238	19.6	3.65	22.3	23.9	95.1	103	1	75.0-125			6.80		20
(T) URANIUM-232		90.2			83.1	84.9							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl

Al

⁹Sc

WG2234410

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

[L1705226-05](#)

Method Blank (MB)

(MB) R4041309-1 02/28/24 00:17

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE %	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.133		0.0614	0.0625	0.0394
URANIUM-235	0.0273	J	0.0270	0.0316	0.0240
URANIUM-238	0.0893		0.0444	0.0316	0.0240
(T) URANIUM-232	71.8		71.8		

L1707865-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1707865-01 02/28/24 00:23 • (DUP) R4041309-5 02/28/24 00:23

Analyte	Original Result pCi/l	Original 2 sigma CE %	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE %	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	0.463	0.297	0.278	0.202	0.194	0.218	0.288	0.213	81.7	0.729	NI	20	3
URANIUM-235	0.00703	0.104	0.244	0.185	0.0734	0.134	0.213	0.176	165	0.391		20	3
URANIUM-238	0.118	0.147	0.194	0.160	0.296	0.250	0.268	0.203	86.1	0.614		20	3
(T) URANIUM-232	90.6				78.5	78.5							

Laboratory Control Sample (LCS)

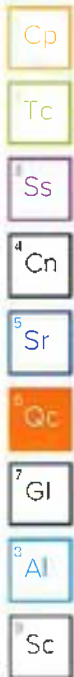
(LCS) R4041309-2 02/28/24 00:23

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	4.86	96.7	80.0-120	
URANIUM-238	4.90	5.07	104	80.0-120	
(T) URANIUM-232			82.6		

L1707290-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1707290-01 02/28/24 00:23 • (MS) R4041309-3 02/28/24 00:23 • (MSD) R4041309-4 02/28/24 00:23

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	20.1	0.509	24.3	21.2	118	103	1	75.0-125			13.4		20
URANIUM-238	19.6	0.441	24.3	20.9	122	104	1	75.0-125			15.2		20
(T) URANIUM-232		89.3			68.4	76.4							



GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁵Qc

⁷Gl

Al

⁹Sc

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ²	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA - ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA - ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable
^{*} Not all certifications held by the laboratory are applicable to the results reported in the attached report.
^{*} Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Cp

Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

Sc

Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weinel				Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeinel@energyfuels.com				Analysis / Containers / Preservation Pres Chk <u>12</u> <u>12</u> <u>12</u> <u>12</u> <u>12</u> <u>12</u> <u>12</u> <u>12</u>				Chain of Custody Page <u> </u> of <u> </u>  PEOPLE ADVANCING SCIENCE MT JULIET, TN 5100 S. Lakewood Rd. Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes an acknowledgment and acceptance of the Pace Terms and Conditions found at: www.paceanalytical.com/chainofcustody SOG # <u>1705226</u> A027																																																																																																																																																					
Project Description: Pinyon Plain Mine GW Sampling		City/State Collected:		Please Circle: PT MT CT ET		* Diss Metals (FF) 250ml HDPE HNO3 ALK, FLUORIDE, PH, SULF 250ml HDPE NoPres GROSS A/B, U-ISO, ADI 1L-HDPE-Add-HNO3 NO2NO3 250ml HDPE-H2SO4 RA-226-903.0 1L-HDPE-Add-HNO3 RA-228 1L-HDPE-Add-HNO3 TDS 1L-HDPE NoPres		Account: ENEFUELCO Template: T217177 Prelimin: P1054318 PM: 732 - Donna Eldson PS: Shipped Via: FedEX Ground Remarks Sample # (25 only)																																																																																																																																																									
Client Project #		Lab Project # ENEFUELCO-PINYONMINE		P.O. #																																																																																																																																																													
Site/Facility ID #		Quote #		Date Results Needed																																																																																																																																																													
Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		No. of Cntrs																																																																																																																																																															
Collected by (print): Travis Boam		Collected by (signature):		Immediately Packed on ice N <u> </u> Y <u>X</u>		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Sample ID</th> <th>Comp/Grab</th> <th>Matrix *</th> <th>Depth</th> <th>Date</th> <th>Time</th> <th>Cntrs</th> <th>* Diss Metals (FF) 250ml HDPE HNO3</th> <th>ALK, FLUORIDE, PH, SULF 250ml HDPE NoPres</th> <th>GROSS A/B, U-ISO, ADI 1L-HDPE-Add-HNO3</th> <th>NO2NO3 250ml HDPE-H2SO4</th> <th>RA-226-903.0 1L-HDPE-Add-HNO3</th> <th>RA-228 1L-HDPE-Add-HNO3</th> <th>TDS 1L-HDPE NoPres</th> </tr> <tr> <td>MW-01_02072024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>2/7/24</td> <td>1054</td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>MW-02_02072024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>2/7/24</td> <td>1452</td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>MW-03_02062024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>2/6/24</td> <td>1424</td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>MW-65_02072024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>2/7/24</td> <td>1054</td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>RW-01_02082024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>2/8/24</td> <td>0938</td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td>X</td> </tr> <tr> <td>MW-01_02072024</td> <td>Grab</td> <td>NPW</td> <td>-</td> <td>2/7/24</td> <td>1054</td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>MW-02_02072024</td> <td>Grab</td> <td>NPW</td> <td>-</td> <td>2/7/24</td> <td>1452</td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>MW-03_02062024</td> <td>Grab</td> <td>NPW</td> <td>-</td> <td>2/6/24</td> <td>1424</td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>MW-65_02072024</td> <td>Grab</td> <td>NPW</td> <td>-</td> <td>2/7/24</td> <td>1054</td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> </tr> <tr> <td>RW-01_02082024</td> <td>Grab</td> <td>NPW</td> <td>-</td> <td>2/8/24</td> <td>0938</td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> </tr> </table>		Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	* Diss Metals (FF) 250ml HDPE HNO3	ALK, FLUORIDE, PH, SULF 250ml HDPE NoPres	GROSS A/B, U-ISO, ADI 1L-HDPE-Add-HNO3	NO2NO3 250ml HDPE-H2SO4	RA-226-903.0 1L-HDPE-Add-HNO3	RA-228 1L-HDPE-Add-HNO3	TDS 1L-HDPE NoPres	MW-01_02072024	Grab	GW	-	2/7/24	1054	4	X	X		X			X	MW-02_02072024	Grab	GW	-	2/7/24	1452	4	X	X		X			X	MW-03_02062024	Grab	GW	-	2/6/24	1424	4	X	X		X			X	MW-65_02072024	Grab	GW	-	2/7/24	1054	4	X	X		X			X	RW-01_02082024	Grab	GW	-	2/8/24	0938	4	X	X		X			X	MW-01_02072024	Grab	NPW	-	2/7/24	1054	3			X		X	X		MW-02_02072024	Grab	NPW	-	2/7/24	1452	3			X		X	X		MW-03_02062024	Grab	NPW	-	2/6/24	1424	3			X		X	X		MW-65_02072024	Grab	NPW	-	2/7/24	1054	3			X		X	X		RW-01_02082024	Grab	NPW	-	2/8/24	0938	3			X		X	X	
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RW-01_02082024	Grab	NPW	-	2/8/24	0938	3			X		X	X																																																																																																																																																					
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Wastewater DW - Drinking Water OT - Other		Remarks: Field filtered dissolved metals		pH <u> </u> Temp <u> </u> Flow <u> </u> Other <u> </u>		Sample Receipt Checklist COC Seal Present/Intact: <u> </u> ☒ <u> </u> COC signed/Initialed: <u> </u> ☒ <u> </u> Bottles arrive intact: <u> </u> ☒ <u> </u> Correct bottle used: <u> </u> ☒ <u> </u> Sufficient volume sent: <u> </u> ☒ <u> </u> VOA Zero Headspace: <u> </u> ☒ <u> </u> Preservation Correct/Checked: <u> </u> ☒ <u> </u> HAO Screen <0.5 m/hr: <u> </u> ☒ <u> </u>																																																																																																																																																											
Samples returned via: ☐ UPS ☐ FedEx ☐ Courier		Tracking #																																																																																																																																																															
Relinquished by: (Signature) Travis Boam		Date: 2/8/24 Time: 1700		Received by: (Signature)		Trip Blank Received: Yes ☒ No ☐ <u> </u>		PH-10BDH5021 TRC-27K-27 CR6-20221V PH-10BDH5021 TRC-27K-27 CR6-20221V																																																																																																																																																									
Relinquished by: (Signature)		Date: Time:		Received by: (Signature)		Temp: °C Bottles Received: 18																																																																																																																																																											
Relinquished by: (Signature)		Date: Time:		Received for lab by: (Signature)		Date: 2/13/24 Time: 11:00																																																																																																																																																											
Relinquished by: (Signature)		Date: Time:		Received for lab by: (Signature)		Date: Time:		Hold: Condition: NCF / OK																																																																																																																																																									

Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weiner				Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeiner@energyfuels.com				Pres Chk				Analysis / Container / Preservation				Chain of Custody Page ____ of ____	
Project Description: Pinyon Plain Mine GW Sampling				City/State Collected:		Please Circle: PT MY CT ET		*Diss Metals (FF) 250mlHDPE HNO3 ALK, FLUORIDE, PH, SULF 250mlHDPE NoPres GROSS A/B, U-I-SO, ADJ 1L-HDPE-Add-HNO3 NO2NO3 250mlHDPE-H2SO4 RA-226-903.0 1L-HDPE-Add-HNO3 RA-228 1L-HDPE-Add-HNO3 TDS 1L-HDPE NoPres				 MT JULIET, TN 12065 Union Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacecontrols.com/tech/pace-standards-terms.pdf					
Phone:		Client Project #		Lab Project # ENEFUELCO-PINYONMINE		SOG # <u>L1705226</u> Tat <u>A034</u>											
Collected by (print): <u>Russell Murren</u>		Site/Facility ID #		P.O. #		Acctnum: ENEFUELCO Template: T217177 Prelogin: P1054318 PM: 732 - Donna Eidson PB:											
Collected by (signature): 		Rush? (Lab MUST Be Notified) Same Day _____ Five Day _____ Next Day _____ 5 Day (Rad Only) _____ Two Day _____ 10 Day (Rad Only) _____ Three Day _____		Quote #		Date Results Needed											
Immediately Packed on Ice N _____ Y <u>X</u>		No. of Cntrs															
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time												
MW-01		GW				4	X	X		X		X					
MW-02		GW				4	X	X		X		X					
MW-03		GW				4	X	X		X		X					
MW-65		GW				4	X	X		X		X					
RW-01-02182024		GW	-	2/18/24	1239	4	X	X		X		X					
MW-01		NPW				3			X	X	X						
MW-02		NPW				3			X	X	X						
MW-03		NPW				3			X	X	X						
MW-65		NPW				3			X	X	X						
RW-01-02182024	Grab	NPW	-	2/18/24	1239	3			X	X	X			-05			
* Matrix: SS - Soil A/R - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other _____																	
Remarks: For SGD #s L1705225 and L1705226, re-sample of RW-01 Field filtered dissolved metals																	
pH _____ Temp _____ Flow _____ Other _____																	
Samples returned via: UPS _____ FedEx _____ Courier _____																	
Tracking #																	
Relinquished by: (Signature) 		Date: 2/18/24	Time: 1400	Received by: (Signature) 			Trip Blank Received: Yes (No) <u>Yes</u> HCL / Meq/L TSS			Temp <u>DP 18</u> Bottles Received: <u>7</u>			If preservation required by LogIn: Date/Time				
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)			Date:			Time:			Hold:				
Relinquished by: (Signature)		Date:	Time:	Received by: (Signature)			Date:			Time:			Condition: NCF / <u>OK</u>				

2/14-NCF-L1705225/L1705226 ENEFUELCO

R5

Time estimate: oh

Time spent: oh

Members



Hailey Robertson (responsible)



Donna Eidson

Due on 17 February 2024 8:00 AM for target Done

- ☒ Login Clarification needed
- ☐ Chain of custody is incomplete
- ☐ Please specify Metals requested
- ☐ Please specify TCLP requested
- ☐ Received additional samples not listed on COC
- ☐ Sample IDs on containers do not match IDs on COC
- ☐ Client did not "X" analysis
- ☐ Chain of Custody is missing
- ☐ If no COC: Received by: _____
- ☐ If no COC: Date/Time: _____
- ☐ If no COC: Temp./Cont.Rec./pH: _____
- ☐ If no COC: Carrier: _____
- ☐ If no COC: Tracking #: _____
- ☐ Client informed by call
- ☐ Client informed by Email
- ☐ Client informed by Voicemail
- ☐ Date/Time: _____
- ☐ PM initials: _____
- ☐ Client Contact: _____

Comments

Hailey Robertson

14 February 2024 9:16 AM

Missing ID: RW-01_02082024

Donna Eidson

14 February 2024 3:28 PM

RW-01 will be resampled and received next week. Please keep in original L#.

Hailey Robertson

20 February 2024 12:47 PM

Samples received and added.



ANALYTICAL REPORT

August 01, 2024

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Energy Fuels Resources

Sample Delivery Group: L1752547
Samples Received: 04/23/2024
Project Number:
Description: PINYON PLAIN SUMP DISCHARGE

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

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ACCOUNT:
Energy Fuels Resources

PROJECT:

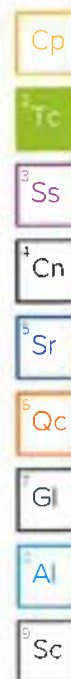
SDG:
L1752547

DATE/TIME:
08/01/24 13:58

PAGE:
1 of 19

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SAMPLE SUMMARY

Collected by: **Matt Germanson**
 Collected date/time: **04/21/24 14:50**
 Received date/time: **04/23/24 09:46**

SUMP-1470_04212024 L1752547-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2325389	1	07/18/24 09:46	07/18/24 17:33	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2325514	1	07/18/24 12:28	07/18/24 12:28	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2325593	10	07/18/24 15:52	07/18/24 15:52	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2325256	1	07/18/24 10:10	07/18/24 10:10	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2325487	1	07/18/24 21:30	07/18/24 21:30	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2332688	1	07/30/24 16:00	07/30/24 16:00	DLH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2332688	5	07/30/24 16:13	07/30/24 16:13	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2321310	1	07/11/24 14:00	07/11/24 17:13	NOL	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2321057	1	07/12/24 00:13	07/12/24 08:47	JTM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2321057	1	07/12/24 00:13	07/12/24 16:22	JTM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2327761	1	07/23/24 10:51	07/31/24 01:28	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2327761	1	07/23/24 10:51	07/31/24 19:42	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2327761	20	07/23/24 10:51	07/31/24 12:58	JPD	Mt. Juliet, TN

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Cp

Tc

³Ss

⁴Cn

⁵Sr

Qc

⁷Gl

²Al

⁹Sc

WG2325389

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1752547-01](#)

Method Blank (MB)

(MB) R4096549-1 07/18/24 17:33

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1757360-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1757360-02 07/18/24 17:33 • (DUP) R4096549-3 07/18/24 17:33

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	218	221	1	1.37		10

L1757360-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1757360-07 07/18/24 17:33 • (DUP) R4096549-4 07/18/24 17:33

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	245	255	1	4.00		10

Laboratory Control Sample (LCS)

(LCS) R4096549-2 07/18/24 17:33

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8610	97.8	85.0-115	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2325514

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

[L1752547-01](#)

Method Blank (MB)

(MB) R4095558-2 07/18/24 12:07

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1757360-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1757360-02 07/18/24 12:16 • (DUP) R4095558-3 07/18/24 12:22

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1757661-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1757661-02 07/18/24 14:52 • (DUP) R4095558-4 07/18/24 14:58

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2325593

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

[L1752547-01](#)

Method Blank (MB)

(MB) R4095561-1 07/18/24 15:19

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1757772-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1757772-02 07/18/24 15:24 • (DUP) R4095561-3 07/18/24 15:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	U	U	1	0.000		20

L1757772-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1757772-15 07/18/24 15:43 • (DUP) R4095561-6 07/18/24 15:44

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	3.83	3.83	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4095561-2 07/18/24 15:20

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Nitrate-Nitrite	2.50	2.64	106	90.0-110	

L1757772-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

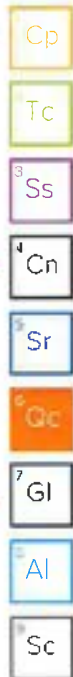
(OS) L1757772-02 07/18/24 15:24 • (MS) R4095561-4 07/18/24 15:26 • (MSD) R4095561-5 07/18/24 15:28

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	2.50	U	2.50	2.58	100	103	1	90.0-110			3.15	20

L1757772-15 Original Sample (OS) • Matrix Spike (MS)

(OS) L1757772-15 07/18/24 15:43 • (MS) R4095561-7 07/18/24 15:45

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	2.50	3.83	5.91	83.2	1	90.0-110	E J6



WG2325256

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

[L1752547-01](#)

L1757535-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1757535-01 07/18/24 10:10 • (DUP) R4095330-2 07/18/24 10:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	9.42	9.42	1	0.000		1

Sample Narrative:

OS: 9.42 at 21.4C

DUP: 9.42 at 21.3C

Laboratory Control Sample (LCS)

(LCS) R4095330-1 07/18/24 10:10

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10.02 at 21.3C

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2325487

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

[L1752547-01](#)

Method Blank (MB)

(MB) R4095686-1 07/18/24 21:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Specific Conductance	umhos/cm		umhos/cm	umhos/cm
	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1752547-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1752547-01 07/18/24 21:30 • (DUP) R4095686-3 07/18/24 21:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	umhos/cm	umhos/cm		%		%
	1510	1500	1	0.532		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1757766-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1757766-02 07/18/24 21:30 • (DUP) R4095686-4 07/18/24 21:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Specific Conductance	umhos/cm	umhos/cm		%		%
	1150	1150	1	0.0872		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4095686-2 07/18/24 21:30

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Specific Conductance	umhos/cm	umhos/cm	%	%	
	733	729	99.5	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2332688

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1752547-01

Method Blank (MB)

(MB) R4100701-1 07/30/24 14:55

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4100701-4 07/30/24 15:34 • (LCSD) R4100701-5 07/30/24 15:47

Analyte	Spike Amount mg/l	LCS Result mg/l	LCSD Result mg/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Fluoride	8.00	8.31	8.44	104	106	80.0-120			1.55	15
Sulfate	40.0	39.2	39.9	98.1	99.7	80.0-120			1.66	15

Cp

Tc

³Ss⁴Cn⁶Sr⁸Qc⁷Gl³Al⁹Sc

WG2321310

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L1752547-01

Method Blank (MB)

(MB) R4092761-1 07/11/24 17:08

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R4092761-2 07/11/24 17:11

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Mercury	0.00300	0.00291	96.8	80.0-120	

L1752547-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1752547-01 07/11/24 17:13 • (MS) R4092761-4 07/11/24 17:18 • (MSD) R4092761-5 07/11/24 17:21

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	0.000125	0.00325	0.00321	104	103	1	75.0-125			1.21	20

Cp

Tc

³Ss⁴Cn⁵Sr

Qc

⁷Gl⁸Al⁹Sc

WG2321057

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1752547-01](#)

Method Blank (MB)

(MB) R4093105-1 07/12/24 08:37

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00440	0.0100
Barium	U		0.000736	0.00500
Beryllium	U		0.000330	0.00200
Cadmium	U		0.000479	0.00200
Calcium	0.231	J	0.0793	1.00
Chromium	U		0.00140	0.0100
Copper	U		0.00368	0.0100
Iron	U		0.0180	0.100
Lead	U		0.00299	0.00600
Magnesium	0.208	J	0.0853	1.00
Manganese	U		0.000934	0.0100
Nickel	U		0.00161	0.0100
Potassium	0.611	J	0.261	2.00
Selenium	U		0.00735	0.0100
Sodium	2.26	J	0.504	3.00

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4093105-2 07/12/24 08:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	1.00	0.994	99.4	80.0-120	
Barium	1.00	1.05	105	80.0-120	
Beryllium	1.00	1.02	102	80.0-120	
Cadmium	1.00	0.996	99.6	80.0-120	
Calcium	10.0	10.2	102	80.0-120	
Chromium	1.00	1.04	104	80.0-120	
Copper	1.00	1.03	103	80.0-120	
Iron	10.0	10.1	101	80.0-120	
Lead	1.00	0.979	97.9	80.0-120	
Magnesium	10.0	10.5	105	80.0-120	
Manganese	1.00	1.05	105	80.0-120	
Nickel	1.00	0.953	95.3	80.0-120	
Potassium	10.0	10.4	104	80.0-120	
Selenium	1.00	0.924	92.4	80.0-120	
Sodium	10.0	11.8	118	80.0-120	

WG2321057

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1752547-01](#)

L1755488-01 Original Sample (OS) + Matrix Spike (MS) + Matrix Spike Duplicate (MSD)

(OS) L1755488-01 07/12/24 08:41 • (MS) R4093105-4 07/12/24 08:44 • (MSD) R4093105-5 07/12/24 08:46

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	0.00588	1.03	0.989	102	98.3	1	75.0-125			3.75	20
Barium	1.00	0.0992	1.14	1.11	104	101	1	75.0-125			2.56	20
Beryllium	1.00	U	1.03	0.995	103	99.5	1	75.0-125			3.27	20
Cadmium	1.00	U	1.00	0.973	100	97.3	1	75.0-125			2.99	20
Calcium	10.0	18.2	28.0	27.9	98.4	96.6	1	75.0-125			0.650	20
Chromium	1.00	0.00197	1.04	1.01	104	101	1	75.0-125			3.02	20
Copper	1.00	U	1.04	0.998	104	99.8	1	75.0-125			4.09	20
Iron	10.0	1.05	11.4	11.7	104	107	1	75.0-125			2.74	20
Lead	1.00	U	1.00	0.967	100	96.7	1	75.0-125			3.77	20
Magnesium	10.0	5.18	15.7	15.4	105	102	1	75.0-125			1.99	20
Manganese	1.00	0.142	1.18	1.14	103	100	1	75.0-125			2.85	20
Nickel	1.00	0.00640	0.986	0.956	98.0	94.9	1	75.0-125			3.14	20
Potassium	10.0	10.4	20.3	20.0	98.9	95.8	1	75.0-125			1.54	20
Selenium	1.00	U	0.985	0.951	98.5	95.1	1	75.0-125			3.46	20
Sodium	10.0	47.4	56.4	55.9	89.7	85.0	1	75.0-125			0.839	20

Cp

Tc

³Ss⁴Cn⁶Sr⁸Qc⁷Gl⁴Al⁹Sc

WG2327761

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

[L1752547-01](#)

Method Blank (MB)

(MB) R4100645-1 07/31/24 01:09

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony	U		0.00103	0.00400
Thallium	U		0.000121	0.00200
Uranium	U		0.0000789	0.00100
Vanadium	U		0.000664	0.00500
Zinc	U		0.00302	0.0250

Laboratory Control Sample (LCS)

(LCS) R4100645-2 07/31/24 01:12

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	0.0500	0.0556	111	80.0-120	
Thallium	0.0500	0.0495	99.0	80.0-120	
Uranium	0.0500	0.0525	105	80.0-120	
Vanadium	0.0500	0.0496	99.1	80.0-120	
Zinc	0.0500	0.0501	100	80.0-120	

L1757360-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1757360-12 07/31/24 01:15 • (MS) R4100645-4 07/31/24 01:22 • (MSD) R4100645-5 07/31/24 01:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	U	0.0562	0.0573	112	115	1	75.0-125			1.83	20
Thallium	0.0500	U	0.0516	0.0496	103	99.2	1	75.0-125			3.94	20
Uranium	0.0500		0.0555	0.0529	110	105	1	75.0-125			4.70	20
Vanadium	0.0500	U	0.0528	0.0523	106	105	1	75.0-125			0.933	20
Zinc	0.0500	0.00637	0.0547	0.0575	96.6	102	1	75.0-125			5.08	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-05-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ¹	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Energy Fuels Resources

225 Union Blvd
Suite 600
Lakewood, CO 80228

Report to:
Kathy Weinel

Project Description:
PINYON PLAIN SUMP DISCHARGE

Phone:

Client Project #

Lab Project #

ENEFUELCO-PINYONMINE

Collected by (print):

William Cole

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☐ Three Day

Quote #

Date Results Needed

No.
of
Ents

Immediately
Packed on Ice: N ☐ Y ☐

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Sump-1470_04212024

Grab

GW

4/21/2024

1450

4

PreWTP

GW

4

PostWTP Tank

GW

4

PostWTP

GW

4

GW

4

GW

4

GW

4

Sump-1470_04212024

Grab

NPW

4/21/2024

1450

3

PreWTP

NPW

3

PostWTP Tank

NPW

3

PostWTP

NPW

3

* Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks:

Samples returned via

UPS

FedEx

Carrier

Tracking #

Relinquished by (Signature)

William Cole

Date:

4/21/2024

Time:

1500

Received by (Signature)

Trip Blank Received: Yes/No

NO/YES

Relinquished by (Signature)

Jim C. [Signature]

Date:

7/2/2024

Time:

0740

Received by (Signature)

Temp: °C

Bottles Received: 7

Relinquished by (Signature)

Received by (Signature)

Date:

4/23/24

Time:

0940

If preservation required by Login: Date/Time

Hold:

Condition:

NCF / OK

Billing Information:

Accounts Payable

225 Union Blvd

Suite 600

Lakewood, CO 80228

Email To: KWeinel@energyfuels.com

Pres
Chk

Analysis / Container / Preservation

Chain of Custody Page ___ of ___

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

12205 Highway 64, Mount Juliet, TN 37122
Submitting a sample via this chain of custody
constitutes acknowledgment and acceptance of the
Pace Terms and Conditions located at:
<https://www.paceinc.com/chain-of-custody-terms>

