ANALYTICAL REPORT

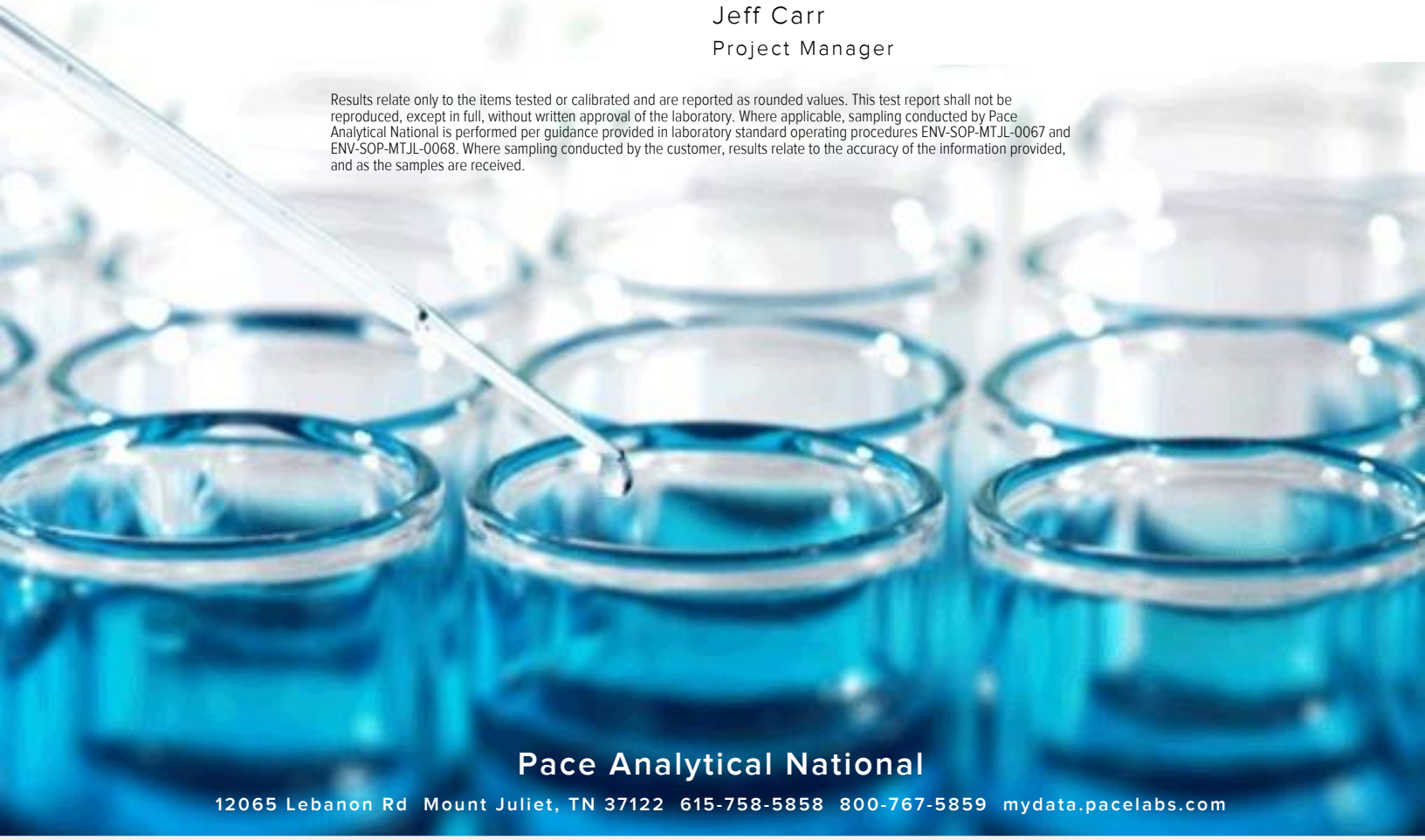
October 06, 2025

ERM - St. Louis, MO

Sample Delivery Group:	L1895679
Samples Received:	09/06/2025
Project Number:	0599247
Description:	Grand Tower Energy Center Groundwater 2Q25 Sampling
Report To:	Randy Homburg
	1968 Craig Road, Suite 100
	Saint Louis, MO 63146