SDG: **LTB2547**

Table #

Account: **ENEFUELCO**

Template: **T215492**

Prelogin: **P1054332**

PM: **732 - Donna Eldon**

PB:

Shipped Via: **FedEX Ground**

Remarks

Sample # (Lab only)

-0

Sample Receipt Checklist

COC Seal Present/Intact: ☒ Y ☐ N
COC Signed/Accurate: ☒ Y ☐ N
Bottles arrive intact: ☒ Y ☐ N
Correct bottles used: ☒ Y ☐ N
Sufficient volume sent: ☒ Y ☐ N
If Applicable
VOA Zero Headpace: ☒ Y ☐ N
Preservation Correct/Checked: ☒ Y ☐ N
RAD Screen <0.5 mR/hr: ☒ Y ☐ N



ANALYTICAL REPORT

July 30, 2024

Energy Fuels Resources

Sample Delivery Group: L1752548
Samples Received: 04/23/2024
Project Number:
Description: PINYON PLAIN SUMP DISCHARGE

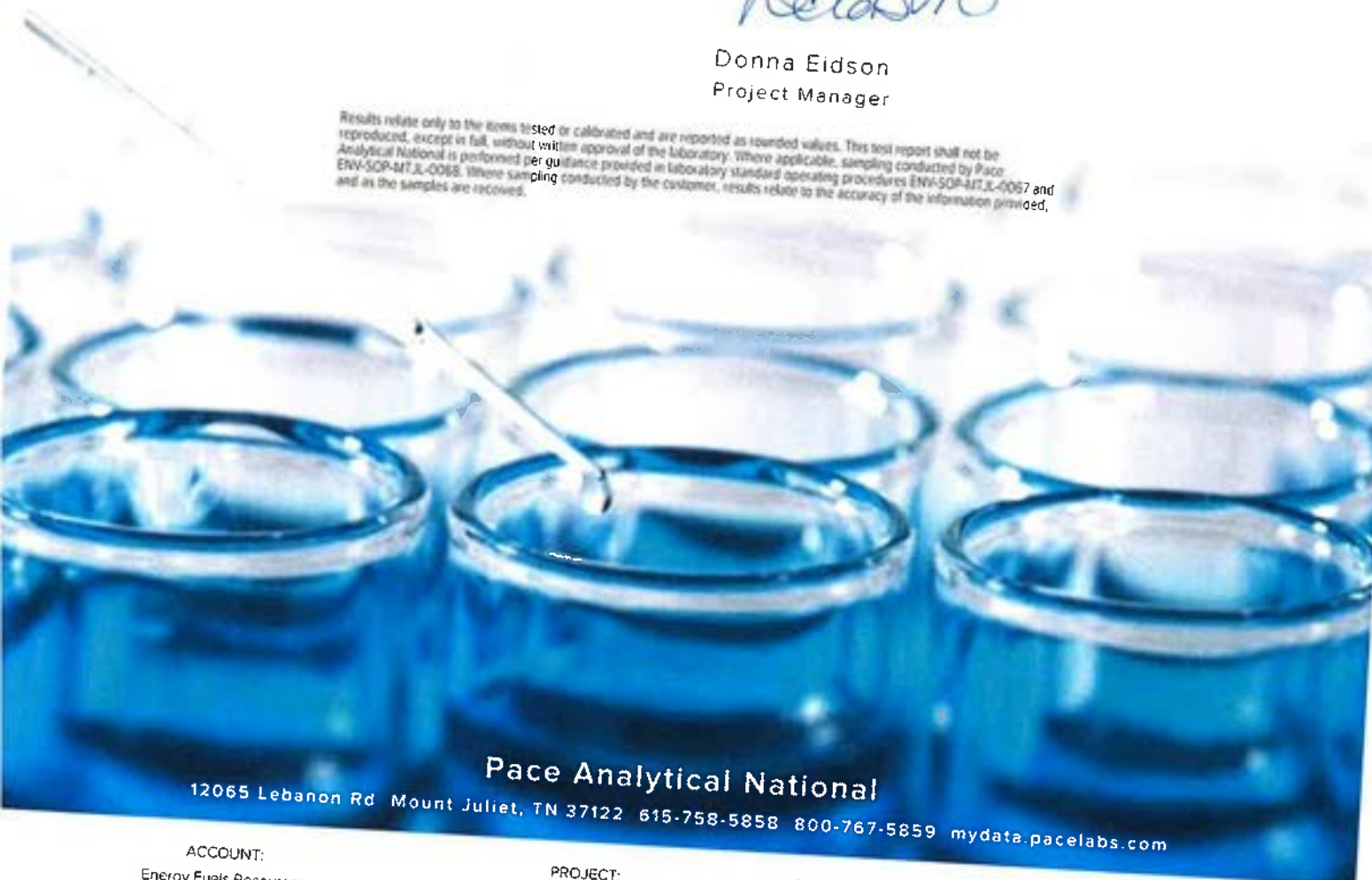
Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTL-0067 and ENV-SOP-MTL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

- Cp
- Tc
- Ss
- Cn
- Sr
- Qc
- Gl
- Al
- Sc



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

ACCOUNT:
Energy Fuels Resources

PROJECT:

SDG:
L1752548

DATE/TIME:
07/30/24 11:27

PAGE:
1 of 12

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Gl: Glossary of Terms	10	⁷ Gl
Al: Accreditations & Locations	11	⁸ Al
Sc: Sample Chain of Custody	12	⁹ Sc

SAMPLE SUMMARY

SUMP-1470_04212024 L1752548-01 Non-Potable Water							Collected by	Collected date/time	Received date/time	
							Matt Germanson	04/21/24 14:50	04/23/24 09:46	³⁹ Cp
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location				
Radiochemistry by Method 900	WG2317801	1	07/05/24 09:30	07/10/24 14:21	SNR	Mt. Juliet, TN				⁴³ Tc
Radiochemistry by Method 903.0/9315	WG2317774	1	07/05/24 12:48	07/25/24 16:19	ASN	Mt. Juliet, TN				⁴⁴ Ss
Radiochemistry by Method 904/9320	WG2317917	1	07/05/24 18:12	07/23/24 19:22	DDD	Mt. Juliet, TN				⁴⁸ Cn
Radiochemistry by Method Calculation	WG2317801	1	07/05/24 09:30	07/10/24 23:52	RGT	Mt. Juliet, TN				⁸⁶ Sr
Radiochemistry by Method D3972 U-02	WG2315459	1	07/09/24 16:00	07/10/24 23:52	RGT	Mt. Juliet, TN				⁹⁰ Qc
										⁷¹ Gl
										⁴¹ Al
										⁴⁵ Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁵Qc

⁷Gl

⁸Al

⁹Sc

WG2317801

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

L1752548-01

Method Blank (MB)

(MB) R4092109-1 07/10/24 14:21

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
GROSS ALPHA	-0.270	<u>U</u>	0.397	0.704	0.291

L1753253-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1753253-01 07/10/24 14:21 • (DUP) R4092109-4 07/10/24 14:21

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
GROSS ALPHA	0.902	1.95	2.84	1.16	1.11	1.53	2.14	0.861	20.7	0.0841	<u>U</u>	20	3

Laboratory Control Sample (LCS)

(LCS) R4092109-2 07/10/24 14:21

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
GROSS ALPHA	15.0	15.5	103	80.0-120	

L1753540-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1753540-01 07/10/24 14:21 • (MS) R4092109-3 07/10/24 14:21

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
GROSS ALPHA	15.0	3.31	13.9	70.8	1	70.0-130	

Cp

Tc

³Ss⁴Cn⁵Sr⁸Qc⁷Gl³Al⁹Sc

WG2317774

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

L1752548-01

Method Blank (MB)

(MB) R4092700-1 07/10/24 13:10

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.368		0.188	0.196	0.0674
(T) Barium	97.9		97.9		

L1748515-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1748515-01 07/10/24 14:10 • (DUP) R4092700-5 07/10/24 14:10

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.262	0.343	0.586	0.228	0.737	0.579	0.785	0.270	95.0	0.705	J	20	3
(T) Barium	92.1				96.8	96.8							

Laboratory Control Sample (LCS)

(LCS) R4092700-2 07/10/24 13:10

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.63	113	75.0-125	
(T) Barium			104		

L1753253-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1753253-01 07/10/24 17:11 • (MS) R4092700-3 07/10/24 13:10 • (MSD) R4092700-4 07/10/24 13:10

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	1.02	20.3	19.5	96.5	92.4	1	75.0-125			4.12		20
(T) Barium		98.2			100	101							

ACCOUNT:
Energy Fuels Resources

PROJECT:

SDG:
L1752548DATE/TIME:
07/30/24 11:27PAGE:
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Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2317917

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

L1752548-01

Method Blank (MB)

(MB) R4092316-1 07/10/24 17:01

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.206	<u>U</u>	0.234	0.451	0.236
(f) Barium	101		101		
(f) Yttrium	71.4		71.4		

L1753253-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1753253-01 07/10/24 17:01 • (DUP) R4092316-4 07/10/24 17:01

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	-0.162	0.285	0.554	0.293	0.217	0.337	0.639	0.339	200	0.860	<u>U</u>	20	3
(f) Barium	94.2				88.9	88.9							
(f) Yttrium	99.4				85.7	85.7							

Laboratory Control Sample (LCS)

(LCS) R4092316-2 07/10/24 17:01

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.72	114	80.0-120	
(f) Barium			88.4		
(f) Yttrium			83.0		

L1751170-29 Original Sample (OS) • Matrix Spike (MS)

(OS) L1751170-29 07/10/24 17:01 • (MS) R4092316-3 07/10/24 17:01

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Radium-228	16.7	50.5	69.4	113	1	70.0-130	
(f) Barium		93.4		54.1			
(f) Yttrium		86.0		78.1			

Cp

Tc

Ss

Cn

Sr

Qc

GI

A

Sc

WG2315459

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

L1752548-01

Method Blank (MB)

(MB) R4093343-3 07/11/24 22:38

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE +/-	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.0827		0.0420	0.0375	0.0259
URANIUM-235	0.00933		0.0173	0.0277	0.0209
URANIUM-238	0.0260		0.0236	0.0277	0.0209
(T) URANIUM-232	75.9		75.9		

L1750499-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750499-01 07/08/24 23:25 • (DUP) R4093343-2 07/08/24 23:25

Analyte	Original Result pCi/l	Original 2 sigma CE +/-	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE +/-	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	0.386	0.359	0.371	0.306	0.545	0.517	0.644	0.450	34.2	0.253		20	3
URANIUM-235	0.0543	0.173	0.371	0.306	0.0411	0.198	0.450	0.353	27.6	0.0502		20	3
URANIUM-238	0.305	0.323	0.371	0.306	0.273	0.366	0.530	0.393	11.3	0.0672		20	3
(T) URANIUM-232	47.1				45.8	45.8							

Laboratory Control Sample (LCS)

(LCS) R4093343-1 07/08/24 23:25

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	5.52	110	80.0-120	
URANIUM-238	4.90	5.23	107	80.0-120	
(T) URANIUM-232			58.0		

L1748503-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1748503-01 07/12/24 15:29 • (MS) R4093343-4 07/12/24 15:29 • (MSD) R4093343-5 07/12/24 15:29

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	20.1	1.36	20.7	21.5	96.1	100	1	75.0-125			4.03		20
URANIUM-238	19.6	0.839	20.6	23.1	101	114	1	75.0-125			11.8		20
(T) URANIUM-232		82.8			85.0	82.4							

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
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Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

C2	Tracer recovery limits have been exceeded; values are outside lower control limits.
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCREDITATIONS & LOCATIONS

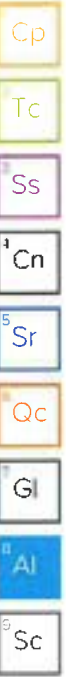
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-05-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	A20612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NE LAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LA80152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228				Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeinel@energyfuels.com				Analysis / Container / Preservation Pres Chk ALK, FL, PH, COND, SULF 125ml HDPE-NoPres ASICP, BAICP, BEICP, CA 250ml HDPE-HNO3 GROSS ALPHA, ADJ 500ml HDPE-Add HNO3 NO2NO3 250ml HDPE-H2SO4 RA-226-903.0, U-150 1L-HDPE-Add HNO3 RA-228 1L-HDPE-Add HNO3 RA-228 1L-HDPE-Add HNO3 TDS 1L-HDPE NoPres				Chain of Custody Page ____ of ____  MT JULIET, TN 12005 Lebanon Rd. Mt. Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at http://info.pacelabs.com/hub/pas-standards-terms.pdf			
Report to: Kathy Weinel				Project Description: PINYON PLAIN SUMP DISCHARGE				City/State Collected:				Please Circle: PT MT CT ET			
Phone:				Client Project #				Lab Project # ENEFUELCO-PINYONMINE				Collected by (print): William Cole			
Collected by (signature):				Site/Facility ID #				P.O. #				Quote #			
Immediately Packed on Ice N ☐ Y ☐				Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day				Date Results Needed				No of Cntrs			
Sample ID				Comp/Grab		Matrix *		Depth		Date		Time		Cntrs	
Sump-1470_04212024				Grab		GW		-		4/21/2024		1450		4	
PreWTP						GW								4	
PostWTP Tank						GW								4	
PostWTP						GW								4	
						GW								4	
						GW								4	
Sump-1470_04212024				Grab		NPW		-		4/21/2024		1450		3	
PreWTP						NPW								3	
PostWTP Tank						NPW								3	
PostWTP						NPW								3	

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - Wastewater
 DW - Drinking Water
 OT - Other

Remarks:

Samples returned via: ☐ UPS ☐ FedEx ☐ Courier

Tracking #

Relinquished by: (Signature) William Cole		Date: 4/21/2024		Time: 1500		Received by: (Signature)		Trip Blank Received: Yes ☐ No ☒		Temp: °C		Bottles Received: 7		If preservation required by Login: Date/Time	
Relinquished by: (Signature) [Signature]		Date: 7/2/2024		Time: 0740		Received by: (Signature)		Temp: °C		Bottles Received: 7		If preservation required by Login: Date/Time		Condition: NCF / OK	

Sample Receipt Checklist

COC Seal Present/Intact: ☒ Y ☐ N

COC Signed/Accurate: ☒ Y ☐ N

Bottles arrive intact: ☒ Y ☐ N

Correct bottles used: ☒ Y ☐ N

Sufficient volume sent: ☒ Y ☐ N

If Applicable

VOA Zero Headpace: ☒ Y ☐ N

Preservation Correct/Checked: ☒ Y ☐ N

RAD Screen <0.5 mR/hr: ☒ Y ☐ N



ANALYTICAL REPORT

July 15, 2024

Energy Fuels Resources

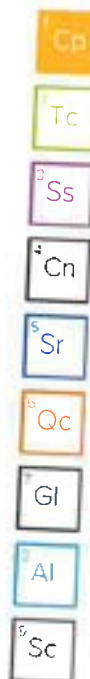
Sample Delivery Group: L1750291
Samples Received: 06/25/2024
Project Number:
Description: Pinyon Plain Mine GW Sampling

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

ACCOUNT:
Energy Fuels Resources

PROJECT:

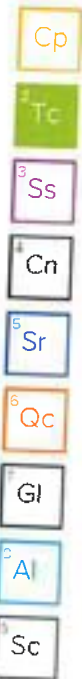
SDG:
L1750291

DATE/TIME:
07/15/24 09:27

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SAMPLE SUMMARY

RW-01_06242024 L1750291-01 GW				Collected by WILLIAM COLE	Collected date/time 06/24/24 13:36	Received date/time 06/25/24 09:09	
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location	
Gravimetric Analysis by Method 2540 C-2011	WG2313097	1	06/27/24 08:10	06/27/24 14:40	OLS	Mt. Juliet, TN	Cp
Wet Chemistry by Method 2320 B-2011	WG2312301	1	06/26/24 10:45	06/26/24 10:45	BJM	Mt. Juliet, TN	Tc
Wet Chemistry by Method 353.2	WG2312488	1	06/28/24 16:15	06/28/24 16:15	JAS	Mt. Juliet, TN	9 Ss
Wet Chemistry by Method 9040C	WG2312391	1	06/26/24 15:15	06/26/24 15:15	KRB	Mt. Juliet, TN	4 Cn
Wet Chemistry by Method 9050A	WG2312021	1	06/25/24 17:53	06/25/24 17:53	KA	Mt. Juliet, TN	5 Sr
Wet Chemistry by Method 9056A	WG2321900	1	07/13/24 04:54	07/13/24 04:54	DLH	Mt. Juliet, TN	6 Qc
Mercury by Method 7470A	WG2312065	1	06/26/24 13:19	06/26/24 21:23	NDL	Mt. Juliet, TN	7 Gl
Metals (ICP) by Method 6010B	WG2314183	1	07/05/24 15:35	07/07/24 09:12	ZSA	Mt. Juliet, TN	8 Al
Metals (ICPMS) by Method 6020	WG2315452	1	07/10/24 07:45	07/13/24 14:04	JPD	Mt. Juliet, TN	9 Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Cp

Tc

³Ss

⁴Cn

⁵Sr

Qc

⁷Gl

⁶Al

⁹Sc

WG2313097

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

L1750291-01

Method Blank (MB)

(MB) R4088217-1 06/27/24 14:40

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1749762-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1749762-07 06/27/24 14:40 • (DUP) R4088217-3 06/27/24 14:40

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Dissolved Solids	1040	1110	1	6.50		10

L1750291-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750291-01 06/27/24 14:40 • (DUP) R4088217-4 06/27/24 14:40

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Dissolved Solids	230	241	1	4.67		10

Laboratory Control Sample (LCS)

(LCS) R4088217-2 06/27/24 14:40

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8390	95.3	85.0-115	

Cp

Tc

Ss

Cn

Sr

Qc

GI

Al

Sc

WG2312301

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

L1750291-01

Method Blank (MB)

(MB) R4086644-2 06/26/24 09:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Alkalinity, Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1750047-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1750047-03 06/26/24 09:29 • (DUP) R4086644-3 06/26/24 09:33

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity, Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1750151-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1750151-06 06/26/24 11:17 • (DUP) R4086644-4 06/26/24 11:21

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity, Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

WG2312488

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L1750291-01

Method Blank (MB)

(MB) R4088045-1 06/28/24 16:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1750311-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750311-01 06/28/24 16:16 • (DUP) R4088045-5 06/28/24 16:17

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Nitrate-Nitrite	1.95	1.95	1	0.000		20

L1750574-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1750574-05 06/28/24 16:35 • (DUP) R4088045-7 06/28/24 16:37

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Nitrate-Nitrite	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4088045-2 06/28/24 16:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Nitrate-Nitrite	2.50	2.53	101	90.0-110	

L1750075-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1750075-01 06/28/24 16:03 • (MS) R4088045-3 06/28/24 16:05 • (MSD) R4088045-4 06/28/24 16:06

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	1.37	4.03	3.88	106	100	1	90.0-110			3.79	20

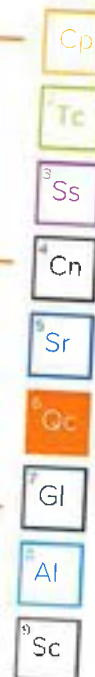
L1750574-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1750574-02 06/28/24 16:26 • (MS) R4088045-6 06/28/24 16:31

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate-Nitrite	2.50	U	2.31	92.4	1	90.0-110	

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WG2312391

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

L1750291-01

L1749742-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1749742-01 06/26/24 15:15 • (DUP) R4086885-2 06/26/24 15:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	su 8.65	su 8.64	1	% 0.116		% 1

Sample Narrative:

OS: 8.65 at 21C

DUP: 8.64 at 21.1C

L1750418-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750418-01 06/26/24 15:15 • (DUP) R4086885-3 06/26/24 15:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	su 6.84	su 6.84	1	% 0.000		% 1

Sample Narrative:

OS: 6.84 at 22.4C

DUP: 6.84 at 22.4C

Laboratory Control Sample (LCS)

(LCS) R4086885-1 06/26/24 15:15

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
pH	su 10.0	su 10.0	% 100	% 99.0-101	

Sample Narrative:

LCS: 10 at 22.2C

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2312021

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

L1750291-01

Method Blank (MB)

(MB) R4086368-1 06/25/24 17:53

Analyte	MB Result umhos/cm	MB Qualifier	MB MDL umhos/cm	MB RDL umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1750254-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750254-01 06/25/24 17:53 • (DUP) R4086368-3 06/25/24 17:53

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Specific Conductance	40300	40700	1	0.988		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1750291-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750291-01 06/25/24 17:53 • (DUP) R4086368-4 06/25/24 17:53

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Specific Conductance	463	459	1	0.868		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4086368-2 06/25/24 17:53

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	733	715	97.5	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

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WG2321900

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1750291-01

Method Blank (MB)

(MB) R4093552-1 07/13/24 02:58

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0640	0.150
Sulfate	U		0.594	5.00

L1750075-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750075-01 07/13/24 03:37 • (DUP) R4093552-3 07/13/24 03:50

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.0945	0.0954	1	0.948	J	15
Sulfate	7.23	7.15	1	1.09		15

L1750469-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1750469-20 07/13/24 09:11 • (DUP) R4093552-6 07/13/24 09:23

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.140	0.150	1	7.16		15

Laboratory Control Sample (LCS)

(LCS) R4093552-2 07/13/24 03:11

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	8.31	104	80.0-120	
Sulfate	40.0	39.7	99.2	80.0-120	

L1750075-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1750075-01 07/13/24 03:37 • (MS) R4093552-4 07/13/24 04:03 • (MSD) R4093552-5 07/13/24 04:16

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	8.00	0.0945	8.29	8.29	102	102	1	80.0-120			0.0169	15
Sulfate	40.0	7.23	45.7	45.7	96.3	96.3	1	80.0-120			0.0216	15

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2321900

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1750291-01](#)

L1750469-20 Original Sample (OS) • Matrix Spike (MS)

(OS) L1750469-20 07/13/24 09:11 • (MS) R4093552-7 07/13/24 09:36

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Fluoride	8.00	0.140	8.17	100	1	80.0-120	

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2312065

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L1750291-01

Method Blank (MB)

(MB) R4087012-1 06/26/24 21:17

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Mercury, Dissolved	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R4087012-2 06/26/24 21:20

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Mercury, Dissolved	0.00300	0.00295	98.3	80.0-120	

L1750291-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1750291-01 06/26/24 21:23 • (MS) R4087012-4 06/26/24 21:28 • (MSD) R4087012-5 06/26/24 21:30

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Mercury, Dissolved	0.00300	U	0.00304	0.00275	101	91.8	1	75.0-125			9.82	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2314183

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L1750291-01

Method Blank (MB)

(MB) R4090824-1 07/07/24 09:20

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic, Dissolved	U		0.00440	0.0100
Barium, Dissolved	U		0.000736	0.00500
Beryllium, Dissolved	U		0.000330	0.00200
Cadmium, Dissolved	U		0.000479	0.00200
Calcium, Dissolved	U		0.0793	1.00
Chromium, Dissolved	U		0.00140	0.0100
Lead, Dissolved	U		0.00299	0.00600
Magnesium, Dissolved	U		0.0853	1.00
Nickel, Dissolved	U		0.00161	0.0100
Potassium, Dissolved	U		0.261	2.00
Selenium, Dissolved	U		0.00735	0.0100
Sodium, Dissolved	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4090824-2 07/07/24 09:22

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic, Dissolved	1.00	1.02	102	80.0-120	
Barium, Dissolved	1.00	1.01	101	80.0-120	
Beryllium, Dissolved	1.00	1.10	110	80.0-120	
Cadmium, Dissolved	1.00	1.00	100	80.0-120	
Calcium, Dissolved	10.0	10.3	103	80.0-120	
Chromium, Dissolved	1.00	0.974	97.4	80.0-120	
Lead, Dissolved	1.00	0.996	99.6	80.0-120	
Magnesium, Dissolved	10.0	10.2	102	80.0-120	
Nickel, Dissolved	1.00	1.03	103	80.0-120	
Potassium, Dissolved	10.0	10.7	107	80.0-120	
Selenium, Dissolved	1.00	1.01	101	80.0-120	
Sodium, Dissolved	10.0	10.3	103	80.0-120	

L1750197-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1750197-01 07/07/24 09:24 • (MS) R4090824-4 07/07/24 09:27 • (MSD) R4090824-5 07/07/24 09:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic, Dissolved	1.00	U	1.02	1.02	102	102	1	75.0-125			0.0692	20
Barium, Dissolved	1.00	0.0726	1.05	1.05	98.0	98.4	1	75.0-125			0.401	20
Beryllium, Dissolved	1.00	U	1.09	1.09	109	109	1	75.0-125			0.243	20

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Cp

Tc

Ss

Cn

Sr

Qc

GI

Al

Sc

WG2314183

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L1750291-01

L1750197-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1750197-01 07/07/24 09:24 • (MS) R4090824-4 07/07/24 09:27 • (MSD) R4090824-5 07/07/24 09:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cadmium, Dissolved	1.00	U	0.996	0.996	99.6	99.6	1	75.0-125			0.00493	20
Calcium, Dissolved	10.0	101	110	110	83.2	85.5	1	75.0-125			0.206	20
Chromium, Dissolved	1.00	U	0.976	0.948	97.6	94.8	1	75.0-125			2.91	20
Lead, Dissolved	1.00	U	0.993	0.985	99.3	98.5	1	75.0-125			0.837	20
Magnesium, Dissolved	10.0	19.1	28.8	28.7	97.3	96.4	1	75.0-125			0.330	20
Nickel, Dissolved	1.00	0.00727	1.02	1.04	101	104	1	75.0-125			2.16	20
Potassium, Dissolved	10.0	2.60	13.2	13.2	106	106	1	75.0-125			0.336	20
Selenium, Dissolved	1.00	0.00825	1.03	1.03	103	102	1	75.0-125			0.529	20
Sodium, Dissolved	10.0	8.73	19.3	19.3	106	106	1	75.0-125			0.160	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:
Energy Fuels Resources

PROJECT:

SDG:
L1750291DATE/TIME:
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WG2315452

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

[L1750291-01](#)

Method Blank (MB)

(MB) R4093427-1 07/13/24 11:42

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony, Dissolved	U		0.00103	0.00400
Thallium, Dissolved	U		0.000121	0.00200
Uranium, Dissolved	U		0.0000789	0.00100

Laboratory Control Sample (LCS)

(LCS) R4093427-2 07/13/24 11:46

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony, Dissolved	0.0500	0.0504	101	80.0-120	
Thallium, Dissolved	0.0500	0.0482	96.4	80.0-120	
Uranium, Dissolved	0.0500	0.0493	98.7	80.0-120	

L1748254-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1748254-07 07/13/24 11:49 • (MS) R4093427-4 07/13/24 11:56 • (MSD) R4093427-5 07/13/24 11:59

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony, Dissolved	0.0500	U	0.0529	0.0545	106	109	1	75.0-125			2.93	20
Thallium, Dissolved	0.0500	U	0.0475	0.0495	95.1	99.0	1	75.0-125			4.06	20
Uranium, Dissolved	0.0500	0.00863	0.0582	0.0619	99.2	106	1	75.0-125			6.04	20

Cp

Tc

3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.
Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
T8	Sample(s) received past/too close to holding time expiration.

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ²	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 4}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	A130792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA - ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA - ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable
^{*} Not all certifications held by the laboratory are applicable to the results reported in the attached report.
^{*} Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address:

Energy Fuels Resources

225 Union Blvd
Suite 600
Lakewood, CO 80228

Report to:
Kathy Weinel

Project Description:
Pinyon Plain Mine GW Sampling

Phone:

Client Project #

City/State
Collected:Please Circle:
PT MT CT ET

Lab Project #
ENEFUELCO-PINYONMINE

Collected by (print):

Site/Facility ID #

P.O. #

Collected by (signature):

William Cole

Rush? (Lab MUST Be Notified)

☐ Same Day ☐ Five Day
☐ Next Day ☐ 5 Day (Rad Only)
☐ Two Day ☐ 10 Day (Rad Only)
☐ Three Day

Quote #

Date Results Needed

Immediately

Packed on Ice N Y

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No
of
Cntrs

RW-01 06242024

RW-01 06242024

06/24/2024

1:36 PM

06/24/2024

1:36 PM

Diss Metals (FF) 250ml-HDPE-HNO3

ALK/FLUORIDE/PI/SULF 250ml-HDPE NoPres

GROSS A/B, U-ISO, ADJ 1L-HDPE-Add-HNO3

NO2NO3 250ml-HDPE-H2SO4

RA-225-G03.0 1L-HDPE-Add-HNO3

RA-228 1L-HDPE-Add-HNO3

TDS 1L-HDPE NoPres

Analysis / Container / Preservation

Chain of Custody Page 1 of 1

Pace
LABORATORY

MT JULIET, TN

12065 E. Highway 40, Suite 100, MT Juliet, TN 37087
 615-471-1122
 Pace Lab is a member of the American Society for Testing and Materials (ASTM) and is a member of the International Organization of Standardization (ISO).
 Pace Lab is an ISO 9001:2015 certified laboratory.
 All test results are subject to laboratory review.

SDG # L1750291

Table #

11111

Accession: ENFUELCO

Template: T217177

Prelogin: P1054318

PM 732 - Donna Eldson

PB:

Shipped Via: FedEx Ground

Remarks

Sample # (lab only)

-01

* Matrix:

SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - Wastewater
 DW - Drinking Water
 OT - Other

Remarks:

Fluid Filled, Dissolved Metals

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:

☐ UPS ☐ FedEx ☐ Courier

Tracking #

Relinquished by: (Signature)

William Cole

Date:

06/24/2024

Time:

4:30pm

Received by: (Signature)

Trip Blank Received: Yes / No

HCL / Meq/L

TBR

Temp: 60.7 °C

Bottles Received:

0.5403 = 0.1

7

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: 60.7 °C

Bottles Received:

0.5403 = 0.1

7

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

6/26/24

Time:

0900

Hold:

Condition:

NCF / *0*

Sample Receipt Checklist

CDC Seal Present/Intact: *Y* ☒ *N* ☐
 CDC Signed/Accurate: *Y* ☒ *N* ☐
 Bottles arrive intact: *Y* ☒ *N* ☐
 Correct bottles used: *Y* ☒ *N* ☐
 Sufficient volume sent: *Y* ☒ *N* ☐
 If Applicable:
 VOA Zero Headspace: *Y* ☒ *N* ☐
 Preservation Correct/Checked: *Y* ☒ *N* ☐
 RAD Screen <0.3 nR/hr: *Y* ☒ *N* ☐

If preservation required by Login: Date/Time

July 29, 2024

Energy Fuels Resources

Sample Delivery Group: L1750295
Samples Received: 06/25/2024
Project Number:
Description: Pinyon Plain Mine GW Sampling

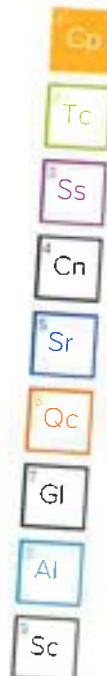
Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:



Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.



Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

ACCOUNT:
Energy Fuels Resources

PROJECT:

SDG:
L1750295

DATE/TIME:
07/29/24 16:10

PAGE:
1 of 12

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SAMPLE SUMMARY

RW-01_06242024 L1750295-01 Non-Potable Water

Collected by

Collected date/time
06/24/24 13:36

Received date/time
06/25/24 09:00

Method

Radiochemistry by Method 900
Radiochemistry by Method 903.0/9315
Radiochemistry by Method 904/9320
Radiochemistry by Method Calculation
Radiochemistry by Method D3972 U-02

Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
WG2312794	1	06/27/24 11:08	07/10/24 14:21	ALG	Mt. Juliet, TN
WG2317774	1	07/05/24 12:48	07/10/24 15:11	ASN	Mt. Juliet, TN
WG2313415	1	06/28/24 19:23	07/16/24 17:59	DDD	Mt. Juliet, TN
WG2312794	1	06/27/24 11:08	07/24/24 22:24	RGT	Mt. Juliet, TN
WG2327890	1	07/23/24 13:53	07/24/24 22:24	RGT	Mt. Juliet, TN

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCOUNT:
Energy Fuels Resources

PROJECT:

SDG:
L1750295

DATE/TIME:
07/29/24 16:10

PAGE:
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CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Cp

Tc

Ss

Cn

Sr

Qc

GI

AI

Sc

WG2312794

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

L1750295-01

Method Blank (MB)

(MB) R4092238-1 07/10/24 14:21

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
GROSS ALPHA	-0.236	<u>U</u>	0.385	0.664	0.278
GROSS BETA	-0.423	<u>U</u>	0.976	1.36	0.647

L1750527-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750527-01 07/10/24 17:59 • (DUP) R4092238-4 07/10/24 14:21

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
GROSS ALPHA	0.738	0.519	0.640	0.266	-0.0849	0.382	0.622	0.259	200	1.28	<u>U</u>	20	3
GROSS BETA	0.282	1.01	1.35	0.640	0.146	0.969	1.32	0.624	63.5	0.0972	<u>U</u>	20	3

Laboratory Control Sample (LCS)

(LCS) R4092238-2 07/10/24 14:21

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
GROSS ALPHA	15.0	14.6	97.6	80.0-120	
GROSS BETA	40.2	41.0	102	80.0-120	

L1750276-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1750276-01 07/10/24 14:21 • (MS) R4092238-3 07/10/24 14:21

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
GROSS ALPHA	15.8	0.761	13.5	80.3	1	70.0-130	
GROSS BETA	42.3	2.32	44.8	101	1	70.0-130	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2317774

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

L1750295-01

Method Blank (MB)

(MB) R4092700-1 07/10/24 13:10

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	0.368		0.188	0.196	0.0674
(T) Barium	97.9		97.9		

L1748515-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1748515-01 07/10/24 14:10 • (DUP) R4092700-5 07/10/24 14:10

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-226	0.262	0.343	0.586	0.228	0.737	0.579	0.785	0.270	95.0	0.705	<u>J</u>	20	3
(T) Barium	92.1				96.8	96.8							

Laboratory Control Sample (LCS)

(LCS) R4092700-2 07/10/24 13:10

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
Radium-226	5.00	5.63	113	75.0-125	
(T) Barium			104		

L1753253-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1753253-01 07/10/24 17:11 • (MS) R4092700-3 07/10/24 13:10 • (MSD) R4092700-4 07/10/24 13:10

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	102	20.3	19.5	96.5	92.4	1	75.0-125			4.12		20
(T) Barium		98.2			100	101							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2313415

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

L1750295-01

Method Blank (MB)

(MB) R4098628-1 07/16/24 17:59

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	-0.282	<u>U</u>	0.151	0.314	0.166
(T) Barium	132		132		
(T) Yttrium	81.0		81.0		

L1750527-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1750527-01 07/16/24 17:59 • (DUP) R4098628-3 07/16/24 17:59

Analyte	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-228	-0.576	0.293	0.608	0.320	0.0865	0.275	0.546	0.288	200	1.65	<u>U</u>	20	3
(T) Barium	130				115	115							
(T) Yttrium	92.9				104	104							

Laboratory Control Sample (LCS)

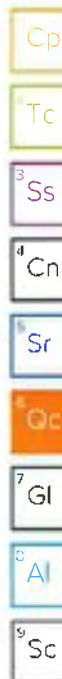
(LCS) R4098628-2 07/16/24 17:59

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	5.16	103	80.0-120	
(T) Barium			110		
(T) Yttrium			98.0		

L1750694-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1750694-04 07/25/24 13:54 • (MS) R4098628-4 07/25/24 13:54 • (MSD) R4098628-5 07/25/24 13:54

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-228	16.7	6.85	20.5	23.9	81.7	102	1	70.0-130			15.3		20
(T) Barium		76.0			72.3	83.6							
(T) Yttrium		100			105	86.5							



WG2327890

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

[L1750295-01](#)

Method Blank (MB)

(MB) R4098626-1 07/24/24 22:24

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.106		0.0424	0.0287	0.0205
URANIUM-235	0.0486		0.0294	0.0239	0.0181
URANIUM-238	0.0980		0.0408	0.0287	0.0205
(T) URANIUM-232	95.7		95.7		

L1756891-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1756891-07 07/24/24 22:24 • (DUP) R4098626-5 07/24/24 22:24

Analyte	Original Result uCi/l	Original 2 sigma CE + / -	Original MDA uCi/l	Original Lc uCi/l	DUP Result uCi/l	DUP 2 sigma CE + / -	DUP MDA uCi/l	DUP Lc uCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	0.000000588	0.000000205	0.000000106	0.0000000802	0.000000641	0.000000235	0.000000127	0.0000000963	8.60	0.170		20	3
URANIUM-235	0.000000141	0.000000109	0.000000106	0.0000000802	0.000000216	0.000000144	0.000000127	0.0000000963	41.7	0.412		20	3
URANIUM-238	0.000000516	0.000000193	0.000000106	0.0000000802	0.000000598	0.000000227	0.000000127	0.0000000963	14.7	0.275		20	3
(T) URANIUM-232	91.6				87.1	87.1							

Laboratory Control Sample (LCS)

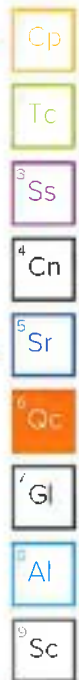
(LCS) R4098626-2 07/24/24 22:24

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	5.17	103	80.0-120	
URANIUM-238	4.90	5.16	105	80.0-120	
(T) URANIUM-232			82.0		

L1750527-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1750527-01 07/24/24 22:24 • (MS) R4098626-3 07/24/24 22:24 • (MSD) R4098626-4 07/24/24 22:24

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	20.1	0.302	20.6	22.5	101	110	1	75.0-125			8.83		20
URANIUM-238	19.6	0.302	21.7	20.6	109	104	1	75.0-125			5.06		20
(T) URANIUM-232		96.1			72.9	82.1							



GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

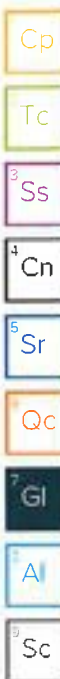
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

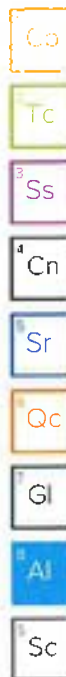
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ³	1461.02	ODD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

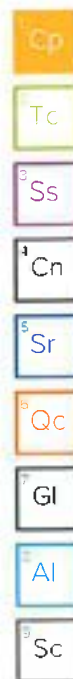
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.





ANALYTICAL REPORT

September 18, 2024



Energy Fuels Resources

Sample Delivery Group: L1766740
Samples Received: 08/13/2024
Project Number:
Description: PINYON PLAIN SUMP DISCHARGE

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

ACCOUNT:
Energy Fuels Resources

PROJECT:

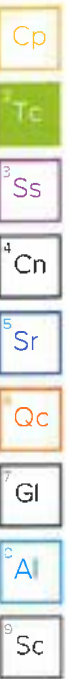
SDG:
L1766740

DATE/TIME:
09/18/24 15:10

PAGE:
1 of 25

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SAMPLE SUMMARY

SUMP-1470_08112024 L1766740-01 GW

				Collected by RM	Collected date/time 08/17/24 08:51	Received date/time 08/13/24 08:00		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location		
Gravimetric Analysis by Method 2540 C-2011	WG2343060	1	08/14/24 16:39	08/15/24 16:51	DLS	Mt. Juliet, TN		
Wet Chemistry by Method 2320 B-2011	WG2342487	1	08/14/24 14:15	08/14/24 14:15	KA	Mt. Juliet, TN		
Wet Chemistry by Method 353.2	WG2342087	10	08/13/24 21:49	08/13/24 21:49	RTW	Mt. Juliet, TN		
Wet Chemistry by Method 9040C	WG2342258	1	08/14/24 11:22	08/14/24 11:22	KA	Mt. Juliet, TN		
Wet Chemistry by Method 9050A	WG2341634	1	08/13/24 22:15	08/13/24 22:15	KRB	Mt. Juliet, TN		
Wet Chemistry by Method 9056A	WG2344417	1	08/23/24 13:32	08/23/24 13:32	DLH	Mt. Juliet, TN		
Wet Chemistry by Method 9056A	WG2344417	10	08/23/24 14:23	08/23/24 14:23	DLH	Mt. Juliet, TN		
Mercury by Method 7470A	WG2342730	1	08/15/24 08:51	08/15/24 21:45	SDG	Mt. Juliet, TN		
Metals (ICP) by Method 6010B	WG2357388	1	09/17/24 18:22	09/17/24 21:10	MAP	Mt. Juliet, TN		
Metals (ICPMS) by Method 6020	WG2357415	1	09/17/24 17:51	09/18/24 05:20	JPD	Mt. Juliet, TN		
Metals (ICPMS) by Method 6020	WG2357415	200	09/17/24 17:51	09/18/24 11:08	JPD	Mt. Juliet, TN		

SUMP-65_08112024 L1766740-02 GW

				Collected by RM	Collected date/time 08/17/24 08:51	Received date/time 08/13/24 08:00		
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location		
Gravimetric Analysis by Method 2540 C-2011	WG2343060	1	08/14/24 16:39	08/15/24 16:51	DLS	Mt. Juliet, TN		
Wet Chemistry by Method 2320 B-2011	WG2342487	1	08/14/24 14:20	08/14/24 14:20	KA	Mt. Juliet, TN		
Wet Chemistry by Method 353.2	WG2342087	10	08/13/24 21:50	08/13/24 21:50	RTW	Mt. Juliet, TN		
Wet Chemistry by Method 9040C	WG2342258	1	08/14/24 11:22	08/14/24 11:22	KA	Mt. Juliet, TN		
Wet Chemistry by Method 9050A	WG2341634	1	08/13/24 22:15	08/13/24 22:15	KRB	Mt. Juliet, TN		
Wet Chemistry by Method 9056A	WG2344417	1	08/23/24 14:49	08/23/24 14:49	DLH	Mt. Juliet, TN		
Wet Chemistry by Method 9056A	WG2344417	10	08/23/24 15:27	08/23/24 15:27	DLH	Mt. Juliet, TN		
Mercury by Method 7470A	WG2342730	1	08/15/24 08:51	08/15/24 21:55	SDG	Mt. Juliet, TN		
Metals (ICP) by Method 6010B	WG2357400	1	09/16/24 21:37	09/17/24 09:09	DJS	Mt. Juliet, TN		
Metals (ICPMS) by Method 6020	WG2357415	1	09/17/24 17:51	09/18/24 05:23	JPD	Mt. Juliet, TN		
Metals (ICPMS) by Method 6020	WG2357415	200	09/17/24 17:51	09/18/24 11:11	JPD	Mt. Juliet, TN		

Cp

Tc

Ss

Cn

Sr

Qc

GI

Al

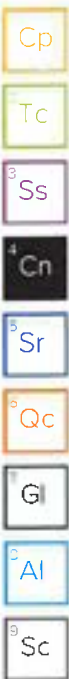
Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager



WG2343060

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1766740-01.02](#)

Method Blank (MB)

(MB) R4108236-1 08/15/24 16:51

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1766175-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1766175-04 08/15/24 16:51 • (DUP) R4108236-3 08/15/24 16:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	601	540	1	10.7	<u>J3</u>	10

Sample Narrative:

OS: Duplicate Analysis performed due to GC failure. Results confirm; reporting in hold data

L1767235-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1767235-02 08/15/24 16:51 • (DUP) R4108236-4 08/15/24 16:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	ND	ND	1	0.000		10

Laboratory Control Sample (LCS)

(LCS) R4108236-2 08/15/24 16:51

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8620	98.0	85.0-115	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2342487

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

[L1766740-01.02](#)

Method Blank (MB)

(MB) R4106872-2 08/14/24 12:14

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK; Endpoint pH 4.5

Method Blank (MB)

(MB) R4106872-3 08/14/24 12:22

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK; Endpoint pH 4.5

L1765059-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1765059-02 08/14/24 12:33 • (DUP) R4106872-4 08/14/24 12:36

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1767060-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1767060-01 08/14/24 14:45 • (DUP) R4106872-5 08/14/24 14:51

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	19.9	20.0	1	0.524		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

WG2342087

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

[L1766740-01.02](#)

Method Blank (MB)

(MB) R4106360-1 08/13/24 21:16

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1766440-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1766440-01 08/13/24 21:19 • (DUP) R4106360-3 08/13/24 21:20

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	1.59	1.59	1	0.000		20

L1766683-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1766683-07 08/13/24 21:31 • (DUP) R4106360-7 08/13/24 21:33

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	U	U	1	0.000		20

L1766683-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1766683-08 08/13/24 21:34 • (DUP) R4106360-8 08/13/24 21:35

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	3.87	3.86	1	0.259		20

Laboratory Control Sample (LCS)

(LCS) R4106360-2 08/13/24 21:17

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Nitrate-Nitrite	2.50	2.75	110	90.0-110	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl³Al⁹Sc

WG2342087

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

[L1766740-01.02](#)

L1766440-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1766440-01 08/13/24 21:19 • (MS) R4106360-4 08/13/24 21:21

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Nitrate-Nitrite	2.50	1.59	4.13	102	1	90.0-110	

L1766683-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1766683-05 08/13/24 21:22 • (MS) R4106360-5 08/13/24 21:24 • (MSD) R4106360-6 08/13/24 21:25

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD %	RPD Limits %
Nitrate-Nitrite	2.50	1.51	3.94	4.10	97.2	104	1	90.0-110			3.98	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2342258

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

[L1766740-01.02](#)

L1766740-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1766740-01 08/14/24 11:22 • (DUP) R4106580-2 08/14/24 11:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	7.84	7.86	1	0.255		1

Sample Narrative:

OS: 7.84 at 20.8C

DUP: 7.86 at 21C

L1766883-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1766883-02 08/14/24 11:22 • (DUP) R4106580-3 08/14/24 11:22

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
pH	7.25	7.24	1	0.138		1

Sample Narrative:

OS: 7.25 at 21.3C

DUP: 7.24 at 21.5C

Laboratory Control Sample (LCS)

(LCS) R4106580-1 08/14/24 11:22

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
pH	10.0	10.0	100	99.0-101	

Sample Narrative:

LCS: 10.01 at 21.2C

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2341634

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

[L1766740-01.02](#)

Method Blank (MB)

(MB) R4106378-1 08/13/24 22:15

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1766024-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1766024-01 08/13/24 22:15 • (DUP) R4106378-3 08/13/24 22:15

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	49.1	48.9	1	0.408		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1766740-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1766740-02 08/13/24 22:15 • (DUP) R4106378-4 08/13/24 22:15

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	1350	1350	1	0.444		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4106378-2 08/13/24 22:15

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	733	748	102	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

Ss

Cn

Sr

Qc

GI

Al

Sc

WG2344417

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1766740-01.02

Method Blank (MB)

(MB) R4111865-1 08/23/24 13:07

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1766740-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1766740-01 08/23/24 13:32 • (DUP) R4111865-3 08/23/24 13:45

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.365	0.617	1	51.3	P1	15

L1766740-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1766740-01 08/23/24 14:23 • (DUP) R4111865-6 08/23/24 14:36

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	404	391	10	3.30		15

L1766740-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1766740-02 08/23/24 14:49 • (DUP) R4111865-7 08/23/24 15:02

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.374	0.696	1	60.3	P1	15

L1766740-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1766740-02 08/23/24 15:27 • (DUP) R4111865-9 08/23/24 15:40

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Sulfate	394	374	10	5.25		15

Cp

Tc

Ss

Cn

Sr

Qc

GI

Al

Sc

WG2344417

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1766740-01,02](#)

Laboratory Control Sample (LCS)

(LCS) R411865-2 08/23/24 13:19

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	7.76	97.1	80.0-120	
Sulfate	40.0	37.3	93.1	80.0-120	

L1766740-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1766740-01 08/23/24 13:32 • (MS) R411865-4 08/23/24 13:58 • (MSD) R411865-5 08/23/24 14:11

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	8.00	0.365	8.65	8.41	104	101	1	80.0-120			2.81	15

L1766740-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1766740-02 08/23/24 14:49 • (MS) R411865-8 08/23/24 15:15

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>
Analyte	mg/l	mg/l	mg/l	%		%	
Fluoride	8.00	0.374	9.02	108	1	80.0-120	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2342730

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L1766740-01.02

Method Blank (MB)

(MB) R4107607-1 08/15/24 21:40

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R4107607-2 08/15/24 21:43

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Mercury	0.00300	0.00281	93.7	80.0-120	

L1766740-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1766740-01 08/15/24 21:45 • (MS) R4107607-4 08/15/24 21:50 • (MSD) R4107607-5 08/15/24 21:53

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	U	0.00341	0.00341	114	114	1	75.0-125			0.187	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2357388

Metals (ICP) by Method 60108

QUALITY CONTROL SUMMARY

L1766740-01

Method Blank (MB)

(MB) R4121003-1 09/17/24 20:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00440	0.0100
Barium	U		0.000736	0.00500
Beryllium	U		0.000330	0.00200
Cadmium	U		0.000479	0.00200
Calcium	U		0.0793	1.00
Chromium	U		0.00140	0.0100
Copper	U		0.00368	0.0100
Iron	U		0.0180	0.100
Lead	U		0.00299	0.00600
Magnesium	U		0.0853	1.00
Manganese	U		0.000934	0.0100
Nickel	0.00228	J	0.00161	0.0100
Potassium	U		0.261	2.00
Selenium	U		0.00735	0.0100
Sodium	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4121003-2 09/17/24 21:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	1.00	0.928	92.8	80.0-120	
Barium	1.00	1.00	100	80.0-120	
Beryllium	1.00	0.972	97.2	80.0-120	
Cadmium	1.00	0.976	97.6	80.0-120	
Calcium	10.0	9.74	97.4	80.0-120	
Chromium	1.00	0.978	97.8	80.0-120	
Copper	1.00	1.02	102	80.0-120	
Iron	10.0	9.58	95.8	80.0-120	
Lead	1.00	0.930	93.0	80.0-120	
Magnesium	10.0	9.53	95.3	80.0-120	
Manganese	1.00	0.992	99.2	80.0-120	
Nickel	1.00	0.975	97.5	80.0-120	
Potassium	10.0	9.55	95.5	80.0-120	
Selenium	1.00	0.972	97.2	80.0-120	
Sodium	10.0	9.71	97.1	80.0-120	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2357388