Entire Report Reviewed By:

Jeff Carr
Project Manager



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APW-03-WG-20250903 L1895679-01

Collected by: Marshall Arendell | Collected date/time: 09/03/25 14:30 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2604016	1	09/22/25 10:09	09/26/25 11:51	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-08-WG-20250905 L1895679-02

Collected by: Marshall Arendell | Collected date/time: 09/05/25 08:35 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2604016	1	09/22/25 10:09	09/26/25 11:51	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-07-WG-20250904 L1895679-03

Collected by: Marshall Arendell | Collected date/time: 09/04/25 16:35 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2605695	1	09/23/25 06:41	09/29/25 12:30	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-10S-WG-20250903 L1895679-04

Collected by: Marshall Arendell | Collected date/time: 09/03/25 16:45 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2605695	1	09/23/25 06:41	09/29/25 12:30	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-10D-WG-20250903 L1895679-05

Collected by: Marshall Arendell | Collected date/time: 09/03/25 15:55 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-06S-WG-20250904 L1895679-06

Collected by: Marshall Arendell | Collected date/time: 09/04/25 10:55 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-06D-WG-20250904 L1895679-07

Collected by: Marshall Arendell | Collected date/time: 09/04/25 09:55 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-05R-WG-20250904 L1895679-08

Collected by: Marshall Arendell | Collected date/time: 09/04/25 12:30 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-09-WG-20250905 L1895679-09

Collected by: Marshall Arendell | Collected date/time: 09/05/25 09:30 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-02-WG-20250904 L1895679-10

Collected by: Marshall Arendell | Collected date/time: 09/04/25 13:30 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2608656	1	09/29/25 08:57	09/30/25 21:48	RGT	Mt. Juliet, TN

APW-01R-WG-20250904 L1895679-11

Collected by: Marshall Arendell | Collected date/time: 09/04/25 15:25 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2610081	1	09/30/25 09:02	10/03/25 16:09	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2610081	1	09/30/25 09:02	10/03/25 16:09	ZRG	Mt. Juliet, TN

APW-04-WG-20250904 L1895679-12

Collected by: Marshall Arendell | Collected date/time: 09/04/25 08:10 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2610081	1	09/30/25 09:02	10/01/25 17:27	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2610081	1	09/30/25 09:02	10/01/25 17:27	ZRG	Mt. Juliet, TN

EB-01-WG-20250903 L1895679-13

Collected by: Marshall Arendell | Collected date/time: 09/03/25 10:00 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2610081	1	09/30/25 09:02	10/01/25 17:27	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2610081	1	09/30/25 09:02	10/01/25 17:27	ZRG	Mt. Juliet, TN

DUP-01-WG-20250904 L1895679-14

Collected by: Marshall Arendell | Collected date/time: 09/04/25 00:01 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2610081	1	09/30/25 09:02	10/01/25 17:27	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2610081	1	09/30/25 09:02	10/01/25 17:27	ZRG	Mt. Juliet, TN

DUP-02-WG-20250905 L1895679-15

Collected by: Marshall Arendell | Collected date/time: 09/05/25 00:02 | Received date/time: 09/06/25 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Radiochemistry by Method 904/9320	WG2603155	1	09/18/25 07:05	09/22/25 11:19	DDD	Mt. Juliet, TN
Radiochemistry by Method Calculation	WG2610081	1	09/30/25 09:02	10/01/25 17:27	ZRG	Mt. Juliet, TN
Radiochemistry by Method SM7500Ra B M	WG2610081	1	09/30/25 09:02	10/01/25 17:27	ZRG	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.