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L1766740-01

L1773512-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773512-04 09/17/24 21:03 • (MS) R4121003-4 09/17/24 21:06 • (MSD) R4121003-5 09/17/24 21:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	U	0.922	0.923	92.2	92.3	1	75.0-125			0.0712	20
Barium	1.00	U	0.987	0.988	98.7	98.8	1	75.0-125			0.122	20
Beryllium	1.00	U	0.947	0.951	94.7	95.1	1	75.0-125			0.343	20
Cadmium	1.00	U	0.966	0.964	96.6	96.4	1	75.0-125			0.120	20
Calcium	10.0	U	9.45	9.52	94.5	95.2	1	75.0-125			0.780	20
Chromium	1.00	U	0.978	0.975	97.8	97.5	1	75.0-125			0.370	20
Copper	1.00	U	1.00	1.00	100	100	1	75.0-125			0.0279	20
Iron	10.0	U	9.49	9.47	94.9	94.7	1	75.0-125			0.204	20
Lead	1.00	U	0.916	0.919	91.6	91.9	1	75.0-125			0.336	20
Magnesium	10.0	U	9.28	9.37	92.8	93.7	1	75.0-125			0.984	20
Manganese	1.00	U	0.985	0.985	98.5	98.5	1	75.0-125			0.0306	20
Nickel	1.00	0.00275	0.955	0.964	95.3	96.1	1	75.0-125			0.837	20
Potassium	10.0	U	9.31	9.35	93.1	93.5	1	75.0-125			0.427	20
Selenium	1.00	U	0.961	0.961	96.1	96.1	1	75.0-125			0.0241	20
Sodium	10.0	U	9.53	9.55	95.3	95.5	1	75.0-125			0.274	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2357400

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1766740-02](#)

Method Blank (MB)

(MB) R4120720-1 09/17/24 08:59

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00440	0.0100
Barium	U		0.000736	0.00500
Beryllium	U		0.000330	0.00200
Cadmium	U		0.000479	0.00200
Calcium	U		0.0793	1.00
Chromium	U		0.00140	0.0100
Copper	U		0.00368	0.0100
Iron	U		0.0180	0.100
Lead	U		0.00299	0.00600
Magnesium	U		0.0853	1.00
Manganese	U		0.000934	0.0100
Nickel	U		0.00161	0.0100
Potassium	U		0.261	2.00
Selenium	U		0.00735	0.0100
Sodium	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4120720-2 09/17/24 09:01

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	1.00	0.998	99.8	80.0-120	
Barium	1.00	1.05	105	80.0-120	
Beryllium	1.00	1.02	102	80.0-120	
Cadmium	1.00	1.03	103	80.0-120	
Calcium	10.0	10.3	103	80.0-120	
Chromium	1.00	1.05	105	80.0-120	
Copper	1.00	1.06	106	80.0-120	
Iron	10.0	9.97	99.7	80.0-120	
Lead	1.00	0.996	99.6	80.0-120	
Magnesium	10.0	9.94	99.4	80.0-120	
Manganese	1.00	1.05	105	80.0-120	
Nickel	1.00	0.984	98.4	80.0-120	
Potassium	10.0	10.1	101	80.0-120	
Selenium	1.00	1.00	100	80.0-120	
Sodium	10.0	10.2	102	80.0-120	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2357400

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1766740-02](#)

L1774096-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1774096-01 09/17/24 09:03 • (MS) R4120720-4 09/17/24 09:06 • (MSD) R4120720-5 09/17/24 09:08

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	U	0.980	0.982	98.0	98.2	1	75.0-125			0.128	20
Barium	1.00	0.0343	1.05	1.06	101	102	1	75.0-125			0.991	20
Beryllium	1.00	U	0.984	0.995	98.4	99.5	1	75.0-125			1.11	20
Cadmium	1.00	0.000796	1.00	1.01	99.9	101	1	75.0-125			0.844	20
Calcium	10.0	14.5	23.7	24.0	92.3	95.4	1	75.0-125			1.29	20
Chromium	1.00	0.00430	1.01	1.03	100	102	1	75.0-125			1.91	20
Copper	1.00	0.00415	1.02	1.03	102	103	1	75.0-125			0.980	20
Iron	10.0	0.516	10.2	10.5	97.1	99.4	1	75.0-125			2.16	20
Lead	1.00	0.00573	0.965	0.984	95.9	97.8	1	75.0-125			1.98	20
Magnesium	10.0	1.83	11.2	11.4	94.1	95.9	1	75.0-125			1.57	20
Manganese	1.00	0.0806	1.08	1.10	100	102	1	75.0-125			1.58	20
Nickel	1.00	0.0100	1.00	1.00	99.0	99.3	1	75.0-125			0.283	20
Potassium	10.0	1.39	11.0	11.2	96.0	97.8	1	75.0-125			1.61	20
Selenium	1.00	U	0.977	0.966	97.7	96.6	1	75.0-125			1.13	20
Sodium	10.0	23.1	32.0	32.5	89.2	94.5	1	75.0-125			1.66	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2357415

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

[L1766740-01.02](#)

Method Blank (MB)

(MB) R4121099-1 09/18/24 05:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony	U		0.00103	0.00400
Thallium	U		0.000121	0.00200
Uranium	U		0.0000789	0.00100
Vanadium	U		0.000664	0.00500
Zinc	U		0.00302	0.0250

Laboratory Control Sample (LCS)

(LCS) R4121099-2 09/18/24 05:04

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	0.0500	0.0471	94.2	80.0-120	
Thallium	0.0500	0.0494	98.8	80.0-120	
Uranium	0.0500	0.0463	92.7	80.0-120	
Vanadium	0.0500	0.0511	102	80.0-120	
Zinc	0.0500	0.0492	98.4	80.0-120	

L1773272-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1773272-03 09/18/24 06:19 • (MS) R4121099-7 09/18/24 06:26 • (MSD) R4121099-8 09/18/24 06:29

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	U	0.0502	0.0497	100	99.4	1	75.0-125			1.05	20
Thallium	0.0500	U	0.0502	0.0502	100	100	1	75.0-125			0.0862	20
Uranium	0.0500	0.00858	0.0578	0.0574	98.5	97.7	1	75.0-125			0.679	20
Vanadium	0.0500	0.00533	0.0560	0.0569	101	103	1	75.0-125			1.50	20
Zinc	0.0500	0.00323	0.0508	0.0529	95.2	99.3	1	75.0-125			3.93	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl

Al

⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.

Cp

Tc

Ss

Cn

5 Sr

5 Qc

7 Gl

Al

Sc

ACCREDITATIONS & LOCATIONS

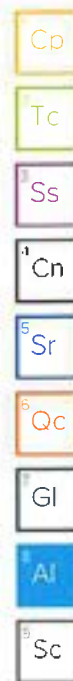
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 4}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	1104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DDO	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

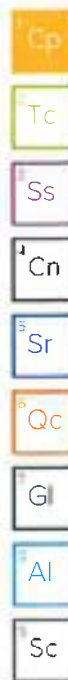


Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weinel						Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeinel@energyfuels.com						Chain of Custody Page ____ of ____ MT JULIET, TN 17065 Lebanon Rd Mount Juliet, TN 37122 Substrate a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.paceintl.com/terms-conditions/chain-of-custody-form.pdf E125					
Project Description: PINYON PLAIN SUMP DISCHARGE						City/State Collected: Tusayan, AZ						Please Circle: PT MT CT ET (PT)					
Phone: 704-995-1531						Client Project #						Lab Project # ENEFUELCO-PINYONMINE					
Collected by (print): Russell Murray						Site/Facility ID #						P.O. #					
Collected by signature:						Rush? (Lab MUST Be Notified) Same Day _____ Five Day _____ Next Day _____ 5 Day (Rad Only) _____ Two Day _____ 10 Day (Rad Only) _____ Three Day _____						Quote #					
Immediately Packed on Ice N Y						Date Results Needed						No. of Cntrs					
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time												
Sump-1470_08112024	Grab	GW		8/11/24	8:51 AM	4	X	X		X					X		
PreWTP		GW				4	X	X		X					X		
PostWTPTank		GW				4	X	X		X					X		
PostWTP		GW				4	X	X		X					X		
Sump-65_08112024	Grab	GW		8/11/24	8:51 AM	4	X	X		X					X		
Sump-65_08112024	Grab	GW		8/11/24	8:51 AM	4	●	●	X	●	X	X			●		
Sump-1470_08112024	Grab	NPW		8/11/24	8:51 AM	3			X		X	X					
PreWTP		NPW				3			X		X	X					
PostWTPTank		NPW				3			X		X	X					
PostWTP		NPW				3			X		X	X					
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Waste Water DW - Drinking Water OT - Other						Remarks: Dissolved Metals is total						pH _____ Temp _____ Flow _____ Other _____					
Samples returned via: UPS FedEx Courier						Tracking #											
Relinquished by: (Signature)						Date: 8/12/24 Time: 3:00 PM						Received by: (Signature)					
Relinquished by: (Signature)						Date:						Time:					
Relinquished by: (Signature)						Date:						Time:					
Trip Blank Received: Yes / No HCL / Mech TBR						Bottles Received: 14						If maintained by Login: Date/Time					
Temp: M 54.9 °C						RAD Screen <0.5 mR/hr:						Hold:					
Date: 8-13-24 Time: 0800						Condition: NCF / OK											



ANALYTICAL REPORT

September 06, 2024



Energy Fuels Resources

Sample Delivery Group: L1766742
Samples Received: 08/13/2024
Project Number:
Description: PINYON PLAIN SUMP DISCHARGE

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Ron Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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SAMPLE SUMMARY

SUMP-1470_08112024 L1766742-01 Non-Potable Water

Collected by: Collected date/time: Received date/time:
08/17/24 08:51 08/13/24 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2344360	1	08/16/24 09:31	08/20/24 16:58	SNR	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2342504	1	08/14/24 12:13	09/03/24 13:03	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2346919	1	08/20/24 17:04	08/26/24 14:44	ALG	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2344360	1	08/16/24 09:31	08/22/24 22:36	SNR	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2346249	1	08/21/24 22:30	08/22/24 22:36	RGT	Mt. Juliet, TN

Cp

Tc

Ss

⁴Cn

⁵Sr

SUMP-65_08112024 L1766742-02 Non-Potable Water

Collected by: Collected date/time: Received date/time:
08/11/24 08:51 08/13/24 08:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2344360	1	08/16/24 09:31	08/20/24 16:58	SNR	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2342504	1	08/14/24 12:13	09/03/24 13:03	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2346919	1	08/20/24 17:04	08/26/24 14:44	ALG	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2344360	1	08/16/24 09:31	08/22/24 22:36	SNR	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2346249	1	08/21/24 22:30	08/22/24 22:36	RGT	Mt. Juliet, TN

Qc

G

Al

Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Ron Eidson
Project Manager

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2344360

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

[L1766742-01.02](#)

Method Blank (MB)

(MB) R4111441-1 08/20/24 16:58

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
GROSS ALPHA	0.637		0.505	0.636	0.260

L1766731-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1766731-01 08/20/24 16:58 • (DUP) R4111441-4 08/20/24 16:58

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
GROSS ALPHA	-0.237	0.346	0.631	0.257	0.166	0.471	0.704	0.287	200	0.689	<u>U</u>	20	3

Laboratory Control Sample (LCS)

(LCS) R4111441-2 08/20/24 16:58

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
GROSS ALPHA	15.0	14.9	99.5	80.0-120	

L1767878-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1767878-01 08/20/24 16:58 • (MS) R4111441-3 08/20/24 16:58

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	pCi/l	pCi/l	pCi/l	%		%	
GROSS ALPHA	15.0	7.35	20.0	84.5	1	70.0-130	

Co

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2342504

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

L1766742-01.02

Method Blank (MB)

(MB) R4109691-1 08/21/24 04:35

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	0.101	J	0.116	0.193	0.0751
(T) Barium	103		103		

L1766835-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1766835-08 08/21/24 10:37 • (DUP) R4109691-5 08/21/24 05:35

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-226	0.537	0.254	0.216	0.0659	0.631	0.515	0.769	0.299	16.2	0.165	J	20	1
(T) Barium	106				102	102							

Laboratory Control Sample (LCS)

(LCS) R4109691-2 08/21/24 04:35

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
Radium-226	5.00	4.97	99.4	75.0-125	
(T) Barium			104		

L1766823-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1766823-02 08/21/24 07:36 • (MS) R4109691-3 08/21/24 05:35 • (MSD) R4109691-4 08/21/24 05:35

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.912	22.5	20.1	108	95.9	1	75.0-125			11.3		20
(T) Barium		103		103	103	104							

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Gc

7 Gl

AI

9 Sc

WG2346919

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

[L1766742-01.02](#)

Method Blank (MB)

(MB) R4112196-1 08/26/24 14:44

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE % / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.238	J	0.143	0.257	0.135
(T) Barium	113		113		
(T) Yttrium	108		108		

L1769402-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1769402-01 08/26/24 14:44 • (DUP) R4112196-5 08/26/24 14:44

Analyte	Original Result pCi/l	Original 2 sigma CE % / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE % / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.612	0.320	0.570	0.300	0.660	0.418	0.750	0.392	7.53	0.0910	J	20	3
(T) Barium	116				113	113							
(T) Yttrium	99.8				79.5	79.5							

Laboratory Control Sample (LCS)

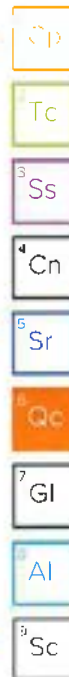
(LCS) R4112196-2 08/26/24 14:44

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.36	107	80.0-120	
(T) Barium			117		
(T) Yttrium			94.0		

L1766049-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1766049-03 08/26/24 14:44 • (MS) R4112196-3 08/26/24 14:44 • (MSD) R4112196-4 08/26/24 14:44

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	2.05	15.9	17.7	82.8	93.8	1	70.0-130			10.9		20
(T) Barium		105			119	92.2							
(T) Yttrium		99.4			95.3	109							



WG2346249

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

L1766742-01.02

Method Blank (MB)

(MB) R4110537-3 08/21/24 21:57

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.0593		0.0329	0.0378	0.0235
URANIUM-235	-0.00346	<u>U</u>	0.0202	0.0378	0.0235
URANIUM-238	0.0410		0.0295	0.0378	0.0235
(T) URANIUM-232	95.5		95.5		

L1768087-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1768087-07 08/21/24 21:28 • (DUP) R4110537-2 08/21/24 21:28

Analyte	Original Result uCi/l	Original 2 sigma CE + / -	Original MDA uCi/l	Original Lc uCi/l	DUP Result uCi/l	DUP 2 sigma CE + / -	DUP MDA uCi/l	DUP Lc uCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	0.000000935	0.000000282	0.000000231	0.000000143	0.000000476	0.000000233	0.000000252	0.000000157	65.0	1.25		20	3
URANIUM-235	0.0000000864	0.000000143	0.000000224	0.000000139	-0.0000000631	0.000000116	0.000000252	0.000000157	200	0.812	<u>D</u>	20	3
URANIUM-238	0.000000944	0.000000281	0.000000224	0.000000139	0.0000000912	0.000000156	0.000000252	0.000000157	165	2.65	<u>D</u>	20	3
(T) URANIUM-232	92.7				96.1	96.1							

Laboratory Control Sample (LCS)

(LCS) R4110537-4 08/21/24 21:57

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	5.67	113	80.0-120	
URANIUM-238	4.90	5.86	119	80.0-120	
(T) URANIUM-232			94.0		

L1768087-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1768087-01 08/21/24 21:28 • (MS) R4110537-5 08/21/24 21:57 • (MSD) R4110537-1 08/21/24 21:28

Analyte	Spike Amount uCi/l	Original Result uCi/l	MS Result uCi/l	MSD Result uCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	0.0000252	0.00000298	0.0000298	0.0000307	106	110	1	75.0-125			3.17		20
URANIUM-238	0.0000245	0.00000435	0.0000291	0.0000300	101	105	1	75.0-125			2.84		20
(T) URANIUM-232		93.5			90.4	98.8							



GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

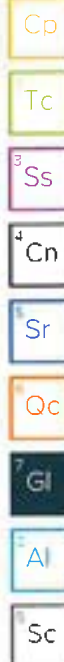
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
C2	Tracer recovery limits have been exceeded; values are outside lower control limits.
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

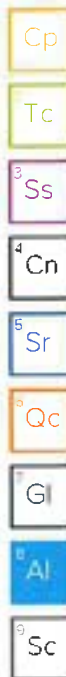
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1, 4}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1, 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

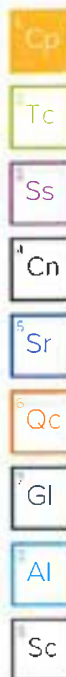


Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weinel				Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeinel@energyfuels.com				Analysis / Container / Preservation: <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>Pres</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Chk</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										Pres	2	2	2	2	2						Chk											Chain of Custody Page ____ of ____ MT JULIET, TN 12065 Lebanon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://www.paceanalytical.com/chainofcustody.pdf E125 Table # Actnum: ENEFUELCO Template: T215492 Preloadin: P1054332 PM: 732 - Donna Eldson PB: Shipped Via: FedEX Ground																																																																																																																																																																																																																													
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Project Description: PINYON PLAIN SUMP DISCHARGE City/State Collected: <u>Tusayan, AZ</u> Client Project # Site/Facility ID # Rush? (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day Immediately Packed on ice N ___ Y ___				Please Circle: PT MT CT ET 427 Lab Project # ENEFUELCO-PINYONMINE P.O. # Quote # Date Results Needed No. of Cntrs				<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Sample ID</th> <th>Comp/Grab</th> <th>Matrix *</th> <th>Depth</th> <th>Date</th> <th>Time</th> <th>Cntrs</th> <th>ALK, FL, PH, COND, SULF</th> <th>125mlHDPE-NoPres</th> <th>ASICP, BAICP, BEICP, CA</th> <th>250mlHDPE-HNO3</th> <th>GROSS ALPHA, ADJ</th> <th>500mlHDPE-Add HNO3</th> <th>NO2NO3</th> <th>250mlHDPE-H2SO4</th> <th>RA-226-903,0,U-ISO</th> <th>1L-HDPE-Add HNO3</th> <th>RA-228</th> <th>1L-HDPE-Add HNO3</th> <th>RA-228</th> <th>1L-HDPE-Add-HNO3</th> <th>TDS</th> <th>1L-HDPE NoPres</th> </tr> <tr> <td>Sump-1470_08/12/24</td> <td>Grab</td> <td>GW</td> <td></td> <td>8/12/24</td> <td>8:51 AM</td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>PreWTP</td> <td></td> <td>GW</td> <td></td> <td></td> <td></td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>PostWTPTank</td> <td></td> <td>GW</td> <td></td> <td></td> <td></td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>PostWTP</td> <td></td> <td>GW</td> <td></td> <td></td> <td></td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Sump-65_08/12/24</td> <td>Grab</td> <td>GW</td> <td></td> <td>8/12/24</td> <td>8:51 AM</td> <td>4</td> <td>X</td> <td>X</td> <td></td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>X</td> <td></td> <td></td> </tr> <tr> <td>Sump-65_08/12/24</td> <td>Grab</td> <td>GW</td> <td></td> <td>8/12/24</td> <td>8:51 AM</td> <td>4</td> <td>●</td> <td>●</td> <td>X</td> <td>●</td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>●</td> <td></td> <td></td> </tr> <tr> <td>Sump-1470_08/12/24</td> <td>Grab</td> <td>NPW</td> <td></td> <td>8/12/24</td> <td>8:51 AM</td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PreWTP</td> <td></td> <td>NPW</td> <td></td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PostWTPTank</td> <td></td> <td>NPW</td> <td></td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PostWTP</td> <td></td> <td>NPW</td> <td></td> <td></td> <td></td> <td>3</td> <td></td> <td></td> <td>X</td> <td></td> <td>X</td> <td>X</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	ALK, FL, PH, COND, SULF	125mlHDPE-NoPres	ASICP, BAICP, BEICP, CA	250mlHDPE-HNO3	GROSS ALPHA, ADJ	500mlHDPE-Add HNO3	NO2NO3	250mlHDPE-H2SO4	RA-226-903,0,U-ISO	1L-HDPE-Add HNO3	RA-228	1L-HDPE-Add HNO3	RA-228	1L-HDPE-Add-HNO3	TDS	1L-HDPE NoPres	Sump-1470_08/12/24	Grab	GW		8/12/24	8:51 AM	4	X	X		X										X			PreWTP		GW				4	X	X		X									X			PostWTPTank		GW				4	X	X		X									X			PostWTP		GW				4	X	X		X									X			Sump-65_08/12/24	Grab	GW		8/12/24	8:51 AM	4	X	X		X									X			Sump-65_08/12/24	Grab	GW		8/12/24	8:51 AM	4	●	●	X	●	X	X							●			Sump-1470_08/12/24	Grab	NPW		8/12/24	8:51 AM	3			X		X	X										PreWTP		NPW				3			X		X	X										PostWTPTank		NPW				3			X		X	X										PostWTP		NPW				3			X		X	X									
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* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other				Remarks: Dissolved Metals is total pH _____ Temp _____ Flow _____ Other _____ Samples returned via: ___ UPS ___ FedEx ___ Courier Tracking #										Sample Receipt Checklist COC Seal Present/Tampered: ☒ Y ___ N ___ COC Signed/Accurate: ☒ Y ___ N ___ Bottles arrive intact: ☒ Y ___ N ___ Correct bottles used: ☒ Y ___ N ___ Sufficient volume sent: ☒ Y ___ N ___ If Applicable VOA Zero Headspace: ☒ Y ___ N ___ Penetration Correct/Checked: ☒ Y ___ N ___ RAD Screen <0.5 mR/hr: ☒ Y ___ N ___																																																																																																																																																																																																																																																							
Relinquished by: (Signature) Date: 8/12/24 Time: 3:00 PM				Received by: (Signature) Date: Time:				Trip Blank Received: Yes / No HCL / MeqH TBR Temp 34.9 °C Bottles Received: 14 2.7+0.3=3.0				Relinquished by: (Signature) Date: Time:				Received by: (Signature) Date: 8-13-24 Time: 0800																																																																																																																																																																																																																																																					
Relinquished by: (Signature) Date: Time:				Received for lab by: (Signature) 17				Date: 8-13-24 Time: 0800				Held: Insured by Login: Date/Time PH-1024021 TRC-3223A24 Condition: NCF / OK																																																																																																																																																																																																																																																									



ANALYTICAL REPORT

September 06, 2024



Energy Fuels Resources

Sample Delivery Group: L1762181
Samples Received: 07/31/2024
Project Number:
Description: Pinyon Plain Mine GW Sampling

Report To: Kathy Weinert
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Ron Eidson
Project Manager

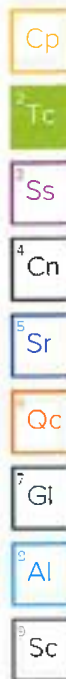
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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SAMPLE SUMMARY

MW-02_07262024 L1762181-01 GW

Collected by: William Cole
 Collected date/time: 07/25/24 14:44
 Received date/time: 07/31/24 11:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2334025	1	08/01/24 07:28	08/01/24 11:55	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2333784	1	08/01/24 12:04	08/01/24 12:04	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2333774	1	08/01/24 16:31	08/01/24 16:31	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2333891	1	08/01/24 18:30	08/01/24 18:30	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2334224	1	08/01/24 21:30	08/01/24 21:30	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2334259	1	08/03/24 20:45	08/03/24 20:45	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2334082	1	08/01/24 10:56	08/02/24 18:52	LAS	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336561	1	08/07/24 10:34	08/07/24 22:44	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2335306	1	08/05/24 10:39	09/04/24 16:28	JPD	Mt. Juliet, TN

RW-01_07262024 L1762181-02 GW

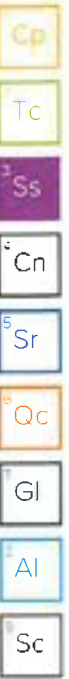
Collected by: William Cole
 Collected date/time: 07/25/24 12:06
 Received date/time: 07/31/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2334026	1	08/01/24 07:59	08/01/24 11:29	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2333788	1	08/01/24 11:47	08/01/24 11:47	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2333774	1	08/01/24 16:32	08/01/24 16:32	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2333891	1	08/01/24 18:30	08/01/24 18:30	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2334224	1	08/01/24 21:30	08/01/24 21:30	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2334259	1	08/03/24 20:59	08/03/24 20:59	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2334082	1	08/01/24 10:56	08/02/24 18:54	LAS	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336561	1	08/07/24 10:34	08/07/24 22:45	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2335306	1	08/05/24 10:39	09/04/24 16:31	JPD	Mt. Juliet, TN

MW-65_07262024 L1762181-03 GW

Collected by: William Cole
 Collected date/time: 07/26/24 12:26
 Received date/time: 07/31/24 11:10

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2334026	1	08/01/24 07:59	08/01/24 11:29	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2333788	1	08/01/24 11:51	08/01/24 11:51	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2333774	1	08/01/24 16:34	08/01/24 16:34	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2333891	1	08/01/24 18:30	08/01/24 18:30	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2334224	1	08/01/24 21:30	08/01/24 21:30	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2334259	1	08/03/24 21:40	08/03/24 21:40	GEB	Mt. Juliet, TN
Mercury by Method 7470A	WG2334082	1	08/01/24 10:56	08/02/24 18:57	LAS	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336562	1	08/07/24 12:24	08/07/24 23:53	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2335306	1	08/05/24 10:39	09/04/24 17:14	JPD	Mt. Juliet, TN



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Ron Eidson
Project Manager

Project Narrative

Cooler arrived out of temp range (18.3degreesC instead of 4).