Jeff Carr
Project Manager

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	0.597		0.557	0.593	0.551	0.297	09/26/2025 11:51	WG2604016
(T) Barium	*95.0*					*30.0-110*	*09/26/2025 11:51*	WG2604016
(T) Yttrium	*97.5*					*30.0-110*	*09/26/2025 11:51*	WG2604016

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.899		0.661	0.739	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.302	J	0.356	0.469	0.492	0.168	09/30/2025 21:48	WG2608656
(T) Barium-133	*74.6*					*30.0-110*	*09/30/2025 21:48*	WG2608656

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.950		0.568	0.613	0.543	0.293	09/26/2025 11:51	WG2604016
(T) Barium	*123*	C1				*30.0-110*	*09/26/2025 11:51*	WG2604016
(T) Yttrium	*96.4*					*30.0-110*	*09/26/2025 11:51*	WG2604016

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.22		0.638	0.664	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.273	J	0.291	0.397	0.382	0.116	09/30/2025 21:48	WG2608656
(T) Barium-133	*82.0*					*30.0-110*	*09/30/2025 21:48*	WG2608656

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	1.32		0.518	0.568	0.787	0.251	09/29/2025 12:30	WG2605695
(T) Barium	*122*	C1				*30.0-110*	*09/29/2025 12:30*	WG2605695
(T) Yttrium	*104*					*30.0-110*	*09/29/2025 12:30*	WG2605695

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.91		0.654	0.893	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.597		0.399	0.553	0.423	0.136	09/30/2025 21:48	WG2608656
(T) Barium-133	*77.8*					*30.0-110*	*09/30/2025 21:48*	WG2608656

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	1.19		0.510	0.558	0.782	0.249	09/29/2025 12:30	WG2605695
(T) Barium	*105*					*30.0-110*	*09/29/2025 12:30*	WG2605695
(T) Yttrium	*97.9*					*30.0-110*	*09/29/2025 12:30*	WG2605695

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.06		0.651	0.855	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.869		0.405	0.571	0.345	0.113	09/30/2025 21:48	WG2608656
(T) Barium-133	*97.8*					*30.0-110*	*09/30/2025 21:48*	WG2608656

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.697	J	0.553	0.592	0.906	0.282	09/22/2025 11:19	WG2603155
(T) Barium	*125*	C1				*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*92.1*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.881	J	0.609	0.980	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.185	J	0.256	0.348	0.374	0.118	09/30/2025 21:48	WG2608656
(T) Barium-133	*87.8*					*30.0-110*	*09/30/2025 21:48*	WG2608656

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.800	J	0.516	0.557	0.832	0.259	09/22/2025 11:19	WG2603155
(T) Barium	*116*	C1				*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*100*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	1.14		0.589	0.898	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.339		0.283	0.394	0.338	0.110	09/30/2025 21:48	WG2608656
(T) Barium-133	*106*					*30.0-110*	*09/30/2025 21:48*	WG2608656

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

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	0.998		0.534	0.580	0.843	0.263	09/22/2025 11:19	WG2603155
(T) Barium	*114*	C1				*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*101*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.55		0.622	0.895	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.548		0.319	0.453	0.302	0.0935	09/30/2025 21:48	WG2608656
(T) Barium-133	*99.5*					*30.0-110*	*09/30/2025 21:48*	WG2608656

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.463	J	0.500	0.532	0.838	0.261	09/22/2025 11:19	WG2603155
(T) Barium	*112*	C1				*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*101*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.687	J	0.559	0.903	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.224	J	0.250	0.333	0.337	0.104	09/30/2025 21:48	WG2608656
(T) Barium-133	*104*					*30.0-110*	*09/30/2025 21:48*	WG2608656

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	0.0164	U	0.480	0.486	0.854	0.265	09/22/2025 11:19	WG2603155
(T) Barium	*109*					*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*93.8*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.0164	U	0.491	0.890	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	-0.00720	U	0.105	0.121	0.250	0.0713	09/30/2025 21:48	WG2608656
(T) Barium-133	*94.4*					*30.0-110*	*09/30/2025 21:48*	WG2608656

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.560	J	0.696	0.731	1.17	0.371	09/22/2025 11:19	WG2603155
(T) Barium	*102*					*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*95.6*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.619	J	0.714	1.20	09/30/2025 21:48	WG2608656

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.0586	U	0.159	0.205	0.272	0.0873	09/30/2025 21:48	WG2608656
(T) Barium-133	*96.6*					*30.0-110*	*09/30/2025 21:48*	WG2608656

Radiochemistry by Method 904/9320

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-228	0.852	J	0.646	0.687	1.06	0.336	09/22/2025 11:19	WG2603155
(T) Barium	*111*	C1				*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*95.7*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result pCi/l	Qualifier	Uncertainty + / -	MDA pCi/l	Analysis Date date / time	Batch
Combined Radium	0.859	J	0.660	1.10	10/03/2025 16:09	WG2610081

Radiochemistry by Method SM7500Ra B M

Analyte	Result pCi/l	Qualifier	2 sigma CE + / -	TPU + / -	MDA pCi/l	Lc pCi/l	Analysis Date date / time	Batch
RADIUM-226	0.00715	U	0.137	0.151	0.280	0.0866	10/03/2025 16:09	WG2610081
(T) Barium-133	*99.9*					*30.0-110*	*10/03/2025 16:09*	WG2610081

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	0.634	J	0.668	0.705	1.12	0.353	09/22/2025 11:19	WG2603155
(T) Barium	*103*					*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*106*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	1.14	J	0.726	1.15	10/01/2025 17:27	WG2610081

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.501		0.285	0.398	0.270	0.0853	10/01/2025 17:27	WG2610081
(T) Barium-133	*95.9*					*30.0-110*	*10/01/2025 17:27*	WG2610081

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	-0.0186	U	0.698	0.704	1.22	0.386	09/22/2025 11:19	WG2603155
(T) Barium	*110*					*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*100*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.000	U	0.717	1.28	10/01/2025 17:27	WG2610081

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	-0.0553	U	0.162	0.203	0.385	0.124	10/01/2025 17:27	WG2610081
(T) Barium-133	*84.8*					*30.0-110*	*10/01/2025 17:27*	WG2610081

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	1.66		0.734	0.796	1.15	0.363	09/22/2025 11:19	WG2603155
(T) Barium	*107*					*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*92.7*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	2.00		0.787	1.20	10/01/2025 17:27	WG2610081

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	0.341		0.283	0.406	0.326	0.0959	10/01/2025 17:27	WG2610081
(T) Barium-133	*94.3*					*30.0-110*	*10/01/2025 17:27*	WG2610081

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	0.551	J	0.694	0.729	1.17	0.369	09/22/2025 11:19	WG2603155
(T) Barium	*135*	C1				*30.0-110*	*09/22/2025 11:19*	WG2603155
(T) Yttrium	*92.1*					*30.0-110*	*09/22/2025 11:19*	WG2603155

Radiochemistry by Method Calculation

Analyte	Result	Qualifier	Uncertainty	MDA	Analysis Date	Batch
	pCi/l		+ / -	pCi/l	date / time	
Combined Radium	0.551	J	0.717	1.25	10/01/2025 17:27	WG2610081

Radiochemistry by Method SM7500Ra B M

Analyte	Result	Qualifier	2 sigma CE	TPU	MDA	Lc	Analysis Date	Batch
	pCi/l		+ / -	+ / -	pCi/l	pCi/l	date / time	
RADIUM-226	-0.0852	U	0.181	0.233	0.427	0.143	10/01/2025 17:27	WG2610081
(T) Barium-133	*88.8*					*30.0-110*	*10/01/2025 17:27*	WG2610081

Method Blank (MB)

(MB) R4278089-1 09/22/25 11:19

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.315	J	0.286	0.474	0.148
(T) Barium	*114*	C1	*114*		
(T) Yttrium	*95.9*		*95.9*		

L1895679-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1895679-11 09/22/25 11:19 • (DUP) R4278089-5 09/22/25 11:19