Sample Delivery Group (SDG) Narrative

Analysis was filtered in the laboratory.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	Method
R4104195-3		60108

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

MW-65_07262024

Collected date/time: 07/26/24 12:26

SAMPLE RESULTS - 03

L1762181

Gravimetric Analysis by Method 2540 C-2011

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l			
Dissolved Solids	250		10.0	1	08/01/2024 11:29	WG2334026

Wet Chemistry by Method 2320 B-2011

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Alkalinity, Carbonate	U		8.45	20.0	1	08/01/2024 11:51	WG2333788

Sample Narrative:

L1762181-03 WG2333788: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 353.2

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Nitrate-Nitrite	0.104		0.0500	0.100	1	08/01/2024 16:34	WG2333774

Wet Chemistry by Method 9040C

	Result	Qualifier	Dilution	Analysis date / time	Batch
Analyte	su				
pH	8.30	T8	1	08/01/2024 18:30	WG2333891

Sample Narrative:

L1762181-03 WG2333891: 8.3 at 23C

Wet Chemistry by Method 9050A

	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
Analyte	umhos/cm		umhos/cm			
Specific Conductance	454		10.0	1	08/01/2024 21:30	WG2334224

Sample Narrative:

L1762181-03 WG2334224: at 25C

Wet Chemistry by Method 9056A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Fluoride	0.246		0.0761	0.150	1	08/03/2024 21:40	WG2334259
Sulfate	18.6		0.637	5.00	1	08/03/2024 21:40	WG2334259

Mercury by Method 7470A

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Mercury, Dissolved	U		0.000100	0.000200	1	08/02/2024 18:57	WG2334082

Metals (ICP) by Method 6010B

	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Analyte	mg/l		mg/l	mg/l			
Arsenic, Dissolved	U		0.00440	0.0100	1	08/07/2024 23:53	WG2336562
Barium, Dissolved	0.0953		0.000736	0.00500	1	08/07/2024 23:53	WG2336562
Beryllium, Dissolved	U		0.000330	0.00200	1	08/07/2024 23:53	WG2336562
Cadmium, Dissolved	0.000716	J	0.000479	0.00200	1	08/07/2024 23:53	WG2336562
Calcium, Dissolved	46.6		0.0793	1.00	1	08/07/2024 23:53	WG2336562
Chromium, Dissolved	U		0.00140	0.0100	1	08/07/2024 23:53	WG2336562
Lead, Dissolved	U		0.00299	0.00600	1	08/07/2024 23:53	WG2336562

Cp

Tc

3 Ss

4 Cn

5 Sr

5 Qc

7 Gl

5 Al

Sc

MW-65_07262024

SAMPLE RESULTS - 03

Collected date/time: 07/26/24 12:26

L1762181

Metals (ICP) by Method 6010B

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Magnesium,Dissolved	29.7		0.0853	1.00	1	08/07/2024 23:53	WG2336562
Nickel,Dissolved	0.0128		0.00161	0.0100	1	08/07/2024 23:53	WG2336562
Potassium,Dissolved	2.58		0.261	2.00	1	08/07/2024 23:53	WG2336562
Selenium,Dissolved	U		0.00735	0.0100	1	08/07/2024 23:53	WG2336562
Sodium,Dissolved	7.30		0.504	3.00	1	08/07/2024 23:53	WG2336562

Metals (ICPMS) by Method 6020

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Antimony,Dissolved	U		0.00103	0.00400	1	09/04/2024 17:14	WG2335306
Thallium,Dissolved	U		0.000121	0.00200	1	09/04/2024 17:14	WG2335306
Uranium,Dissolved	0.0160		0.0000789	0.00100	1	09/04/2024 17:14	WG2335306

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2334025

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1762181-01](#)

Method Blank (MB)

(MB) R4102662-1 08/01/24 11:55

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1760883-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1760883-01 08/01/24 11:55 • (DUP) R4102662-3 08/01/24 11:55

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	ND	ND	1	0.000		10

L1762181-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762181-01 08/01/24 11:55 • (DUP) R4102662-4 08/01/24 11:55

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	416	434	1	4.24		10

Laboratory Control Sample (LCS)

(LCS) R4102662-2 08/01/24 11:55

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8600	97.7	85.0-115	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2334026

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1762181-02.03](#)

Method Blank (MB)

(MB) R4102782-1 08/01/24 11:29

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1761938-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1761938-01 08/01/24 11:29 • (DUP) R4102782-3 08/01/24 11:29

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	809	804	1	0.661		10

L1762181-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1762181-03 08/01/24 11:29 • (DUP) R4102782-4 08/01/24 11:29

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	250	253	1	1.19		10

Laboratory Control Sample (LCS)

(LCS) R4102782-2 08/01/24 11:29

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8730	99.2	85.0-115	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2333784

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

[L1762181-01](#)

Method Blank (MB)

(MB) R4101422-2 08/01/24 09:05

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1762023-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1762023-02 08/01/24 09:17 • (DUP) R4101422-3 08/01/24 09:25

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	429	418	1	2.67		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1762141-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1762141-16 08/01/24 11:37 • (DUP) R4101422-4 08/01/24 11:43

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2333788

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

[L1762181-02.03](#)

Method Blank (MB)

(MB) R4101415-2 08/01/24 09:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1759264-17 Original Sample (OS) • Duplicate (DUP)

(OS) L1759264-17 08/01/24 09:40 • (DUP) R4101415-3 08/01/24 09:43

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1762199-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762199-01 08/01/24 11:31 • (DUP) R4101415-4 08/01/24 11:37

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl^cAl⁹Sc

WG2333774

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L1762181-01.02.03

Method Blank (MB)

(MB) R4101583-1 08/01/24 16:07

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1761987-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1761987-01 08/01/24 16:09 • (DUP) R4101583-3 08/01/24 16:11

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	U	U	1	0.000		20

L1762057-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1762057-03 08/01/24 16:26 • (DUP) R4101583-5 08/01/24 16:27

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	0.658	0.665	1	1.06		20

Laboratory Control Sample (LCS)

(LCS) R4101583-2 08/01/24 16:08

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Nitrate-Nitrite	2.50	2.62	105	90.0-110	

L1761987-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1761987-01 08/01/24 16:09 • (MS) R4101583-4 08/01/24 16:12

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	2.50	U	2.63	105	1	90.0-110	

L1762057-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762057-03 08/01/24 16:26 • (MS) R4101583-6 08/01/24 16:28 • (MSD) R4101583-7 08/01/24 16:30

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	2.50	0.658	3.33	2.94	107	91.3	1	90.0-110			12.4	20

Cp

Tc

³Ss⁴Cn⁶Sr⁸Qc⁷Gl¹³Al⁹Sc

WG2333891

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

L1762181-01.02.03

L1762146-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1762146-02 08/01/24 18:30 • (DUP) R4101641-2 08/01/24 18:30

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.92	7.90	1	0.253		1

Sample Narrative:

OS: 7.92 at 23.8C

DUP: 7.9 at 23.8C

L1762261-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1762261-08 08/01/24 18:30 • (DUP) R4101641-3 08/01/24 18:30

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	5.99	5.99	1	0.000		1

Sample Narrative:

OS: 5.99 at 23.2C

DUP: 5.99 at 23.2C

Laboratory Control Sample (LCS)

(LCS) R4101641-1 08/01/24 18:30

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 23.6C

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2334224

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

L1762181-01.02.03

Method Blank (MB)

(MB) R4101676-1 08/01/24 21:30

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1762284-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762284-01 08/01/24 21:30 • (DUP) R4101676-3 08/01/24 21:30

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	675	675	1	0.000		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4101676-2 08/01/24 21:30

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	733	739	101	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2334259

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1762181-01.02.03](#)

Method Blank (MB)

(MB) R4102685-1 08/03/24 15:08

	<u>MB Result</u>	<u>MB Qualifier</u>	<u>MB MDL</u>	<u>MB RDL</u>
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1762180-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762180-01 08/03/24 16:56 • (DUP) R4102685-3 08/03/24 17:09

	<u>Original Result</u>	<u>DUP Result</u>	<u>Dilution</u>	<u>DUP RPD</u>	<u>DUP Qualifier</u>	<u>DUP RPD Limits</u>
Analyte	mg/l	mg/l		%		%
Fluoride	0.425	0.411	1	2.81		15
Sulfate	141	140	1	0.978		15

L1762180-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1762180-02 08/03/24 17:50 • (DUP) R4102685-6 08/03/24 18:03

	<u>Original Result</u>	<u>DUP Result</u>	<u>Dilution</u>	<u>DUP RPD</u>	<u>DUP Qualifier</u>	<u>DUP RPD Limits</u>
Analyte	mg/l	mg/l		%		%
Fluoride	0.547	0.546	1	0.238		15
Sulfate	113	113	1	0.349		15

Laboratory Control Sample (LCS)

(LCS) R4102685-2 08/03/24 15:21

	<u>Spike Amount</u>	<u>LCS Result</u>	<u>LCS Rec.</u>	<u>Rec. Limits</u>	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	8.41	105	80.0-120	
Sulfate	40.0	39.0	97.6	80.0-120	

L1762180-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762180-01 08/03/24 16:56 • (MS) R4102685-4 08/03/24 17:23 • (MSD) R4102685-5 08/03/24 17:36

	<u>Spike Amount</u>	<u>Original Result</u>	<u>MS Result</u>	<u>MSD Result</u>	<u>MS Rec.</u>	<u>MSD Rec.</u>	<u>Dilution</u>	<u>Rec. Limits</u>	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	<u>RPD</u>	<u>RPD Limits</u>
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	8.00	0.425	8.71	8.50	104	101	1	80.0-120			2.39	15
Sulfate	40.0	141	154	156	31.7	36.5	1	80.0-120	J6	J6	1.25	15

Cp

Tc

3
Ss4
Cn5
Sr6
Oc7
Gl8
Al9
Sc

WG2334259

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1762181-01,02,03](#)

L1762180-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L1762180-02 08/03/24 17:50 • (MS) R4102685-7 08/03/24 18:17

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	8.00	0.547	8.52	99.6	1	80.0-120	
Sulfate	40.0	113	130	42.8	1	80.0-120	<u>J6</u>

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2334082

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L1762181-01.02.03

Method Blank (MB)

(MB) R4102156-1 08/02/24 17:46

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury,Dissolved	U		0.000100	0.000200

Laboratory Control Sample (LCS)

(LCS) R4102156-2 08/02/24 17:49

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Mercury,Dissolved	0.00300	0.00345	115	80.0-120	

L1762031-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762031-04 08/02/24 17:51 • (MS) R4102156-4 08/02/24 17:56 • (MSD) R4102156-5 08/02/24 18:04

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury,Dissolved	0.00300	U	0.00325	0.00318	108	106	1	75.0-125			2.38	20

Cp

Tc

3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

WG2336561

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L1762181-01.02

Method Blank (MB)

(MB) R4104124-1 08/07/24 21:57

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic, Dissolved	U		0.00440	0.0100
Barium, Dissolved	U		0.000736	0.00500
Beryllium, Dissolved	U		0.000330	0.00200
Cadmium, Dissolved	U		0.000479	0.00200
Calcium, Dissolved	U		0.0793	1.00
Chromium, Dissolved	U		0.00140	0.0100
Lead, Dissolved	0.00416	U	0.00299	0.00600
Magnesium, Dissolved	U		0.0853	1.00
Nickel, Dissolved	U		0.00161	0.0100
Potassium, Dissolved	U		0.261	2.00
Selenium, Dissolved	U		0.00735	0.0100
Sodium, Dissolved	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4104124-2 08/07/24 21:58

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic, Dissolved	1.00	1.01	101	80.0-120	
Barium, Dissolved	1.00	1.03	103	80.0-120	
Beryllium, Dissolved	1.00	1.05	105	80.0-120	
Cadmium, Dissolved	1.00	0.995	99.5	80.0-120	
Calcium, Dissolved	10.0	10.5	105	80.0-120	
Chromium, Dissolved	1.00	1.04	104	80.0-120	
Lead, Dissolved	1.00	1.01	101	80.0-120	
Magnesium, Dissolved	10.0	10.3	103	80.0-120	
Nickel, Dissolved	1.00	0.984	98.4	80.0-120	
Potassium, Dissolved	10.0	10.7	107	80.0-120	
Selenium, Dissolved	1.00	0.955	95.5	80.0-120	
Sodium, Dissolved	10.0	10.3	103	80.0-120	

L1762141-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762141-08 08/07/24 22:00 • (MS) R4104124-4 08/07/24 22:04 • (MSD) R4104124-5 08/07/24 22:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic, Dissolved	1.00	0.320	1.33	1.35	101	103	1	75.0-125			2.05	20
Barium, Dissolved	1.00	0.00656	1.00	1.01	99.5	101	1	75.0-125			1.06	20
Beryllium, Dissolved	1.00	U	0.996	1.00	99.6	100	1	75.0-125			0.856	20



WG2336561

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1762181-01.02](#)

L1762141-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762141-08 08/07/24 22:00 • (MS) R4104124-4 08/07/24 22:04 • (MSD) R4104124-5 08/07/24 22:05

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cadmium, Dissolved	1.00	U	1.01	1.03	101	103	1	75.0-125			1.64	20
Calcium, Dissolved	10.0	226	238	239	121	131	1	75.0-125		✓	0.398	20
Chromium, Dissolved	1.00	U	0.986	0.997	98.6	99.7	1	75.0-125			1.12	20
Lead, Dissolved	1.00	U	0.967	0.974	96.7	97.4	1	75.0-125			0.657	20
Magnesium, Dissolved	10.0	431	435	438	42.2	74.2	1	75.0-125	✓	✓	0.733	20
Nickel, Dissolved	1.00	0.00656	0.960	0.973	95.3	96.6	1	75.0-125			1.33	20
Potassium, Dissolved	10.0	77.2	88.5	88.8	113	116	1	75.0-125			0.365	20
Selenium, Dissolved	1.00	0.00805	1.06	1.08	106	107	1	75.0-125			1.61	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2336562

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

L1762181-03

Method Blank (MB)

(MB) R4104195-1 08/07/24 23:36

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic, Dissolved	U		0.00440	0.0100
Barium, Dissolved	U		0.000736	0.00500
Beryllium, Dissolved	U		0.000330	0.00200
Cadmium, Dissolved	U		0.000479	0.00200
Calcium, Dissolved	U		0.0793	1.00
Chromium, Dissolved	U		0.00140	0.0100
Lead, Dissolved	U		0.00299	0.00600
Magnesium, Dissolved	U		0.0853	1.00
Nickel, Dissolved	U		0.00161	0.0100
Potassium, Dissolved	U		0.261	2.00
Selenium, Dissolved	U		0.00735	0.0100
Sodium, Dissolved	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4104195-2 08/07/24 23:39

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic, Dissolved	1.00	1.06	106	80.0-120	
Barium, Dissolved	1.00	1.10	110	80.0-120	
Beryllium, Dissolved	1.00	1.07	107	80.0-120	
Cadmium, Dissolved	1.00	1.03	103	80.0-120	
Calcium, Dissolved	10.0	10.8	108	80.0-120	
Chromium, Dissolved	1.00	1.09	109	80.0-120	
Lead, Dissolved	1.00	1.05	105	80.0-120	
Magnesium, Dissolved	10.0	10.1	101	80.0-120	
Nickel, Dissolved	1.00	1.04	104	80.0-120	
Potassium, Dissolved	10.0	10.7	107	80.0-120	
Selenium, Dissolved	1.00	1.05	105	80.0-120	
Sodium, Dissolved	10.0	11.0	110	80.0-120	

L1762427-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762427-01 08/07/24 23:42 • (MS) R4104195-4 08/07/24 23:47 • (MSD) R4104195-5 08/07/24 23:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic, Dissolved	1.00	U	1.08	1.07	108	107	1	75.0-125			0.951	20
Barium, Dissolved	1.00	0.00698	1.08	1.07	107	106	1	75.0-125			0.510	20
Beryllium, Dissolved	1.00	U	1.06	1.06	106	106	1	75.0-125			0.0994	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2336562

Metals (ICP) by Method 6010B

QUALITY CONTROL SUMMARY

[L1762181-03](#)

L1762427-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762427-01 08/07/24 23:42 • (MS) R4104195-4 08/07/24 23:47 • (MSD) R4104195-5 08/07/24 23:50

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cadmium,Dissolved	1.00	U	1.04	1.03	104	103	1	75.0-125			0.888	20
Calcium,Dissolved	10.0	0.631	11.2	11.1	106	104	1	75.0-125			1.02	20
Chromium,Dissolved	1.00	U	1.06	1.07	106	107	1	75.0-125			1.15	20
Lead,Dissolved	1.00	U	1.06	1.05	106	105	1	75.0-125			0.574	20
Magnesium,Dissolved	10.0	U	9.93	9.82	99.3	98.2	1	75.0-125			1.09	20
Nickel,Dissolved	1.00	U	1.05	1.05	105	105	1	75.0-125			0.467	20
Potassium,Dissolved	10.0	0.278	10.9	10.8	106	105	1	75.0-125			0.711	20
Selenium,Dissolved	1.00	U	1.06	1.06	106	106	1	75.0-125			0.194	20
Sodium,Dissolved	10.0	157	165	165	76.1	70.4	1	75.0-125		V	0.345	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2335306

Metals (ICPMS) by Method 6020

QUALITY CONTROL SUMMARY

L1762181-01 02.03

Method Blank (MB)

(MB) R4115520-1 09/04/24 17:07

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony,Dissolved	U		0.00103	0.00400
Thallium,Dissolved	U		0.000121	0.00200
Uranium,Dissolved	U		0.0000789	0.00100

Laboratory Control Sample (LCS)

(LCS) R4115520-2 09/04/24 17:10

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony,Dissolved	0.0500	0.0553	111	80.0-120	
Thallium,Dissolved	0.0500	0.0481	96.2	80.0-120	
Uranium,Dissolved	0.0500	0.0491	98.1	80.0-120	

L1762181-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762181-03 09/04/24 17:14 • (MS) R4115520-4 09/04/24 17:20 • (MSD) R4115520-5 09/04/24 17:23

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony,Dissolved	0.0500	U	0.0546	0.0565	109	113	1	75.0-125			3.41	20
Thallium,Dissolved	0.0500	U	0.0488	0.0464	97.6	92.8	1	75.0-125			5.12	20
Uranium,Dissolved	0.0500	0.0160	0.0656	0.0628	99.3	93.8	1	75.0-125			4.34	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

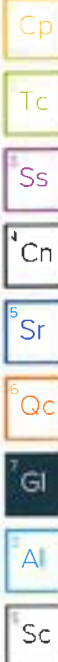
Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

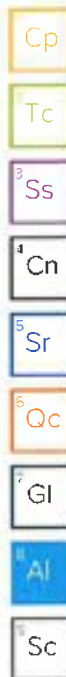
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

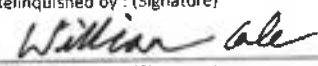
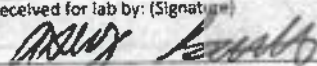
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Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weinel				Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeinel@energyfuels.com				Analysis / Container / Preservation Pres Chk: 42 28 12 12 12				Chain of Custody Page ____ of ____  MT JULIET, TN 12345 Leannon Rd Mount Juliet, TN 37122 Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://www.paceanalytical.com/technical-services																																																										
Project Description: Pinyon Plain Mine GW Sampling		City/State Collected:		Please Circle: PT MT CT ET		* Diss Metals (FF) 250mlHDPE HNO3 ALK, FLUORIDE, PH, SULF 250mlHDPE NoPres GROSS A/B, U-HSO, ADJ 1L-HDPE-Add-HNO3 NO2NO3 250mlHDPE-H2SO4 RA-226-903.0 1L-HDPE-Add-HNO3 RA-228 1L-HDPE-Add-HNO3 TDS 1L-HDPE NoPres				SDG # 4762181 Table # G105 Account: ENEFUELCO Template: T217177 Prelogon: P1054318 PM: 732 - Donna Eldon PB: Shipped Via: FedEx Ground Remarks: Sample # (lab only)																																																												
Phone:		Client Project #		Lab Project # ENEFUELCO-PINYONMINE																																																																		
Collected by (print): William Gale		Site/Facility ID #		P.O. #																																																																		
Collected by (signature): 		Rush? (Lab MUST Be Notified) ☐ Same Day ☐ Five Day ☐ Next Day ☐ 5 Day (Rad Only) ☐ Two Day ☐ 10 Day (Rad Only) ☐ Three Day		Quote #																																																																		
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<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Sample ID</th> <th>Comp/Grab</th> <th>Matrix *</th> <th>Depth</th> <th>Date</th> <th>Time</th> <th></th> </tr> </thead> <tbody> <tr> <td>MW-02-07262024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>7-26-24</td> <td>14:49</td> <td>41</td> </tr> <tr> <td>MW-02-07262024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>7-26-24</td> <td>14:49</td> <td>43</td> </tr> <tr> <td>RW-01-07282024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>7-28-24</td> <td>12:26</td> <td>44</td> </tr> <tr> <td>RW-01-07282024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>7-28-24</td> <td>12:26</td> <td>43</td> </tr> <tr> <td>MW-65-07282024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>7-28-24</td> <td>12:26</td> <td>44</td> </tr> <tr> <td>MW-65-07282024</td> <td>Grab</td> <td>GW</td> <td>-</td> <td>7-28-24</td> <td>12:26</td> <td>43</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>0</td> </tr> </tbody> </table>				Sample ID	Comp/Grab	Matrix *	Depth	Date	Time		MW-02-07262024	Grab	GW	-	7-26-24	14:49	41	MW-02-07262024	Grab	GW	-	7-26-24	14:49	43	RW-01-07282024	Grab	GW	-	7-28-24	12:26	44	RW-01-07282024	Grab	GW	-	7-28-24	12:26	43	MW-65-07282024	Grab	GW	-	7-28-24	12:26	44	MW-65-07282024	Grab	GW	-	7-28-24	12:26	43							0							0				
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* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - WasteWater DW - Drinking Water OT - Other							Remarks: MW-65-07282024 Diss. Metals sample bottle repurposed from 2023 batch of sample bottles. * Fluid Filled, Dissolved Metals pH _____ Temp _____ Flow _____ Other _____																																																															
Samples returned via: UPS ☐ FedEx ☐ Courier ☐				Tracking # 1Z18E99F0199376659				Sample Receipt Checklist COC Seal Present/Intact: ☒ Y ☐ N COC Signed/Accurate: ☒ Y ☐ N Bottles arrive intact: ☒ Y ☐ N Correct bottles used: ☒ Y ☐ N Sufficient volume sent: ☒ Y ☐ N If Applicable VOA Zero Headspace: ☒ Y ☐ N Preservation Correct/Checked: ☒ Y ☐ N RAD Screen <0.5 mR/hr: ☒ Y ☐ N																																																														
Relinquished by: (Signature) 		Date: 7-27-24 Time: 5:00pm		Received by: (Signature)		Trip Blank Received: Yes ☐ No ☒ HCL / MeOH TER		Temp: _____ °C Bottles Received: 21 604918 04035183																																																														
Relinquished by: (Signature)		Date:		Time:		Received by: (Signature)		If preservation required by Login: Date/Time																																																														
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) 		Date: 07/31/2024 Time: 1100		Hold:		Condition: NCF / OK																																																										

7/31-NCF-L1762181 ENEFUELCO TD

R5

Time estimate: oh

Time spent: oh

Members

-  Troy Dunlap (responsible)
-  Donna Eidson

- ☐ Parameter(s) past holding time
- ☒ Temperature not in range
- ☐ Improper container type
- ☐ pH not in range
- ☐ Insufficient sample volume
- ☐ Sample is biphasic
- ☐ Vials received with headspace
- ☐ Broken container
- ☐ Sufficient sample remains
- ☐ If broken container: Insufficient packing material around container
- ☐ If broken container: Insufficient packing material inside cooler
- ☐ If broken container: Improper handling by carrier: _____
- ☐ If broken container: Sample was frozen
- ☐ If broken container: Container lid not intact
- ☐ Client informed by Call
- ☐ Client informed by Email
- ☐ Client informed by Voicemail
- ☐ Date/Time: _____
- ☐ PM initials: _____
- ☐ Client Contact: _____

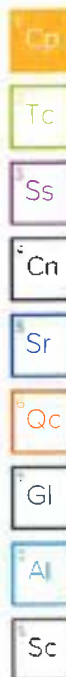
Comments

Troy Dunlap	31 July 2024 3:16 PM
Received out of temperature at 18.3°c.	
Donna Eidson	1 August 2024 2:23 PM
Noted. Please proceed with analysis.	
Troy Dunlap	1 August 2024 2:25 PM
Done.	