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	0.852	0.646	1.06	0.336	1.13	0.556	0.873	0.273	27.6	0.321		20	3
(T) Barium	*111*				*108*	*108*							
(T) Yttrium	*95.7*				*99.7*	*99.7*							

Laboratory Control Sample (LCS)

(LCS) R4278089-2 09/22/25 11:19

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	5.04	101	80.0-120	
(T) Barium			*116*		C1
(T) Yttrium			*95.6*		

L1895349-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1895349-05 09/22/25 11:19 • (MS) R4278089-3 09/22/25 11:19 • (MSD) R4278089-4 09/22/25 11:19

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	10.0	0.453	11.0	9.96	105	95.0	1	70.0-130			9.49		20
(T) Barium		*103*			*105*	*102*							
(T) Yttrium		*98.1*			*94.5*	*98.3*							

QUALITY CONTROL SUMMARY

L1895679-01,02

Method Blank (MB)

(MB) R4279245-1 09/26/25 11:51

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-228	0.182	J	0.300	0.307	0.165
(T) Barium	*93.4*		*93.4*		
(T) Yttrium	*92.5*		*92.5*		

L1899840-29 Original Sample (OS) • Duplicate (DUP)

(OS) L1899840-29 09/26/25 11:51 • (DUP) R4279245-5 09/26/25 11:51

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	0.0485	0.576	0.601	0.325	0.446	0.506	0.508	0.272	161	0.519	J	20	3
(T) Barium	*123*				*110*	*110*							
(T) Yttrium	*96.8*				*99.6*	*99.6*							

Laboratory Control Sample (LCS)

(LCS) R4279245-2 09/26/25 11:51

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-228	5.00	4.59	91.8	80.0-120	
(T) Barium			*129*		C1
(T) Yttrium			*99.3*		

L1895349-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1895349-05 09/26/25 11:51 • (MS) R4279245-3 09/26/25 11:51 • (MSD) R4279245-4 09/26/25 11:51

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	10.0	0.177	8.96	8.50	87.8	83.2	1	70.0-130			5.25		20
(T) Barium		*102*			*92.3*	*119*				C1			
(T) Yttrium		*93.1*			*95.0*	*93.0*							

Method Blank (MB)

(MB) R4281268-1 09/29/25 12:30

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-228	0.185	U	0.291	0.493	
(T) Barium	*107*		*107*		
(T) Yttrium	*87.9*		*87.9*		

L1900439-25 Original Sample (OS) • Duplicate (DUP)

(OS) L1900439-25 09/29/25 12:30 • (DUP) R4281268-5 09/29/25 12:30

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	1.67	0.654	1.01	0.325	1.02	0.626	1.01		48.1	0.716		20	3
(T) Barium	*121*				*128*	*128*					C1		
(T) Yttrium	*96.6*				*100*	*100*							

Laboratory Control Sample (LCS)

(LCS) R4281268-2 09/29/25 12:30

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-228	5.00	5.62	112	80.0-120	
(T) Barium			*104*		
(T) Yttrium			*86.4*		

L1900439-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1900439-21 09/29/25 12:30 • (MS) R4281268-3 09/29/25 12:30 • (MSD) R4281268-4 09/29/25 12:30

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	10.0	1.40	9.68	9.24	82.8	78.4	1	70.0-130			4.66		20
(T) Barium		*96.2*			*108*	*117*				C1			
(T) Yttrium		*89.8*			*101*	*99.1*							

Method Blank (MB)

(MB) R4281732-1 09/30/25 21:48

Analyte	MB Result	MB Qualifier	MB 2 sigma CE	MB MDA	MB Lc
	pCi/l		+ / -	pCi/l	pCi/l
Radium-226	-0.0117	U	0.0268	0.0584	
(T) Barium-133	*79.7*		*79.7*		

L1895679-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1895679-10 09/30/25 21:48 • (DUP) R4281732-5 09/30/25 21:48

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	0.0586	0.159	0.272	0.0873	0.137	0.189	0.276		80.1	0.317	J	20	3
(T) Barium-133	*96.6*				*101*	*101*							

Laboratory Control Sample (LCS)

(LCS) R4281732-2 09/30/25 21:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	pCi/l	pCi/l	%	%	
Radium-226	5.00	5.31	106	80.0-120	
(T) Barium-133			*79.6*		

L1895679-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1895679-01 09/30/25 21:48 • (MS) R4281732-3 09/30/25 21:48 • (MSD) R4281732-4 09/30/25 21:48

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	0.302	20.3	19.7	100	97.1	1	75.0-125			3.05		20
(T) Barium-133		*74.6*			*98.8*	*98.2*							

Method Blank (MB)

(MB) R4283205-1 10/01/25 17:27

Analyte	MB Result pCi/l	MB Qualifier	MB 2 sigma CE + / -	MB MDA pCi/l	MB Lc pCi/l
Radium-226	-0.00213	U	0.0428	0.0890	0.0286
(T) Barium-133	*87.6*		*87.6*		

L1895679-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1895679-15 10/01/25 17:27 • (DUP) R4283205-5 10/01/25 17:27

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	-0.0852	0.181	0.427	0.143	0.0273	0.164	0.331	0.0973	200	0.460	U	20	3
(T) Barium-133	*88.8*				*83.6*	*83.6*							

Laboratory Control Sample (LCS)

(LCS) R4283205-2 10/01/25 17:27

Analyte	Spike Amount pCi/l	LCS Result pCi/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Radium-226	5.00	5.21	104	80.0-120	
(T) Barium-133			*80.6*		

L1895679-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1895679-11 10/03/25 16:09 • (MS) R4283205-3 10/01/25 17:27 • (MSD) R4283205-4 10/01/25 17:27

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	0.00715	21.1	19.1	105	95.6	1	75.0-125			9.60		20
(T) Barium-133		*99.9*			*103*	*97.8*							

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.
TPU	Total Propagated Uncertainty reported at 2 sigma (counting error plus all measurable variables).
Lc	Decision Level or Critical Level. DOE required Detection limit at a 68% confidence level.
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.
U (Radiochemistry)	Result + Error < MDA.
J (Radiochemistry)	Result < MDA; Result + Error > MDA.
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.

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 [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:
ERM - St. Louis, MO

1968 Craig Road, Suite 100
Saint Louis, MO 63146

Billing Information:
Accounts Payable Dept.
1701 Golf Road, Suite 1-1000
Rolling Meadows, IL 60008-4242

Report to:
Randy Homburg 314-682-3980

Email To:
Randy.Homburg@erm.com;Tim.Wilson@erm.co

Project Description:
Grand Tower Energy Center Groundwater 2Q25

City/State Collected: Grand Tower, IL

Please Circle: PT MT CT ET

Regulatory Program(DOD,RCRA,DW,etc):

Client Project #
0599247

Lab Project #
ERMSCMO-0599247

Collected by (print):
Marshall Arendell

Site/Facility ID #

P.O. #

Collected by (signature):
Immediately
Packed on Ice N ___ Y X

Rush? (Lab MUST Be Notified)
___ Same Day ___ Five Day
___ Next Day ___ 5 Day (Rad Only)
___ Two Day ___ 10 Day (Rad Only)
___ Three Day X STD TAT

Quote #

Date Results Needed

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Pace
PEOPLE ADVANCING SCIENCE

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://info.pacelabs.com/hubfs/pas-standard-terms.pdf