ANALYTICAL REPORT

August 29, 2024



Energy Fuels Resources

Sample Delivery Group: L1762184
Samples Received: 07/31/2024
Project Number:
Description: Pinyon Plain Mine GW Sampling

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

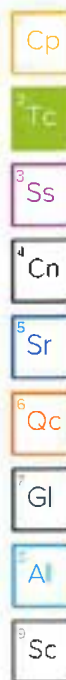
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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SAMPLE SUMMARY

MW-02_07262024 L1762184-01 Non-Potable Water

Collected by: William Cole
 Collected date/time: 07/26/24 14:44
 Received date/time: 07/31/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2334907	1	08/02/24 10:26	08/07/24 19:41	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2334539	1	08/02/24 13:05	08/20/24 18:32	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2342148	1	08/14/24 15:57	08/17/24 12:55	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2334907	1	08/02/24 10:26	08/07/24 21:14	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2335416	1	08/05/24 17:13	08/07/24 21:14	RGT	Mt. Juliet, TN

RW-01_07282024 L1762184-02 Non-Potable Water

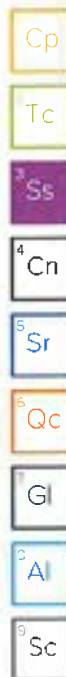
Collected by: William Cole
 Collected date/time: 07/28/24 12:26
 Received date/time: 07/31/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2334907	1	08/02/24 10:26	08/07/24 19:41	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2334539	1	08/02/24 13:05	08/20/24 18:32	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2343369	1	08/15/24 10:03	08/27/24 19:43	ALG	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2334907	1	08/02/24 10:26	08/07/24 21:14	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2335416	1	08/05/24 17:13	08/07/24 21:14	RGT	Mt. Juliet, TN

MW-65_07282024 L1762184-03 Non-Potable Water

Collected by: William Cole
 Collected date/time: 07/28/24 12:26
 Received date/time: 07/31/24 11:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2334907	1	08/02/24 10:26	08/07/24 19:41	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2334539	1	08/02/24 13:05	08/20/24 18:32	ASN	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2343369	1	08/15/24 10:03	08/27/24 19:43	ALG	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2334907	1	08/02/24 10:26	08/07/24 21:15	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2335416	1	08/05/24 17:13	08/07/24 21:15	RGT	Mt. Juliet, TN



CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eldson
Project Manager

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

WG2334907

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

L1762184-01.02.03

Method Blank (MB)

(MB) R4106137-1 08/07/24 15:57

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE %	MB MDA pCi/l	MB Lc pCi/l
GROSS ALPHA	0.111	U	0.390	0.591	0.241
GROSS BETA	0.584	U	0.943	1.25	0.592

L1759163-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1759163-11 08/07/24 15:57 • (DUP) R4106137-5 08/07/24 15:57

Analyte	Original Result pCi/l	Original 2 sigma CE %	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE %	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
GROSS ALPHA	3.15	1.25	1.28	0.525	5.00	1.80	1.81	0.759	45.5	0.846		20	3
GROSS BETA	30.1	2.12	1.51	0.713	28.8	2.20	1.78	0.851	4.48	0.432		20	3

Laboratory Control Sample (LCS)

(LCS) R4106137-2 08/07/24 15:57

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
GROSS ALPHA	15.0	14.2	94.8	80.0-120	
GROSS BETA	40.1	40.2	100	80.0-120	

L1762184-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762184-02 08/07/24 19:41 • (MS) R4106137-3 08/07/24 15:57 • (MSD) R4106137-4 08/07/24 15:57

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
GROSS ALPHA	15.0	21.0	37.4	39.6	109	124	1	70.0-130			5.90		20
GROSS BETA	40.1	5.54	46.0	46.4	101	102	1	70.0-130			0.910		20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2334539

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

L1762184-01.02.03

Method Blank (MB)

(MB) R4109632-1 08/08/24 17:50

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	0.135	J	0.132	0.208	0.0788
(T) Barium	104		104		

L1762184-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1762184-02 08/20/24 18:32 • (DUP) R4109632-6 08/20/24 18:32

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-226	4.74	0.628	0.278	0.108	4.39	0.859	0.458	0.167	7.56	0.324		20	3
(T) Barium	104				103	103							

Laboratory Control Sample (LCS)

(LCS) R4109632-2 08/08/24 17:50

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
Radium-226	5.00	5.11	102	75.0-125	
(T) Barium			99.7		

L1761183-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1761183-05 08/08/24 20:51 • (MS) R4109632-3 08/08/24 17:50 • (MSD) R4109632-4 08/08/24 18:50

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.266	23.1	21.4	114	105	1	75.0-125			7.87		20
(T) Barium		104			103	102							

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2342148

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

[L1762184-01](#)

Method Blank (MB)

(MB) R4108762-1 08/17/24 12:55

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.255	J	0.175	0.306	0.161
(T) Barium	117		117		
(T) Yttrium	86.8		86.8		

L1762184-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762184-01 08/17/24 12:55 • (DUP) R4108762-5 08/17/24 12:55

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	1.20	0.356	0.601	0.315	0.924	0.371	0.637	0.332	25.9	0.534		20	3
(T) Barium	116				99.8	99.8							
(T) Yttrium	106				107	107							

Laboratory Control Sample (LCS)

(LCS) R4108762-2 08/17/24 12:55

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.52	110	80.0-120	
(T) Barium			112		
(T) Yttrium			98.9		

L1761183-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1761183-05 08/17/24 12:55 • (MS) R4108762-3 08/17/24 12:55 • (MSD) R4108762-4 08/17/24 12:55

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	2.76	17.9	17.2	90.8	86.2	1	70.0-130			4.45		20
(T) Barium		126			108	106							
(T) Yttrium		98.2			110	99.2							

Cp

Tc

Ss

⁴Cn⁵Sr⁹Qc⁷Gl³Al⁸Sc

WG2343369

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

[L1762184-02.03](#)

Method Blank (MB)

(MB) R4113005-1 08/27/24 19:43

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.254	<u>J</u>	0.151	0.277	0.146
(T) Barium	136		136		
(T) Yttrium	91.3		91.3		

L1762273-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762273-01 08/27/24 19:43 • (DUP) R4113005-5 08/27/24 19:43

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	0.145	0.315	0.585	0.305	-0.198	0.553	1.04	0.542	200	0.538	<u>U</u>	20	3
(T) Barium	94.8				114	114							
(T) Yttrium	87.8				79.7	79.7							

Laboratory Control Sample (LCS)

(LCS) R4113005-2 08/27/24 19:43

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.51	110	80.0-120	
(T) Barium			89.8		
(T) Yttrium			89.0		

L1762494-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762494-05 08/27/24 19:43 • (MS) R4113005-3 08/27/24 19:43 • (MSD) R4113005-4 08/27/24 19:43

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	-0.416	15.6	16.2	93.4	97.2	1	70.0-130			4.02		20
(T) Barium		92.4			110	96.3							
(T) Yttrium		96.0			93.9	105							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl^cAl⁹Sc

WG2335416

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

L1762184-01,02,03

Method Blank (MB)

(MB) R4106303-6 08/09/24 00:02

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE +/-	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.0552		0.0368	0.0469	0.0285
URANIUM-235	0.0142		0.0270	0.0430	0.0266
URANIUM-238	0.0401		0.0321	0.0430	0.0266
(T) URANIUM-232	114		114		

L1762184-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1762184-03 08/07/24 21:15 • (DUP) R4106303-5 08/07/24 21:14

Analyte	Original Result pCi/l	Original 2 sigma CE +/-	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE +/-	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	10.2	1.24	0.324	0.220	12.4	1.58	0.441	0.298	19.2	1.08		20	3
URANIUM-235	0.215	0.243	0.324	0.220	0.648	0.418	0.429	0.292	100	0.895		20	3
URANIUM-238	5.85	0.947	0.324	0.220	6.05	1.11	0.429	0.292	3.43	0.140		20	3
(T) URANIUM-232	86.2				76.1	76.1							

Laboratory Control Sample (LCS)

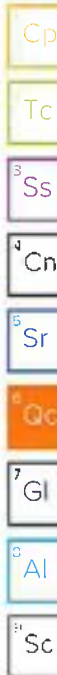
(LCS) R4106303-2 08/07/24 21:14

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	4.60	91.4	80.0-120	
URANIUM-238	4.90	4.84	98.8	80.0-120	
(T) URANIUM-232			90.9		

L1759163-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1759163-01 08/07/24 21:14 • (MS) R4106303-3 08/07/24 21:14 • (MSD) R4106303-4 08/07/24 21:14

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	20.1	1.58	19.6	20.8	85.5	91.4	1	75.0-125			5.90		20
URANIUM-238	19.6	0.500	20.3	20.1	99.7	98.6	1	75.0-125			1.04		20
(T) URANIUM-232		99.2			89.8	94.1							



GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

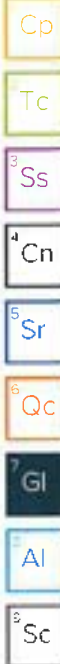
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
C1	Tracer recovery limits have been exceeded; values are outside upper control limits.
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.



ACCREDITATIONS & LOCATIONS

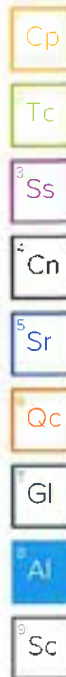
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LA80152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
AZLA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
AZLA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



[illegible]



ANALYTICAL REPORT

November 12, 2024

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Energy Fuels Resources

Sample Delivery Group: L1787552

Samples Received: 10/10/2024

Project Number:

Description: PINYON PLAIN SUMP DISCHARGE

Report To: Kathy Weinel

225 Union Blvd

Suite 600

Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson

Project Manager

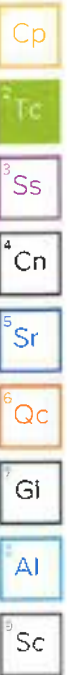
Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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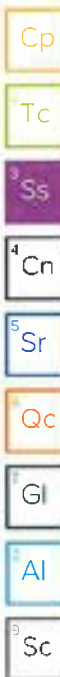


SAMPLE SUMMARY

Collected by: Collected date/time: Received date/time:
 10/09/24 13:00 10/10/24 10:00

SUMP-1470_10092024 L1787552-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2380279	1	10/11/24 09:27	10/11/24 16:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2383910	1	10/17/24 09:25	10/17/24 09:25	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2384026	4	10/17/24 16:48	10/17/24 16:48	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2382169	1	10/15/24 14:52	10/15/24 14:52	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2384953	1	10/18/24 14:01	10/18/24 14:01	KA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2379932	1	10/14/24 17:06	10/14/24 17:06	DLH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2379932	10	10/14/24 17:23	10/14/24 17:23	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2380359	1	10/16/24 18:09	10/18/24 01:02	LAS	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2395850	1	11/08/24 22:04	11/09/24 14:39	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2395886	1	11/08/24 19:52	11/09/24 01:14	UNP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2395886	50	11/08/24 19:52	11/09/24 02:22	UNP	Mt. Juliet, TN

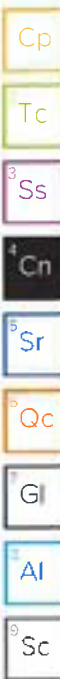


CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager



WG2380279

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1787552-01](#)

Method Blank (MB)

(MB) R4132133-1 10/11/24 16:00

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Dissolved Solids	U		10.0	10.0

L1787486-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1787486-07 10/11/24 16:00 • (DUP) R4132133-3 10/11/24 16:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	543	533	1	1.86		10

L1787666-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1787666-03 10/11/24 16:00 • (DUP) R4132133-4 10/11/24 16:00

Analyte	Original Result mg/l	DUP Result mg/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Dissolved Solids	8120	8720	1	7.13		10

Laboratory Control Sample (LCS)

(LCS) R4132133-2 10/11/24 16:00

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Dissolved Solids	8800	8270	94.0	85.0-115	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2383910

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

[L1787552-01](#)

Method Blank (MB)

(MB) R4134001-2 10/17/24 09:17

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1787552-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1787552-01 10/17/24 09:25 • (DUP) R4134001-3 10/17/24 09:32

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1789158-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1789158-01 10/17/24 11:08 • (DUP) R4134001-4 10/17/24 11:13

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	130	108	1	19.1		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

Ss

Cn

Sr

Qc

G

Al

Sc

WG2384026

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

L1787552-01

Method Blank (MB)

(MB) R4134213-1 10/17/24 16:08

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1787559-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1787559-01 10/17/24 16:13 • (DUP) R4134213-3 10/17/24 16:14

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	U	U	1	0.000		20

L1789757-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1789757-04 10/17/24 16:58 • (DUP) R4134213-8 10/17/24 16:59

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	6.72	5.76	2	15.4		20

Laboratory Control Sample (LCS)

(LCS) R4134213-2 10/17/24 16:09

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Nitrate-Nitrite	2.50	2.43	97.2	90.0-110	

L1787559-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787559-01 10/17/24 16:13 • (MS) R4134213-4 10/17/24 16:16 • (MSD) R4134213-5 10/17/24 16:17

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	2.50	U	2.48	2.53	99.2	101	1	90.0-110			2.00	20

L1789757-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1789757-04 10/17/24 16:58 • (MS) R4134213-9 10/17/24 17:01

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	2.50	6.72	7.96	49.6	2	90.0-110	J6

Cp

Tc

Ss

Cn

Sr

Cc

Gl

Al

Sc

WG2382169

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

L1787552-01

L1787552-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1787552-01 10/15/24 14:52 • (DUP) R4133063-2 10/15/24 14:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.87	7.89	1	0.254		1

Sample Narrative:

OS: 7.87 at 18.2C

DUP: 7.89 at 18C

L1788636-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1788636-01 10/15/24 14:52 • (DUP) R4133063-3 10/15/24 14:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	9.14	9.16	1	0.219		1

Sample Narrative:

OS: 9.14 at 18.7C

DUP: 9.16 at 18.7C

Laboratory Control Sample (LCS)

(LCS) R4133063-1 10/15/24 14:52

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.97	99.7	99.0-101	

Sample Narrative:

LCS: 9.97 at 19.4C

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2384953

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

[L1787552-01](#)

Method Blank (MB)

(MB) R4134708-1 10/18/24 14:01

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1787552-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1787552-01 10/18/24 14:01 • (DUP) R4134708-3 10/18/24 14:01

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	1270	1280	1	0.782		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1790277-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1790277-03 10/18/24 14:01 • (DUP) R4134708-4 10/18/24 14:01

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	428	434	1	1.39		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4134708-2 10/18/24 14:01

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	733	752	103	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

WG2379932

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1787552-01

Method Blank (MB)

(MB) R4135335-1 10/14/24 12:27

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1787029-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1787029-20 10/14/24 13:02 • (DUP) R4135335-3 10/14/24 13:20

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	U	U	1	0.000		15
Sulfate	2.56	2.60	1	1.78	J	15

L1787029-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1787029-22 10/14/24 14:12 • (DUP) R4135335-6 10/14/24 14:29

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	U	U	1	0.000		15
Sulfate	23.3	23.0	1	1.21		15

Laboratory Control Sample (LCS)

(LCS) R4135335-2 10/14/24 12:45

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	7.76	97.0	80.0-120	
Sulfate	40.0	38.7	96.8	80.0-120	

L1787029-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787029-20 10/14/24 13:02 • (MS) R4135335-4 10/14/24 13:37 • (MSD) R4135335-5 10/14/24 13:54

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	8.00	U	7.75	7.99	96.8	99.9	1	80.0-120			3.08	15
Sulfate	40.0	2.56	41.0	41.2	96.2	96.7	1	80.0-120			0.492	15

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2379932

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1787552-01](#)

L1787029-22 Original Sample (OS) • Matrix Spike (MS)

(OS) L1787029-22 10/14/24 14:12 • (MS) R4135335-7 10/14/24 14:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Fluoride	8.00	U	7.78	97.3	1	80.0-120	
Sulfate	40.0	23.3	57.6	85.8	1	80.0-120	

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2380359

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

[L1787552-01](#)

Method Blank (MB)

(MB) R4134404-1 10/18/24 00:42

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury	U		0.0000700	0.000200

Laboratory Control Sample (LCS)

(LCS) R4134404-2 10/18/24 00:44

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Mercury	0.00300	0.00325	108	80.0-120	

L1787565-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787565-05 10/18/24 00:47 • (MS) R4134404-4 10/18/24 00:57 • (MSD) R4134404-5 10/18/24 00:59

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury	0.00300	U	0.00324	0.00325	108	108	1	75.0-125			0.162	20

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2395850

Metals (ICP) by Method 6010D

QUALITY CONTROL SUMMARY

L1787552-01

Method Blank (MB)

(MB) R4144088-1 11/09/24 14:29

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic	U		0.00440	0.0100
Barium	U		0.000736	0.00500
Beryllium	U		0.000330	0.00200
Cadmium	U		0.000479	0.00200
Calcium	U		0.0793	1.00
Chromium	U		0.00140	0.0100
Copper	U		0.00368	0.0100
Iron	U		0.0180	0.100
Lead	0.00527	J	0.00299	0.00600
Magnesium	U		0.0853	1.00
Manganese	U		0.000934	0.0100
Nickel	U		0.00161	0.0100
Potassium	U		0.261	2.00
Selenium	U		0.00735	0.0100
Sodium	U		0.504	3.00

Cp

Tc

³Ss⁴Cn⁵Sr⁶Gc⁷Gl^cAl^uSc

Laboratory Control Sample (LCS)

(LCS) R4144088-2 11/09/24 14:30

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	1.00	0.966	96.6	80.0-120	
Barium	1.00	0.989	98.9	80.0-120	
Beryllium	1.00	0.967	96.7	80.0-120	
Cadmium	1.00	0.948	94.8	80.0-120	
Calcium	10.0	9.61	96.1	80.0-120	
Chromium	1.00	0.984	98.4	80.0-120	
Copper	1.00	0.952	95.2	80.0-120	
Iron	10.0	9.72	97.2	80.0-120	
Lead	1.00	0.952	95.2	80.0-120	
Magnesium	10.0	9.36	93.6	80.0-120	
Manganese	1.00	0.994	99.4	80.0-120	
Nickel	1.00	0.945	94.5	80.0-120	
Potassium	10.0	9.78	97.8	80.0-120	
Selenium	1.00	0.953	95.3	80.0-120	
Sodium	10.0	9.66	96.6	80.0-120	

WG2395850

Metals (ICP) by Method 6010D

QUALITY CONTROL SUMMARY

[L1787552-01](#)

L1794329-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1794329-03 11/09/24 14:32 • (MS) R4144088-4 11/09/24 14:35 • (MSD) R4144088-5 11/09/24 14:37

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	1.00	U	0.977	0.976	97.7	97.6	1	75.0-125			0.142	20
Barium	1.00	0.0183	0.995	0.998	97.7	97.9	1	75.0-125			0.268	20
Beryllium	1.00	U	0.953	0.954	95.3	95.4	1	75.0-125			0.141	20
Cadmium	1.00	U	0.959	0.960	95.9	96.0	1	75.0-125			0.130	20
Calcium	10.0	142	150	149	79.4	69.0	1	75.0-125		V	0.701	20
Chromium	1.00	0.00143	0.974	0.988	97.3	98.6	1	75.0-125			1.37	20
Copper	1.00	U	0.967	0.973	96.7	97.3	1	75.0-125			0.674	20
Iron	10.0	36.6	45.8	45.6	92.2	90.5	1	75.0-125			0.358	20
Lead	1.00	0.00955	0.967	0.967	95.8	95.7	1	75.0-125			0.0464	20
Magnesium	10.0	46.0	54.3	53.9	82.6	78.7	1	75.0-125			0.728	20
Manganese	1.00	1.23	2.19	2.19	96.1	95.8	1	75.0-125			0.146	20
Nickel	1.00	0.00328	0.957	0.957	95.4	95.3	1	75.0-125			0.0304	20
Potassium	10.0	5.99	15.8	15.7	97.8	97.2	1	75.0-125			0.368	20
Selenium	1.00	U	0.960	0.970	96.0	97.0	1	75.0-125			0.964	20
Sodium	10.0	95.5	103	102	76.8	67.9	1	75.0-125		V	0.862	20

Cp

Tc

3
Ss4
Cn5
Sr6
Gc7
Gl8
Al9
Sc

WG2395886

Metals (ICPMS) by Method 6020B

QUALITY CONTROL SUMMARY

L1787552-01

Method Blank (MB)

(MB) R4143960-1 11/09/24 00:55

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Antimony	U		0.000310	0.00400
Thallium	U		0.000130	0.00200
Uranium	U		0.000130	0.00100
Vanadium	U		0.000520	0.00500
Zinc	U		0.00400	0.0250

Cp

Tc

³Ss⁴Cn⁵Sr⁶Gc⁷Gl⁸Al⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4143960-2 11/09/24 00:59

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Antimony	0.0500	0.0494	98.7	80.0-120	
Thallium	0.0500	0.0465	92.9	80.0-120	
Uranium	0.0500	0.0462	92.3	80.0-120	
Vanadium	0.0500	0.0482	96.4	80.0-120	
Zinc	0.0500	0.0565	113	80.0-120	

L1794053-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1794053-02 11/09/24 01:02 • (MS) R4143960-4 11/09/24 01:08 • (MSD) R4143960-5 11/09/24 01:11

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Antimony	0.0500	U	0.0487	0.0493	97.4	98.5	1	75.0-125			1.15	20
Thallium	0.0500	U	0.0443	0.0450	88.7	90.0	1	75.0-125			1.52	20
Uranium	0.0500	0.000356	0.0444	0.0456	88.2	90.5	1	75.0-125			2.56	20
Vanadium	0.0500	0.00120	0.0483	0.0485	94.3	94.6	1	75.0-125			0.300	20
Zinc	0.0500	U	0.0471	0.0474	94.1	94.8	1	75.0-125			0.681	20

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCREDITATIONS & LOCATIONS

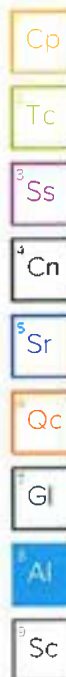
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-05-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LA80152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ³	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



Company Name/Address:

Energy Fuels Resources

225 Union Blvd

Suite 600

Lakewood, CO 80228

Report to:

Kathy Weinle

Billing Information:

Accounts Payable

225 Union Blvd

Suite 600

Lakewood, CO 80228

Email To: KWeinle@energyfuels.com

Pres
Chk

Analysis / Container / Preservation

Chain of Custody

Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

MT JULIET, TN

USE THIS SECTION FOR ALTERNATIVE USES. DO NOT USE
 to document a sample and the chain of custody
 information with knowledge and acceptance of the
 Party Terms and Conditions found at
 https://info.paceplus.com/chain-of-custody-terms.pdf

SDG #

Table #

Acctnum: ENEFUELCO

Template: T215492

Prelogin: P1054332

PM: 732 - Donna Eidson

PB:

Shipped Via: FedEX Ground

Remarks

Sample # (Lab only)

Project Description:

PINYON PLAIN SUMP DISCHARGE

City/State

Collected:

Please Circle

PT MT CT ET

Phone:

Client Project #

Lab Project #

ENEFUELCO-PINYONMINE

Collected by (print):

Matt Germansen

Site/Facility ID #

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Date Results Needed

No.
ofImmediately
Packed on Ice N ☐ Y ☒

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Coolers

Sump-1470_10092024

Grab

GW

1470

10/9/24

1300

4

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

PreWTP

PostWTP Tank

PostWTP

Sump-1470_10092024

NPW

1470

10/9/24

1300

3

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

X

PreWTP

PostWTP Tank

PostWTP

* Matrix:

SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - Wastewater
 DW - Drinking Water
 OT - Other

Remarks:

Temp Blank, 3 coolers

pH Temp

Flow Other

Samples returned via:

UPS FedEx Courier

Tracking #

Relinquished by: (Signature)

Date:

10/9/24

Time:

1550

Received by: (Signature)

Trip Blank Received: Yes / No

HCL / MeOH

TSS

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: °C

Bottles Received:

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Hold:

Condition:

NCF / OK

Sample Receipt Checklist

COC Seal Present / Intact: NP Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 If Applicable
 VOA Zero Headpace: Y N
 Preservation Correct/Checked: Y N
 RAD Screen <0.5 mR/hr: Y N

Fed Ex tracking #	Gun ID	Temperature
UPS		$1.7 + 0.3 = 2.0$
UPS		$3.6 + 0.3 = 3.9$
UPS		$5.1 + 0.3 = 5.4$

Name

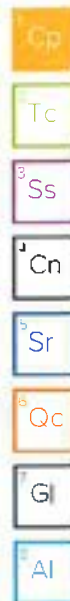
Date

2558752



ANALYTICAL REPORT

November 18, 2024



Energy Fuels Resources

Sample Delivery Group: L1787554
Samples Received: 10/10/2024
Project Number:
Description: PINYON PLAIN SUMP DISCHARGE

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

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SAMPLE SUMMARY

SUMP-1470_10092024 L1787554-01 Non-Potable Water				Collected by	Collected date/time	Received date/time
					10/09/24 12:00	10/10/24 12:00
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2385898	1	10/23/24 16:22	10/24/24 23:47	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2384044	1	10/17/24 13:50	10/30/24 02:51	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2387326	1	10/23/24 17:20	11/01/24 15:40	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2385898	1	10/23/24 16:22	11/13/24 17:43	RGT	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2381917	1	11/11/24 16:04	11/13/24 17:43	RGT	Mt. Juliet, TN

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

Al

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Cp

Tc

Ss

Cn

Sr

Qc

Gl

AI

WG2385898

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

L1787554-01

Method Blank (MB)

(MB) R4137414-1 10/24/24 20:09

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
GROSS ALPHA	-0.255	U	0.378	0.671	0.278

L1787561-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1787561-02 10/24/24 20:09 • (DUP) R4137414-5 10/24/24 20:09

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
GROSS ALPHA	12.2	2.27	1.54	0.635	11.2	2.20	1.52	0.625	8.48	0.313		20	3

Laboratory Control Sample (LCS)

(LCS) R4137414-2 10/24/24 20:09

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
GROSS ALPHA	15.0	17.1	114	80.0-120	

L1788359-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1788359-05 10/24/24 20:09 • (MS) R4137414-3 10/24/24 20:09 • (MSD) R4137414-4 10/24/24 20:09

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
GROSS ALPHA	17.6	0.227	18.2	19.1	102	107	1	70.0-130			4.93		20

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

WG2384044

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

L1787554-01

Method Blank (MB)

(MB) R4139587-1 10/29/24 22:50

	MB Result	<u>MB Qualifier</u>	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	0.132		0.0848	0.0919	0.0280
(T) Barium	104		104		

L1785896-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1785896-01 10/30/24 00:50 • (DUP) R4139587-5 10/29/24 23:50

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	<u>DUP Qualifier</u>	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
Radium-226	0.333	0.197	0.228	0.0784	0.288	0.266	0.367	0.112	14.5	0.136	<u>J</u>	20	3
(T) Barium	109				107	107							

Laboratory Control Sample (LCS)

(LCS) R4139587-2 10/29/24 23:50

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	pCi/l	pCi/l	%	%	
Radium-226	5.00	5.39	108	80.0-120	
(T) Barium			105		

L1788389-23 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1788389-23 10/30/24 03:51 • (MS) R4139587-3 10/29/24 23:50 • (MSD) R4139587-4 10/29/24 23:50

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
Radium-226	20.0	0.360	21.9	25.2	108	124	1	75.0-125			14.0		20
(T) Barium		105			105	107							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al

WG2387326

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

L1787554-01

Method Blank (MB)

(MB) R4138721-1 10/27/24 13:40

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.274	U	0.152	0.299	0.156
(T) Barium	113		113		
(T) Yttrium	99.2		99.2		

L1791381-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1791381-02 10/27/24 13:40 • (DUP) R4138721-5 10/27/24 13:40

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	2.68	0.310	0.491	0.260	1.84	0.355	0.619	0.323	37.0	1.77		20	3
(T) Barium	111				130	130							
(T) Yttrium	114				102	102							

Laboratory Control Sample (LCS)

(LCS) R4138721-2 10/27/24 13:40

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.57	91.5	80.0-120	
(T) Barium			126		
(T) Yttrium			113		

L1787548-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787548-04 10/27/24 13:40 • (MS) R4138721-3 10/27/24 13:40 • (MSD) R4138721-4 10/27/24 13:40

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.407	13.7	12.7	79.4	73.7	1	70.0-130			7.21		20
(T) Barium		106			103	88.1							
(T) Yttrium		90.6			98.5	102							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al

WG2381917

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

L1787554-01

Method Blank (MB)

(MB) R4138375-1 10/21/24 17:48

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.0788		0.0432	0.0515	0.0312
URANIUM-235	-0.0275	<u>U</u>	0.0251	0.0622	0.0239
URANIUM-238	0.0215	<u>U</u>	0.0298	0.0461	0.0285
(T) URANIUM-232	94.9		94.9		

L1778467-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1778467-01 10/21/24 17:48 • (DUP) R4138375-5 10/21/24 17:48

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	17.4	1.61	0.487	0.301	15.3	2.32	1.21	0.735	13.0	0.751		20	3
URANIUM-235	0.963	0.553	0.636	0.242	0.672	0.933	1.42	0.539	35.5	0.268	<u>U</u>	20	3
URANIUM-238	16.2	1.56	0.487	0.301	13.8	2.20	1.12	0.687	16.4	0.912		20	3
(T) URANIUM-232	81.7				76.2	76.2							

Laboratory Control Sample (LCS)

(LCS) R4138375-2 10/21/24 17:48

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	4.62	91.8	80.0-120	
URANIUM-238	4.90	4.82	98.4	80.0-120	
(T) URANIUM-232			100		

L1786672-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1786672-01 10/21/24 17:48 • (MS) R4138375-3 10/21/24 17:48 • (MSD) R4138375-4 10/21/24 17:48

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	20.1	-0.0486	19.0	16.7	94.3	83.1	1	75.0-125			12.6		20
URANIUM-238	19.6	0.0324	19.6	16.3	99.6	82.7	1	75.0-125			18.5		20
(T) URANIUM-232		93.3			96.9	99.1							

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

ACCREDITATIONS & LOCATIONS

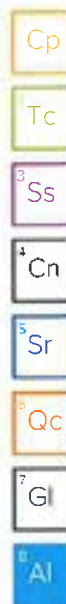
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Alabama	40660	Nebraska	NE-QS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA - ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA - ISO 17025 ⁶	1461.02	ODD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

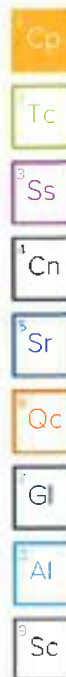
* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.





ANALYTICAL REPORT

November 12, 2024



Energy Fuels Resources

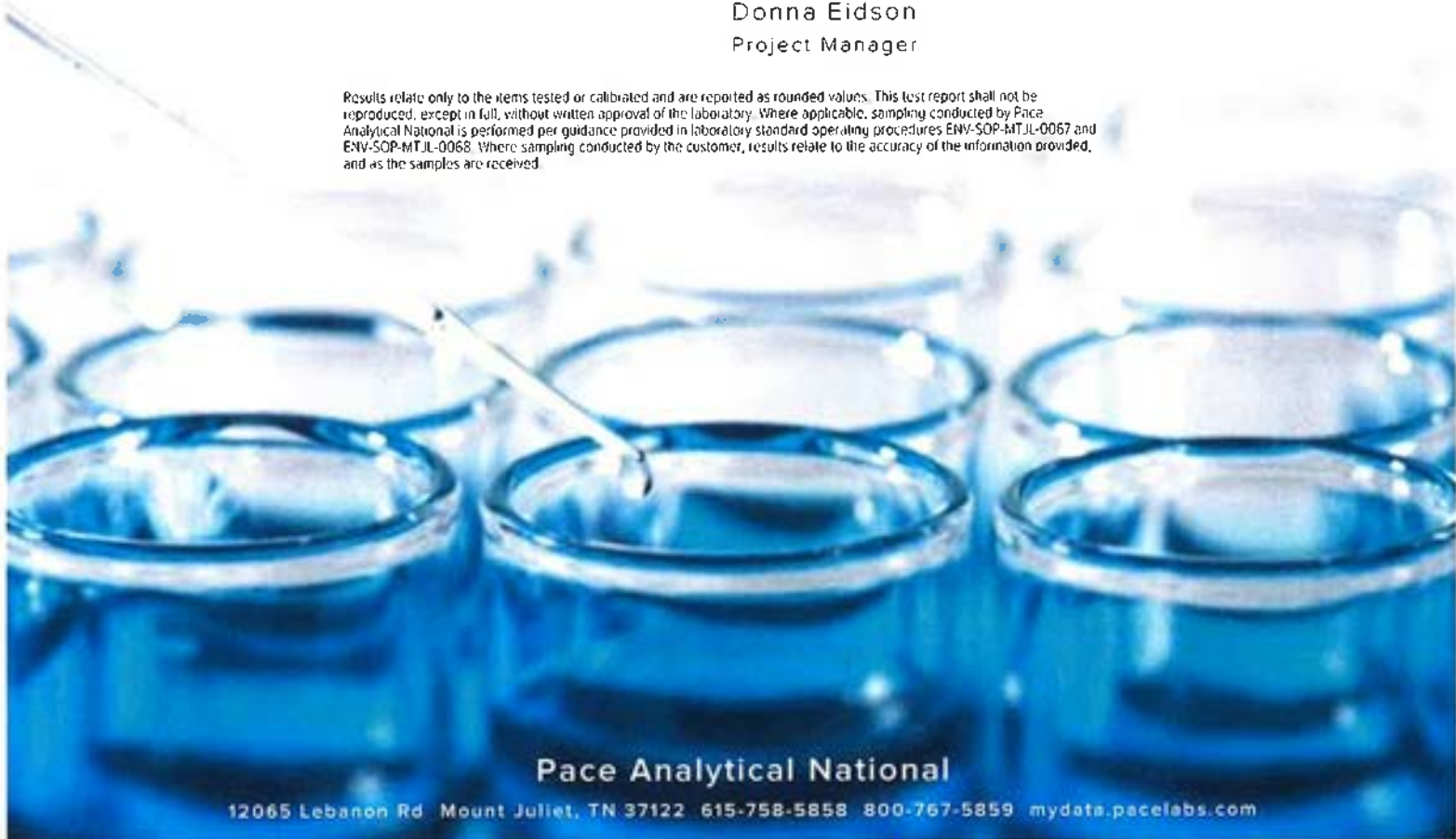
Sample Delivery Group: L1787559
Samples Received: 10/10/2024
Project Number:
Description: Pinyon Plain Mine GW Sampling

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

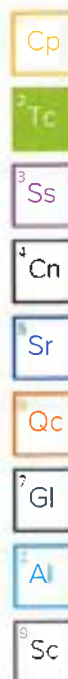


Pace Analytical National

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SAMPLE SUMMARY

MW-01_10092024 L1787559-01 GW

Collected by: Collect date/time: Received date/time:
10/09/24 09:47 10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2380279	1	10/11/24 09:27	10/11/24 16:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2383084	1	10/16/24 10:34	10/16/24 10:34	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2384026	1	10/17/24 16:13	10/17/24 16:13	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2382166	1	10/15/24 12:23	10/15/24 12:23	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2382588	1	10/15/24 15:15	10/15/24 15:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2379932	1	10/14/24 17:41	10/14/24 17:41	DLH	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2379932	10	10/14/24 17:58	10/14/24 17:58	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2387879	1	10/26/24 12:01	10/27/24 18:27	SDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2395823	1	11/10/24 22:10	11/11/24 09:24	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2395838	1	11/10/24 22:35	11/11/24 17:56	LD	Mt. Juliet, TN

MW-02_10092024 L1787559-02 GW

Collected by: Collect date/time: Received date/time:
10/09/24 13:30 10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2380262	1	10/11/24 09:08	10/14/24 15:52	MMF	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2383084	1	10/16/24 10:23	10/16/24 10:23	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2384026	1	10/17/24 16:18	10/17/24 16:18	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2385129	1	10/19/24 11:15	10/19/24 11:15	BRT	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2384068	1	10/17/24 14:58	10/17/24 14:58	KA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2379932	1	10/14/24 18:16	10/14/24 18:16	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2387879	1	10/26/24 12:01	10/27/24 18:42	SDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2395823	1	11/10/24 22:10	11/11/24 09:17	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2395838	1	11/10/24 22:35	11/11/24 18:00	LD	Mt. Juliet, TN

MW-03_10082024 L1787559-03 GW

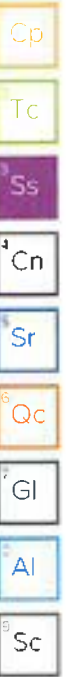
Collected by: Collect date/time: Received date/time:
10/09/24 12:27 10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2380279	1	10/11/24 09:27	10/11/24 16:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2381630	1	10/14/24 09:40	10/14/24 09:40	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2384026	1	10/17/24 16:23	10/17/24 16:23	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2382166	1	10/15/24 12:23	10/15/24 12:23	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2382588	1	10/15/24 15:15	10/15/24 15:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2379934	10	10/12/24 04:22	10/12/24 04:22	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2387879	1	10/26/24 12:01	10/27/24 18:44	SDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2395823	1	11/10/24 22:10	11/11/24 09:25	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2395838	1	11/10/24 22:35	11/11/24 18:03	LD	Mt. Juliet, TN

MW-65_10082024 L1787559-04 GW

Collected by: Collect date/time: Received date/time:
10/09/24 12:27 10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2380279	1	10/11/24 09:27	10/11/24 16:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2381630	1	10/14/24 09:31	10/14/24 09:31	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2384026	1	10/17/24 16:25	10/17/24 16:25	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2382166	1	10/15/24 12:23	10/15/24 12:23	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2382588	1	10/15/24 15:15	10/15/24 15:15	KRB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2379934	10	10/12/24 04:44	10/12/24 04:44	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2391328	1	10/31/24 12:44	11/02/24 19:22	SDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2395823	1	11/10/24 22:10	11/11/24 09:27	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2395838	1	11/10/24 22:35	11/11/24 18:06	LD	Mt. Juliet, TN



SAMPLE SUMMARY

Collected by

Collected date/time

Received date/time

RW-01_10082024 L1787559-05 GW

10/09/24 15:51

10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Gravimetric Analysis by Method 2540 C-2011	WG2380279	1	10/11/24 09:27	10/11/24 16:00	JAC	Mt. Juliet, TN
Wet Chemistry by Method 2320 B-2011	WG2381630	1	10/14/24 09:44	10/14/24 09:44	BJM	Mt. Juliet, TN
Wet Chemistry by Method 353.2	WG2384026	1	10/17/24 16:26	10/17/24 16:26	KMB	Mt. Juliet, TN
Wet Chemistry by Method 9040C	WG2382169	1	10/15/24 14:52	10/15/24 14:52	KA	Mt. Juliet, TN
Wet Chemistry by Method 9050A	WG2384068	1	10/17/24 14:58	10/17/24 14:58	KA	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG2379934	1	10/12/24 05:06	10/12/24 05:06	DLH	Mt. Juliet, TN
Mercury by Method 7470A	WG2391328	1	10/31/24 12:44	11/02/24 19:24	SDG	Mt. Juliet, TN
Metals (ICP) by Method 6010D	WG2395823	1	11/10/24 22:10	11/11/24 09:28	DJS	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG2395838	1	11/10/24 22:35	11/11/24 18:23	LD	Mt. Juliet, TN

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager

Project Narrative

-04 container ID=MW-03 DUP. Changed to MW-65 per KWeinel

Cp

Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

²Al

⁹Sc

WG2380262

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1787559-02](#)

Method Blank (MB)

(MB) R4133649-1 10/14/24 15:52

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1786950-18 Original Sample (OS) • Duplicate (DUP)

(OS) L1786950-18 10/14/24 15:52 • (DUP) R4133649-3 10/14/24 15:52

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	ND	ND	1	0.000		10

L1787596-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1787596-02 10/14/24 15:52 • (DUP) R4133649-4 10/14/24 15:52

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	544	547	1	0.550		10

Laboratory Control Sample (LCS)

(LCS) R4133649-2 10/14/24 15:52

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8740	99.3	85.0-115	

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2380279

Gravimetric Analysis by Method 2540 C-2011

QUALITY CONTROL SUMMARY

[L1787559-01.03.04.05](#)

Method Blank (MB)

(MB) R4132133-1 10/11/24 16:00

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Dissolved Solids	U		10.0	10.0

L1787486-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1787486-07 10/11/24 16:00 • (DUP) R4132133-3 10/11/24 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	543	533	1	1.86		10

L1787666-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1787666-03 10/11/24 16:00 • (DUP) R4132133-4 10/11/24 16:00

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Dissolved Solids	8120	8720	1	7.13		10

Laboratory Control Sample (LCS)

(LCS) R4132133-2 10/11/24 16:00

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Dissolved Solids	8800	8270	94.0	85.0-115	

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2381630

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

L1787559-03.04.05

Method Blank (MB)

(MB) R4132426-2 10/14/24 09:20

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1787559-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1787559-04 10/14/24 09:31 • (DUP) R4132426-3 10/14/24 09:35

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1787884-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1787884-01 10/14/24 11:16 • (DUP) R4132426-4 10/14/24 11:21

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

³Ss⁴Cn

Sr

⁵Qc⁷Gl⁸Al⁹Sc

WG2383084

Wet Chemistry by Method 2320 B-2011

QUALITY CONTROL SUMMARY

[L1787559-01,02](#)

Method Blank (MB)

(MB) R4133440-2 10/16/24 10:03

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Alkalinity,Carbonate	U		8.45	20.0

Sample Narrative:

BLANK: Endpoint pH 4.5

L1787559-02 Original Sample (OS) - Duplicate (DUP)

(OS) L1787559-02 10/16/24 10:23 - (DUP) R4133440-3 10/16/24 10:28

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

L1788383-03 Original Sample (OS) - Duplicate (DUP)

(OS) L1788383-03 10/16/24 12:48 - (DUP) R4133440-4 10/16/24 12:53

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Alkalinity,Carbonate	U	U	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace

DUP: Endpoint pH 4.5

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

WG2384026

Wet Chemistry by Method 353.2

QUALITY CONTROL SUMMARY

[L1787559-01.02.03.04.05](#)

Method Blank (MB)

(MB) R4134213-1 10/17/24 16:08

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Nitrate-Nitrite	U		0.0500	0.100

L1787559-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1787559-01 10/17/24 16:13 • (DUP) R4134213-3 10/17/24 16:14

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	U	U	1	0.000		20

L1789757-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1789757-04 10/17/24 16:58 • (DUP) R4134213-8 10/17/24 16:59

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Nitrate-Nitrite	6.72	5.76	2	15.4		20

Laboratory Control Sample (LCS)

(LCS) R4134213-2 10/17/24 16:09

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Nitrate-Nitrite	2.50	2.43	97.2	90.0-110	

L1787559-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787559-01 10/17/24 16:13 • (MS) R4134213-4 10/17/24 16:16 • (MSD) R4134213-5 10/17/24 16:17

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Nitrate-Nitrite	2.50	U	2.48	2.53	99.2	101	1	90.0-110			2.00	20

L1789757-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1789757-04 10/17/24 16:58 • (MS) R4134213-9 10/17/24 17:01

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/l	mg/l	mg/l	%		%	
Nitrate-Nitrite	2.50	6.72	7.96	49.6	2	90.0-110	J6

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2382166

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

[L1787559-01.03.04](#)

L1787452-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1787452-02 10/15/24 12:23 • (DUP) R4133019-2 10/15/24 12:23

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.33	8.33	1	0.000		1

Sample Narrative:

OS: 8.33 at 18C

DUP: 8.33 at 18C

L1788221-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1788221-03 10/15/24 12:23 • (DUP) R4133019-3 10/15/24 12:23

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	8.05	8.07	1	0.248		1

Sample Narrative:

OS: 8.05 at 18C

DUP: 8.07 at 18C

Laboratory Control Sample (LCS)

(LCS) R4133019-1 10/15/24 12:23

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.99	99.9	99.0-101	

Sample Narrative:

LCS: 9.99 at 18.3C

Cp

Tc

Ss

⁴Cn⁵Sr⁶Qc⁷Gl³Al⁸Sc

WG2382169

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

[L1787559-05](#)

L1787552-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1787552-01 10/15/24 14:52 • (DUP) R4133063-2 10/15/24 14:52

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.87	7.89	1	0.254		1

Sample Narrative:

OS: 7.87 at 18.2C

DUP: 7.89 at 18C

L1788636-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1788636-01 10/15/24 14:52 • (DUP) R4133063-3 10/15/24 14:52

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	9.14	9.16	1	0.219		1

Sample Narrative:

OS: 9.14 at 18.7C

DUP: 9.16 at 18.7C

Laboratory Control Sample (LCS)

(LCS) R4133063-1 10/15/24 14:52

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.97	99.7	99.0-101	

Sample Narrative:

LCS: 9.97 at 19.4C

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl²Al⁹Sc

WG2385129

Wet Chemistry by Method 9040C

QUALITY CONTROL SUMMARY

[L1787559-02](#)

L1789820-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1789820-02 10/19/24 11:15 • (DUP) R4134956-2 10/19/24 11:15

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	7.24	7.25	1	0.138		1

Sample Narrative:

OS: 7.24 at 19.4C

DUP: 7.25 at 19.4C

L1790461-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1790461-01 10/19/24 11:15 • (DUP) R4134956-3 10/19/24 11:15

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	su	su		%		%
pH	12.0	12.0	1	0.334		1

Sample Narrative:

OS: 11.99 at 25C

DUP: 11.95 at 25.2C

Laboratory Control Sample (LCS)

(LCS) R4134956-1 10/19/24 11:15

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	su	su	%	%	
pH	10.0	9.97	99.7	99.0-101	

Sample Narrative:

LCS: 9.97 at 19.3C

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2382588

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

[L1787559-01,03,04](#)

Method Blank (MB)

(MB) R4132957-1 10/15/24 15:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1787559-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1787559-01 10/15/24 15:15 • (DUP) R4132957-3 10/15/24 15:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	umhos/cm	umhos/cm		%		%
Specific Conductance	893	893	1	0.000		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4132957-2 10/15/24 15:15

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	umhos/cm	umhos/cm	%	%	
Specific Conductance	733	688	93.9	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2384068

Wet Chemistry by Method 9050A

QUALITY CONTROL SUMMARY

[L1787559-02.05](#)

Method Blank (MB)

(MB) R4134259-1 10/17/24 14:58

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	umhos/cm		umhos/cm	umhos/cm
Specific Conductance	U		10.0	10.0

Sample Narrative:

BLANK: at 25C

L1787559-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1787559-02 10/17/24 14:58 • (DUP) R4134259-3 10/17/24 14:58

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	692	689	1	0.434		20

Sample Narrative:

OS: at 25C

DUP: at 25C

L1789487-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1789487-05 10/17/24 14:58 • (DUP) R4134259-4 10/17/24 14:58

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	umhos/cm	umhos/cm		%		%
Specific Conductance	2640	2630	1	0.152		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4134259-2 10/17/24 14:58

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	umhos/cm	umhos/cm	%	%	
Specific Conductance	733	745	102	85.0-115	

Sample Narrative:

LCS: at 25C

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

WG2379932

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1787559-01.02

Method Blank (MB)

(MB) R4135335-1 10/14/24 12:27

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1787029-20 Original Sample (OS) • Duplicate (DUP)

(OS) L1787029-20 10/14/24 13:02 • (DUP) R4135335-3 10/14/24 13:20

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	U	U	1	0.000		15
Sulfate	2.56	2.60	1	1.78	J	15

L1787029-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1787029-22 10/14/24 14:12 • (DUP) R4135335-6 10/14/24 14:29

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	U	U	1	0.000		15
Sulfate	23.3	23.0	1	1.21		15

Laboratory Control Sample (LCS)

(LCS) R4135335-2 10/14/24 12:45

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	7.76	97.0	80.0-120	
Sulfate	40.0	38.7	96.8	80.0-120	

L1787029-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787029-20 10/14/24 13:02 • (MS) R4135335-4 10/14/24 13:37 • (MSD) R4135335-5 10/14/24 13:54

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	8.00	U	7.75	7.99	96.8	99.9	1	80.0-120			3.08	15
Sulfate	40.0	2.56	41.0	41.2	96.2	96.7	1	80.0-120			0.492	15

Cp

Tc

3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

WG2379932

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1787559-01.02](#)

L1787029-22 Original Sample (OS) • Matrix Spike (MS)

(OS) L1787029-22 10/14/24 14:12 • (MS) R4135335-7 10/14/24 14:47

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Fluoride	8.00	U	7.78	97.3	1	80.0-120	
Sulfate	40.0	23.3	57.6	85.8	1	80.0-120	

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2379934

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

L1787559-03.04.05

Method Blank (MB)

(MB) R4132270-1 10/12/24 02:12

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Fluoride	U		0.0761	0.150
Sulfate	U		0.637	5.00

L1785216-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1785216-01 10/12/24 02:55 • (DUP) R4132270-3 10/12/24 03:06

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.346	0.405	1	15.7	P1	15
Sulfate	549	549	1	0.0784	E	15

L1785216-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1785216-03 10/12/24 03:38 • (DUP) R4132270-6 10/12/24 03:49

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/l	mg/l		%		%
Fluoride	0.546	0.622	1	13.0		15
Sulfate	443	443	1	0.0260	E	15

Laboratory Control Sample (LCS)

(LCS) R4132270-2 10/12/24 02:22

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Fluoride	8.00	7.66	95.7	80.0-120	
Sulfate	40.0	40.5	101	80.0-120	

L1785216-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1785216-01 10/12/24 02:55 • (MS) R4132270-4 10/12/24 03:17 • (MSD) R4132270-5 10/12/24 03:28

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Fluoride	8.00	0.346	7.78	7.86	92.9	93.9	1	80.0-120			1.02	15
Sulfate	40.0	549	435	435	0.000	0.000	1	80.0-120	EV	EV	0.126	15

Cp

Tc

3 Ss

4 Cn

5 Sr

6 Gc

7 Gl

8 Al

9 Sc

WG2379934

Wet Chemistry by Method 9056A

QUALITY CONTROL SUMMARY

[L1787559-03.04.05](#)

L1785216-03 Original Sample (OS) + Matrix Spike (MS)

(OS) L1785216-03 10/12/24 03:38 + (MS) R4132270-7 10/12/24 04:00

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Fluoride	8.00	0.546	8.09	94.3	1	80.0-120	
Sulfate	40.0	443	366	0.000	1	80.0-120	EV

Cp

Tc

Ss

⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2387879

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

[L1787559-01.02.03](#)

Method Blank (MB)

(MB) R4138216-1 10/27/24 18:22

	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury,Dissolved	U		0.0000700	0.000200

Laboratory Control Sample (LCS)

(LCS) R4138216-2 10/27/24 18:24

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	mg/l	mg/l	%	%	
Mercury,Dissolved	0.00300	0.00291	97.1	80.0-120	

L1787559-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787559-01 10/27/24 18:27 • (MS) R4138216-4 10/27/24 18:37 • (MSD) R4138216-5 10/27/24 18:39

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury,Dissolved	0.00300	U	0.00301	0.00299	100	99.6	1	75.0-125			0.774	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2391328

Mercury by Method 7470A

QUALITY CONTROL SUMMARY

L1787559-04.05

Method Blank (MB)

(MB) R4141254-1 11/02/24 18:52

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Mercury,Dissolved	U		0.0000700	0.000200

Laboratory Control Sample (LCS)

(LCS) R4141254-2 11/02/24 18:55

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Mercury,Dissolved	0.00300	0.00282	93.9	80.0-120	

L1793097-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1793097-02 11/02/24 18:57 • (MS) R4141254-4 11/02/24 19:02 • (MSD) R4141254-5 11/02/24 19:05

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury,Dissolved	0.00300	U	0.00298	0.00299	99.2	99.6	1	75.0-125			0.360	20

L1793338-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1793338-01 11/02/24 19:07 • (MS) R4141254-6 11/02/24 19:09 • (MSD) R4141254-7 11/02/24 19:19

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Mercury,Dissolved	0.00300	U	0.00252	0.00251	84.1	83.7	1	75.0-125			0.435	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2395823

Metals (ICP) by Method 6010D

QUALITY CONTROL SUMMARY

L1787559-01.02.03.04.05

Method Blank (MB)