SDG # L1604579

F016

Acctnum: **ERMSCMO**
Template: **T243472**
Prelogin: **P1175082**
PM: **206 - Jeff Carr**
PB:
Shipped Via: **FedEX Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	RA-226 1L-HDPE-Add HNO3	RA-228 1L-HDPE-Add-HNO3	Pres Chk	Remarks	Sample # (lab only)
APW-03-WG-2025 0903	Grab	NPW		9/3/2025	1430	3	X	X			01
APW-08-WG-2025 0905		NPW		9/5/2025	0835	3	X	X			02
APW-07-WG-2025 0904		NPW		9/4/2025	1635	3	X	X			03
APW-10S-WG-2025 0903		NPW		9/3/2025	1645	3	X	X			04
APW-10D-WG-2025 0903		NPW		9/3/2025	1555	3	X	X			05
APW-06S-WG-2025 0904		NPW		9/4/2025	1055	3	X	X			06
APW-06D-WG-2025 0904		NPW		9/4/2025	0955	3	X	X			07
APW-05R-WG-2025 0904		NPW		9/4/2025	1230	3	X	X			08
APW-09-WG-2025 0905		NPW		9/5/2025	0930	3	X	X			09
APW-02-WG-2025 0904		NPW		9/4/2025	1330	3	X	X			10

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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 Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	9/5/25	1200	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			CRobello

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 45

Date: 09.06.25 Time: 0900

If preservation required by Login: Date/Time

Hold:

Conditions: NCF / OK

Company Name/Address:
ERM - St. Louis, MO

1968 Craig Road, Suite 100
Saint Louis, MO 63146

Billing Information:
Accounts Payable Dept.
1701 Golf Road, Suite 1-1000
Rolling Meadows, IL 60008-4242

Pres Chk

Report to:
Randy Homburg 314-682-3980

Email To:
Randy.Homburg@erm.com;Tim.Wilson@erm.co

Project Description:
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City/State Collected: Grand Tower, IL

Please Circle: PT MT CT ET

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ERMSCMO-0599247

Collected by (print):
Marshall Arendell

Site/Facility ID #

P.O. #

Collected by (signature):

Immediately Packed on Ice N ____ Y X

Rush? (Lab MUST Be Notified)
____ Same Day ____ Five Day
____ Next Day ____ 5 Day (Rad Only)
____ Two Day ____ 10 Day (Rad Only)
____ Three Day X STD TAT

Quote #

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	RA-226 1L-HDPE-Add HNO3	RA-228 1L-HDPE-Add-HNO3							Remarks	Sample # (lab only)
APW-01R-WG-2025 0904	Grab	NPW		9/4/2025	1525	3	X	X								11
APW-04-WG-2025 0904		NPW		9/4/2025	0810	3	X	X								12
EB-01-WG-2025 0903		NPW		9/3/2025	1000	3	X	X								13
DUP-01-WG-2025 0904		NPW		9/4/2025	0001	3	X	X								14
DUP-02-WG-2025 0905		NPW		9/5/2025	0002	3	X	X								15

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Pace
PEOPLE ADVANCING SCIENCE

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SDG # L1806624

Table #

Acctnum: **ERMSCMO**
Template: **T243472**
Prelogin: **P1175082**
PM: **206 - Jeff Carr**
PB:

Shipped Via: **FedEX Ground**

* Matrix:
SS - Soil **AIR** - Air **F** - Filter
GW - Groundwater **B** - Bioassay
WW - WasteWater
DW - Drinking Water
OT - Other_____

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier _____

Tracking #

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 Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	9/5/2025	1200	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			CRobert

Trip Blank Received: Yes / No
HCL / MeoH
TBR

Temp: °C Bottles Received: 45

If preservation required by Login: Date/Time

Date: 09.06.25 Time: 0900

Hold:

Condition: NCF OK

Multiple Parcel Form L# L1895679

Parcel Tracking Number	Infrared Thermometer ID	Temperature Reading (°C)	Correction Factor (°C)	Corrected Temperature (°C)	Custody Seal Intact
4580 6312 5225	TUA9	2.3	-0.1	2.2	Yes / No / Not Present
4580 6312 5236			0.4	-0.1	0.3	Yes / No / Not Present
4102 9167 4331			4.7	-0.1	4.6	Yes / No / Not Present
4416 7188 8478			3.4	-0.1	3.3	Yes / No / Not Present
4718 2716 7417			0.2	-0.1	0.1	Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present
					Yes / No / Not Present

CRomero
Name

09-06-25
Date