(MB) R4144523-1 11/11/24 09:14

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Arsenic, Dissolved	U		0.00440	0.0100
Barium, Dissolved	U		0.000736	0.00500
Beryllium, Dissolved	U		0.000330	0.00200
Cadmium, Dissolved	0.000561	U	0.000479	0.00200
Calcium, Dissolved	0.0806	U	0.0793	1.00
Chromium, Dissolved	U		0.00140	0.0100
Lead, Dissolved	U		0.00299	0.00600
Magnesium, Dissolved	U		0.0853	1.00
Nickel, Dissolved	U		0.00161	0.0100
Potassium, Dissolved	0.576	U	0.261	2.00
Selenium, Dissolved	U		0.00735	0.0100
Sodium, Dissolved	U		0.504	3.00

Laboratory Control Sample (LCS)

(LCS) R4144523-2 11/11/24 09:15

Analyte	Spike Amount mg/l	LCS Result mg/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic, Dissolved	1.00	0.962	96.2	80.0-120	
Barium, Dissolved	1.00	1.02	102	80.0-120	
Beryllium, Dissolved	1.00	0.997	99.7	80.0-120	
Cadmium, Dissolved	1.00	0.976	97.6	80.0-120	
Calcium, Dissolved	10.0	10.2	102	80.0-120	
Chromium, Dissolved	1.00	1.01	101	80.0-120	
Lead, Dissolved	1.00	0.989	98.9	80.0-120	
Magnesium, Dissolved	10.0	10.1	101	80.0-120	
Nickel, Dissolved	1.00	0.963	96.3	80.0-120	
Potassium, Dissolved	10.0	10.3	103	80.0-120	
Selenium, Dissolved	1.00	0.972	97.2	80.0-120	
Sodium, Dissolved	10.0	10.3	103	80.0-120	

L1787559-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787559-02 11/11/24 09:17 • (MS) R4144523-4 11/11/24 09:20 • (MSD) R4144523-5 11/11/24 09:22

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic, Dissolved	1.00	0.0300	0.982	0.987	95.2	95.8	1	75.0-125			0.567	20
Barium, Dissolved	1.00	0.0498	1.04	1.05	99.0	100	1	75.0-125			1.10	20
Beryllium, Dissolved	1.00	U	0.976	0.986	97.6	98.6	1	75.0-125			0.977	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2395823

Metals (ICP) by Method 60100

QUALITY CONTROL SUMMARY

L1787559-01.02.03.04.05

L1787559-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787559-02 11/11/24 09:17 • (MS) R4144523-4 11/11/24 09:20 • (MSD) R4144523-5 11/11/24 09:22

Analyte	Spike Amount mg/l	Original Result mg/l	MS Result mg/l	MSD Result mg/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Cadmium,Dissolved	1.00	U	0.965	0.970	96.5	97.0	1	75.0-125			0.560	20
Calcium,Dissolved	10.0	85.8	93.9	94.1	80.9	83.2	1	75.0-125			0.245	20
Chromium,Dissolved	1.00	U	0.987	0.992	98.7	99.2	1	75.0-125			0.559	20
Lead,Dissolved	1.00	U	0.979	0.995	97.9	99.5	1	75.0-125			1.56	20
Magnesium,Dissolved	10.0	41.4	50.4	50.6	89.9	92.0	1	75.0-125			0.423	20
Nickel,Dissolved	1.00	0.0152	0.996	0.992	98.1	97.6	1	75.0-125			0.424	20
Potassium,Dissolved	10.0	1.81	12.1	11.9	103	101	1	75.0-125			1.98	20
Selenium,Dissolved	1.00	U	0.966	0.983	96.6	98.3	1	75.0-125			1.70	20
Sodium,Dissolved	10.0	2.50	12.7	12.7	102	102	1	75.0-125			0.374	20

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷Gl⁸Al⁹Sc

WG2395838

Metals (ICPMS) by Method 6020B

QUALITY CONTROL SUMMARY

L1787559-01.02.03.04.05

Method Blank (MB)

(MB) R4144655-1 11/11/24 17:37

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/l		mg/l	mg/l
Antimony,Dissolved	U		0.000310	0.00400
Thallium,Dissolved	U		0.000130	0.00200
Uranium,Dissolved	U		0.000130	0.00100

Laboratory Control Sample (LCS)

(LCS) R4144655-2 11/11/24 17:41

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/l	mg/l	%	%	
Antimony,Dissolved	0.0500	0.0546	109	80.0-120	
Thallium,Dissolved	0.0500	0.0495	99.0	80.0-120	
Uranium,Dissolved	0.0500	0.0481	96.2	80.0-120	

L1794045-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1794045-07 11/11/24 17:44 • (MS) R4144655-4 11/11/24 17:50 • (MSD) R4144655-5 11/11/24 17:53

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/l	mg/l	mg/l	mg/l	%	%		%			%	%
Antimony,Dissolved	0.0500	0.000828	0.0566	0.0554	112	109	1	75.0-125			2.18	20
Thallium,Dissolved	0.0500	U	0.0493	0.0500	98.6	100	1	75.0-125			1.38	20
Uranium,Dissolved	0.0500	0.00112	0.0506	0.0510	99.0	99.8	1	75.0-125			0.776	20

Cp

Tc

3
Ss4
Cn5
Sr6
Qc7
Gl8
Al9
Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

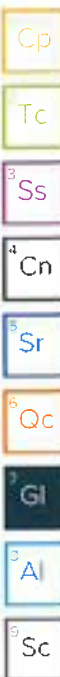
The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ACCREDITATIONS & LOCATIONS

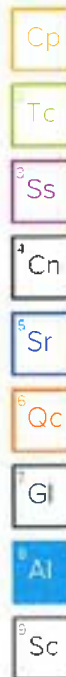
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-05-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	A20612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ¹ ⁶	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ¹ ⁴	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LA60152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.



1787559

Fed Ex tracking #	Gun ID	Temperature
UPS		$1.7 + 0.3 = 2.0$
2		$3.6 + 0.3 = 3.9$
UPS		$5.1 + 0.3 = 5.4$

Name

Date

10/10 NCF-11787559/L1787561 ENFUELCO

R5

Time estimate: 0h

Time spent: 0h

Members

-  Nicole Faulk (responsible)
-  Donna Eidson

Due on 17 October 2024 5:00 PM for target Done

- ☒ Login Clarification needed
- ☐ Chain of custody is incomplete
- ☐ Please specify Metals requested
- ☐ Please specify TCLP requested
- ☐ Received additional samples not listed on COC
- ☐ Sample IDs on containers do not match IDs on COC
- ☐ Client did not "X" analysis
- ☐ Chain of Custody is missing
- ☐ If no COC: Received by: _____
- ☐ If no COC: Date/Time: _____
- ☐ If no COC: Temp./Cont.Rec./pH: _____
- ☐ If no COC: Carrier: _____
- ☐ If no COC: Tracking #: _____
- ☐ Client informed by call
- ☐ Client informed by Email
- ☐ Client informed by Voicemail
- ☐ Date/Time: _____
- ☐ PM initials: _____
- ☐ Client Contact: _____

Comments

- Nicolle Faulk

10 October 2024 4:32 PM

Did not receive MW-65, instead received MW-03 DUP. Logged per COC.
- Donna Eidson

14 October 2024 2:34 PM

Per KWeinell, MW-03DUP should be named MW-65 so you were correct.
- Troy Dunlap

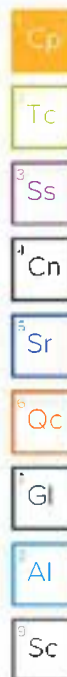
14 October 2024 2:45 PM

Done.



ANALYTICAL REPORT

November 12, 2024



Energy Fuels Resources

Sample Delivery Group: L1787561
Samples Received: 10/10/2024
Project Number:
Description: Pinyon Plain Mine GW Sampling

Report To: Kathy Weinel
225 Union Blvd
Suite 600
Lakewood, CO 80228

Entire Report Reviewed By:

Donna Eidson
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.

Pace Analytical National

12065 Lebanon Rd. Mount Juliet, TN 37122 615-758-5858 800-767-5859 mydata.pacelabs.com

ACCOUNT:
Energy Fuels Resources

PROJECT:

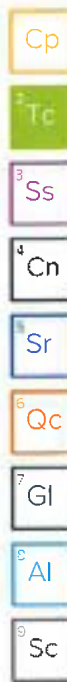
SDG:
L1787561

DATE/TIME:
11/12/24 21:47

PAGE:
1 of 18

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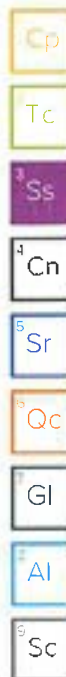


SAMPLE SUMMARY

MW-01_10092024 L1787561-01 Non-Potable Water

Collected by: Collected date/time: Received date/time:
10/09/24 09:47 10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2385898	1	10/23/24 16:22	10/24/24 23:47	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2384072	1	10/22/24 14:51	11/01/24 02:22	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2387326	1	10/23/24 17:20	10/27/24 13:40	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2385898	1	10/23/24 16:22	10/24/24 23:47	RRE	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2381917	1	10/17/24 16:30	10/21/24 17:48	RRE	Mt. Juliet, TN



MW-02_10092024 L1787561-02 Non-Potable Water

Collected by: Collected date/time: Received date/time:
10/09/24 10:20 10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2385898	1	10/23/24 16:22	10/24/24 20:09	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2384072	1	10/22/24 14:51	11/01/24 03:22	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2387331	1	10/27/24 12:20	11/02/24 15:57	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2385898	1	10/23/24 16:22	10/24/24 20:09	RRE	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2381917	1	10/17/24 16:30	10/21/24 17:48	RRE	Mt. Juliet, TN

MW-03_10082024 L1787561-03 Non-Potable Water

Collected by: Collected date/time: Received date/time:
10/09/24 12:27 10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2385898	1	10/23/24 16:22	10/24/24 23:47	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2384072	1	10/22/24 14:51	11/01/24 03:22	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2387331	1	10/27/24 12:20	11/02/24 15:57	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2385898	1	10/23/24 16:22	10/24/24 23:47	RRE	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2381917	1	10/17/24 16:30	10/21/24 17:48	RRE	Mt. Juliet, TN

MW-65_10082024 L1787561-04 Non-Potable Water

Collected by: Collected date/time: Received date/time:
10/09/24 12:27 10/10/24 10:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2385898	1	10/23/24 16:22	10/24/24 23:47	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2384072	1	10/22/24 14:51	11/01/24 03:22	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2387331	1	10/27/24 12:20	11/02/24 15:57	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2385898	1	10/23/24 16:22	10/24/24 23:47	RRE	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2381917	1	10/17/24 16:30	10/21/24 17:48	RRE	Mt. Juliet, TN

RW-01_10082024 L1787561-05 Non-Potable Water

Collected by: Collected date/time: Received date/time:
10/09/24 15:51 10/10/24 10:00

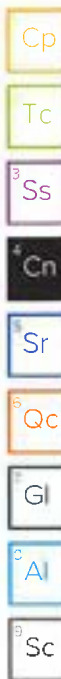
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 900	WG2385898	1	10/23/24 16:22	10/24/24 23:47	ALG	Mt. Juliet, TN
Radiochemistry by Method 903.0/9315	WG2384072	1	10/22/24 14:51	11/01/24 03:22	SNR	Mt. Juliet, TN
Radiochemistry by Method 904/9320	WG2387331	1	10/27/24 12:20	11/02/24 15:57	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2385898	1	10/23/24 16:22	10/24/24 23:47	RRE	Mt. Juliet, TN
Radiochemistry by Method D3972 U-02	WG2381917	1	10/17/24 16:30	10/21/24 17:48	RRE	Mt. Juliet, TN

CASE NARRATIVE

All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.



Donna Eidson
Project Manager



WG2385898

Radiochemistry by Method 900

QUALITY CONTROL SUMMARY

[L1787561-01.02.03.04.05](#)

Method Blank (MB)

(MB) R4137414-1 10/24/24 20:09

	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l
GROSS ALPHA	-0.255	<u>U</u>	0.378	0.671	0.278
GROSS BETA	0.318	<u>U</u>	0.959	1.29	0.613

L1787561-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1787561-02 10/24/24 20:09 • (DUP) R4137414-5 10/24/24 20:09

	Original Result	Original 2 sigma CE	Original MDA	Original Lc	DUP Result	DUP 2 sigma CE	DUP MDA	DUP Lc	DUP RPD	DUP RER	DUP Qualifier	DUP RPD Limits	DUP RER Limit
Analyte	pCi/l	+ / -	pCi/l	pCi/l	pCi/l	+ / -	pCi/l	pCi/l	%			%	
GROSS ALPHA	12.2	2.27	1.54	0.635	11.2	2.20	1.52	0.625	8.48	0.313		20	3
GROSS BETA	1.51	1.48	1.82	0.861	2.88	1.75	2.14	1.02	62.2	0.595		20	3

Laboratory Control Sample (LCS)

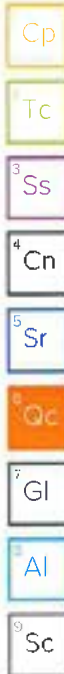
(LCS) R4137414-2 10/24/24 20:09

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	pCi/l	pCi/l	%	%	
GROSS ALPHA	15.0	17.1	114	80.0-120	
GROSS BETA	39.9	43.1	108	80.0-120	

L1788359-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1788359-05 10/24/24 20:09 • (MS) R4137414-3 10/24/24 20:09 • (MSD) R4137414-4 10/24/24 20:09

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	MS RER	RPD Limits
Analyte	pCi/l	pCi/l	pCi/l	pCi/l	%	%		%			%		%
GROSS ALPHA	17.6	0.227	18.2	19.1	102	107	1	70.0-130			4.93		20
GROSS BETA	46.9	-1.82	50.6	49.8	108	106	1	70.0-130			1.58		20



WG2384072

Radiochemistry by Method 903.0/9315

QUALITY CONTROL SUMMARY

[L1787561-01.02.03.04.05](#)

Method Blank (MB)

(MB) R4143172-1 11/01/24 01:21

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	0.0955	J	0.0811	0.114	0.0394
(T) Barium	105		105		

L1788389-45 Original Sample (OS) • Duplicate (DUP)

(OS) L1788389-45 11/01/24 07:23 • (DUP) R4143172-5 11/01/24 02:22

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-226	0.355	0.202	0.226	0.0780	0.191	0.264	0.457	0.157	60.1	0.493	U	20	3
(T) Barium	101				105	105							

Laboratory Control Sample (LCS)

(LCS) R4143172-2 11/01/24 01:21

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.63	113	80.0-120	
(T) Barium			105		

L1788389-31 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1788389-31 11/01/24 04:22 • (MS) R4143172-3 11/01/24 02:22 • (MSD) R4143172-4 11/01/24 02:22

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-226	20.0	0.730	20.7	22.1	99.6	107	1	75.0-125			6.78		20
(T) Barium		103			104	104							

Cp

Tc

Ss

Cn

Sr

Gc

Gd

Al

Sc

WG2387326

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

[L1787561-01](#)

Method Blank (MB)

(MB) R4138721-1 10/27/24 13:40

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	-0.274	<u>U</u>	0.152	0.299	0.156
(T) Barium	113		113		
(T) Yttrium	99.2		99.2		

L1791381-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1791381-02 10/27/24 13:40 • (DUP) R4138721-5 10/27/24 13:40

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	2.68	0.310	0.491	0.260	1.84	0.355	0.619	0.323	37.0	1.77		20	3
(T) Barium	111				130	130							
(T) Yttrium	114				102	102							

Laboratory Control Sample (LCS)

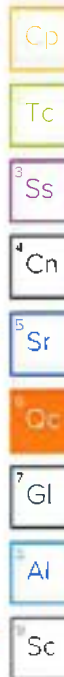
(LCS) R4138721-2 10/27/24 13:40

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.57	91.5	80.0-120	
(T) Barium			126		
(T) Yttrium			113		

L1787548-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787548-04 10/27/24 13:40 • (MS) R4138721-3 10/27/24 13:40 • (MSD) R4138721-4 10/27/24 13:40

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	0.407	13.7	12.7	79.4	73.7	1	70.0-130			7.21		20
(T) Barium		106			103	88.1							
(T) Yttrium		90.6			98.5	102							



WG2387331

Radiochemistry by Method 904/9320

QUALITY CONTROL SUMMARY

L1787561-02.03.04.05

Metnod Blank (MB)

(MB) R4142342-1 11/02/24 15:57

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.0796	<u>U</u>	0.132	0.248	0.131
(T) Barium	108		108		
(T) Yttrium	96.9		96.9		

L1788359-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1788359-14 11/02/24 15:57 • (DUP) R4142342-5 11/02/24 15:57

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
Radium-228	-0.300	0.292	0.568	0.300	0.308	0.341	0.632	0.330	200	1.35	<u>J</u>	20	3
(T) Barium	108				104	104							
(T) Yttrium	95.9				99.0	99.0							

Laboratory Control Sample (LCS)

(LCS) R4142342-2 11/02/24 15:57

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.07	81.4	80.0-120	
(T) Barium			93.3		
(T) Yttrium			107		

L1787561-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1787561-02 11/02/24 15:57 • (MS) R4142342-3 11/02/24 15:57 • (MSD) R4142342-4 11/02/24 15:57

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
Radium-228	16.7	-0.360	13.8	16.5	82.8	98.8	1	70.0-130			17.7		20
(T) Barium		116			99.8	91.6							
(T) Yttrium		96.5			96.7	94.3							

Cp

Tc

³Ss⁹Cn⁵Sr⁶Qc⁷Gl^cAl⁸Sc

WG2381917

Radiochemistry by Method D3972 U-02

QUALITY CONTROL SUMMARY

L1787561-01.02.03.04.05

Method Blank (MB)

(MB) R4138375-1 10/21/24 17:48

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
URANIUM-234	0.0788		0.0432	0.0515	0.0312
URANIUM-235	-0.0275	U	0.0251	0.0622	0.0239
URANIUM-238	0.0215	J	0.0298	0.0461	0.0285
(T) URANIUM-232	94.9		94.9		

L1778467-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1778467-01 10/21/24 17:48 • (DUP) R4138375-5 10/21/24 17:48

Analyte	Original Result pCi/l	Original 2 sigma CE + / -	Original MDA pCi/l	Original Lc pCi/l	DUP Result pCi/l	DUP 2 sigma CE + / -	DUP MDA pCi/l	DUP Lc pCi/l	DUP RPD %	DUP RER	DUP Qualifier	DUP RPD Limits %	DUP RER Limit
URANIUM-234	17.4	1.61	0.487	0.301	15.3	2.32	1.21	0.735	13.0	0.751		20	3
URANIUM-235	0.963	0.553	0.636	0.242	0.672	0.933	1.42	0.539	35.5	0.268	J	20	3
URANIUM-238	16.2	1.56	0.487	0.301	13.8	2.20	1.12	0.687	16.4	0.912		20	3
(T) URANIUM-232	81.7				76.2	76.2							

Laboratory Control Sample (LCS)

(LCS) R4138375-2 10/21/24 17:48

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
URANIUM-234	5.03	4.62	91.8	80.0-120	
URANIUM-238	4.90	4.82	98.4	80.0-120	
(T) URANIUM-232			100		

L1786672-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1786672-01 10/21/24 17:48 • (MS) R4138375-3 10/21/24 17:48 • (MSD) R4138375-4 10/21/24 17:48

Analyte	Spike Amount pCi/l	Original Result pCi/l	MS Result pCi/l	MSD Result pCi/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	MS RER	RPD Limits %
URANIUM-234	20.1	-0.0486	19.0	16.7	94.3	83.1	1	75.0-125			12.6		20
URANIUM-238	19.6	0.0324	19.6	16.3	99.6	82.7	1	75.0-125			18.5		20
(T) URANIUM-232		93.3			96.9	99.1							

Cp

Tc

³Ss⁴Cn⁵Sr⁶Qc⁷GI⁸Al⁹Sc

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDA	Minimum Detectable Activity.
Rec.	Recovery.
RER	Replicate Error Ratio.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(T)	Tracer - A radioisotope of known concentration added to a solution of chemically equivalent radioisotopes at a known concentration to assist in monitoring the yield of the chemical separation.
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
U	Below Detectable Limits: Indicates that the analyte was not detected.

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ²	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1 6}	KY90010	South Carolina	84004002
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1 4}	2006
Louisiana	LA018	Texas	T104704245-20-18
Maine	TN00003	Texas ⁵	LAB0152
Maryland	324	Utah	TN000032021-11
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	110033
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	998093910
Montana	CERT0086	Wyoming	A2LA
A2LA – ISO 17025	1461.01	AIHA-LAP, LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.

* Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace Analytical.

Cp

Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Company Name/Address: Energy Fuels Resources 225 Union Blvd Suite 600 Lakewood, CO 80228 Report to: Kathy Weinel Project Description: Pinyon Plain Mine GW Sampling City/State Collected: <u>Tusay, AZ</u> Please Circle: PT MT CT ET Phone: _____ Client Project # _____ Lab Project # _____ ENEFUELCO-PINYONMINE Collected by (print): <u>Matt Germansen</u> Site/Facility ID # _____ P.O. # _____ Collected by (signature): <u>[Signature]</u> Quote # _____ Rush? (Lab MUST Be Notified) ___ Same Day ___ Five Day ___ Next Day ___ 5 Day (Rad Only) ___ Two Day ___ 10 Day (Rad Only) ___ Three Day Date Results Needed _____ No. of _____ Entries _____ Immediately Packed on Ice N <u>Y</u> <u>X</u>		Billing Information: Accounts Payable 225 Union Blvd Suite 600 Lakewood, CO 80228 Email To: KWeinel@energyfuels.com		Analysis / Container / Preservation <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> <td style="width:10%;">42</td> </tr> <tr> <td>*Diss Metals (FF) 250mlHDPE HNO3</td> <td>ALK, FLUORIDE, PH, SULF 250mlHDPE NoPres</td> <td>GROSS A/B, U-ISO, ADJ 1L HDPE-Add-HNO3</td> <td>NO2NO3 250mlHDPE-H2SO4</td> <td>RA-226-903.0 1L-HDPE-Add-HNO3</td> <td>RA-228 1L-HDPE Add-HNO3</td> <td>TDS 1L-HDPE NoPres</td> <td></td> <td></td> <td></td> <td></td> </tr> </table>										42	42	42	42	42	42	42	42	42	42	42	*Diss Metals (FF) 250mlHDPE HNO3	ALK, FLUORIDE, PH, SULF 250mlHDPE NoPres	GROSS A/B, U-ISO, ADJ 1L HDPE-Add-HNO3	NO2NO3 250mlHDPE-H2SO4	RA-226-903.0 1L-HDPE-Add-HNO3	RA-228 1L-HDPE Add-HNO3	TDS 1L-HDPE NoPres					Chain of Custody Page ___ of ___  MT JULIET, TN 1201 E. Main St. Mt. Juliet, TN 37122 (615) 891-1111 www.paceanalytical.com Pace Terms and Conditions (found at http://www.paceanalytical.com/terms) SOG # <u>L1787301</u> F075 Accnum: ENEFUELCO Template: T217177 Prelogin: P1054318 PM: 732 - Donna Eldson PB: _____ Shipped Via FedEX Ground Remarks _____ Sample # (Lab only) _____	
42	42	42	42	42	42	42	42	42	42	42																											
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Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Entries																															
MW-01-10092024	Grab	GW		10/9/24	947	4	X	X		X		X																									
MW-02-10092024		GW		10/9/24	1330	4	X	X		X		X																									
MW-03-10082024		GW		10/8/24	1227	4	X	X		X		X																									
MW-65-10082024		GW		10/9/24	1227	4	X	X		X		X																									
RW-01-10082024		GW		10/8/24	1551	4	X	X		X		X																									
MW-01-10092024		NPW		10/9/24	947	3			X		X	X																									
MW-02-10092024		NPW		10/9/24	1330	3			X		X	X																									
MW-03-10082024		NPW		10/8/24	1227	3			X		X	X																									
MW-65-10082024		NPW		10/8/24	1227	3			X		X	X																									
RW-01-10082024		NPW		10/8/24	1551	3			X		X	X																									
* Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Bioassay WW - Wastewater DW - Drinking Water OT - Other																																					
Remarks: <u>3 coolers, Temp Blank in each cooler</u> pH _____ Temp _____ Flow _____ Other _____																																					
Samples returned via: ___ UPS ___ FedEx ___ Courier _____				Tracking # _____				T-1 C8D-10941 T4C 4072A72				Trip Blank Received: Yes <u>No</u> HCL / MeqH TBR																									
Relinquished by: (Signature) <u>[Signature]</u>		Date: <u>10/09/24</u>		Time: <u>1550</u>		Received by: (Signature) _____		Trip Blank Received: Yes <u>No</u> HCL / MeqH TBR		Temp: <u>5.1-5.4</u> °C Bottles Received: <u>42</u>		If preservation required by Login: Date/Time _____																									
Relinquished by: (Signature) _____		Date: _____		Time: _____		Received by: (Signature) _____		Temp: _____ °C Bottles Received: _____		Hold: _____		Condition: <u>NCF</u> / OK																									
Relinquished by: (Signature) _____		Date: _____		Time: _____		Received by: (Signature) <u>Christopher Gallun</u>		Date: <u>10/10/24</u>		Time: <u>1000</u>		Hold: _____																									

Sample Receipt Checklist	
COC Seal Present/Intact:	NP <u>X</u> N
COC Signed/Accurate:	Y <u>N</u> N
Bottles arrive intact:	Y <u>N</u> N
Correct bottles used:	Y <u>N</u> N
Sufficient volume sent:	Y <u>N</u> N
If Applicable	
VOA Zero Headspace:	Y <u>N</u> N
Preservation Correct/Checked:	Y <u>N</u> N
RAD Screen <0.5 MR/hr:	Y <u>N</u> N

