

Caerus Oil and Gas

Sample Delivery Group: L1762660
Samples Received: 08/01/2024
Project Number:
Description: Love Ranch 8 Remediation
Site: LOVE RANCH 8 REMEDIATION
Report To: Jake J. / Brett M. / Blair R. / Andy V.
143 Diamond Avenue
Parachute, CO 81635

Entire Report Reviewed By:



Chris Ward
Project Manager

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

SAMPLE SUMMARY

20240729-LOVE RANCH 8-(SB MW05)@5 L1762660-01 Solid

Collected by
Ryan Finley

Collected date/time
07/29/24 09:30

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336103	1	08/08/24 18:07	08/08/24 18:07	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2335486	1	08/12/24 11:24	08/13/24 02:01	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338849	1	08/08/24 11:17	08/08/24 12:07	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2338858	1	08/08/24 11:20	08/08/24 15:23	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:29	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:09	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336102	1	08/06/24 14:48	08/07/24 10:57	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 09:39	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 13:56	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 08:25	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 20:24	DSH	Mt. Juliet, TN

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

20240729-LOVE RANCH 8-(SB MW07)@5 L1762660-02 Solid

Collected by
Ryan Finley

Collected date/time
07/29/24 11:15

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336103	1	08/08/24 18:09	08/08/24 18:09	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2335486	1	08/12/24 11:24	08/13/24 02:08	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338849	1	08/08/24 11:17	08/08/24 12:07	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2338858	1	08/08/24 11:20	08/08/24 15:23	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:31	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:14	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336102	1	08/06/24 14:48	08/07/24 10:59	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353820	5	08/31/24 07:57	09/01/24 14:28	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 10:03	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 14:14	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 10:20	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 20:41	DSH	Mt. Juliet, TN

20240729-LOVE RANCH 8-(SB MW08)@4 L1762660-03 Solid

Collected by
Ryan Finley

Collected date/time
07/29/24 12:10

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336100	1	08/08/24 11:31	08/08/24 11:31	MAP	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2335486	1	08/12/24 11:24	08/13/24 02:26	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338803	1	08/08/24 10:19	08/08/24 11:29	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2338805	1	08/08/24 10:22	08/08/24 15:03	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:32	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:16	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336101	1	08/06/24 11:24	08/07/24 09:48	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353820	5	08/31/24 07:57	09/01/24 14:31	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 10:51	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 14:33	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 08:39	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 20:59	DSH	Mt. Juliet, TN

20240729-LOVE RANCH 8-(SB MW06)@4 L1762660-04 Solid

Collected by
Ryan Finley

Collected date/time
07/29/24 13:17

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336100	1	08/08/24 11:36	08/08/24 11:36	MAP	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2335486	1	08/12/24 11:24	08/13/24 02:32	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338803	1	08/08/24 10:19	08/08/24 11:29	BJM	Mt. Juliet, TN

SAMPLE SUMMARY

20240729-LOVE RANCH 8-(SB MW06)@4 L1762660-04 Solid

Collected by
Ryan Finley

Collected date/time
07/29/24 13:17

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9050AMod	WG2338805	1	08/08/24 10:22	08/08/24 15:03	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:06	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:17	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336101	1	08/06/24 11:24	08/07/24 09:49	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 11:15	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 14:52	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 09:37	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 21:17	DSH	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

20240729-LOVE RANCH 8-(SB MW09)@4 L1762660-05 Solid

Collected by
Ryan Finley

Collected date/time
07/29/24 14:16

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336103	1	08/08/24 18:11	08/08/24 18:11	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2335486	1	08/12/24 11:24	08/13/24 02:38	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338849	1	08/08/24 11:17	08/08/24 12:07	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2338858	1	08/08/24 11:20	08/08/24 15:23	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:34	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:19	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336102	1	08/06/24 14:48	08/07/24 11:01	MAP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG2353820	5	08/31/24 07:57	09/01/24 14:49	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 11:38	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 15:12	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 08:54	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 21:34	DSH	Mt. Juliet, TN

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

20240729-LOVE RANCH 8-(SB MW10)@4 L1762660-06 Solid

Collected by
Ryan Finley

Collected date/time
07/29/24 15:10

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336100	1	08/08/24 11:38	08/08/24 11:38	MAP	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2335486	1	08/12/24 11:24	08/13/24 02:45	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338803	1	08/08/24 10:19	08/08/24 11:29	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2338805	1	08/08/24 10:22	08/08/24 15:03	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:36	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:21	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336101	1	08/06/24 11:24	08/07/24 09:51	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 12:02	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 15:31	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 13:56	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 21:52	DSH	Mt. Juliet, TN

20240729-LOVE RANCH 8-(SB MW11)@4 L1762660-07 Solid

Collected by
Ryan Finley

Collected date/time
07/30/24 08:30

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336103	1	08/08/24 18:12	08/08/24 18:12	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2335486	1	08/12/24 11:24	08/13/24 02:51	EKB	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338849	1	08/08/24 11:17	08/08/24 12:07	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2338858	1	08/08/24 11:20	08/08/24 15:23	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:37	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:23	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336102	1	08/06/24 14:48	08/07/24 11:02	MAP	Mt. Juliet, TN

SAMPLE SUMMARY

20240729-LOVE RANCH 8-(SB MW11)@4 L1762660-07 Solid

Collected by
Ryan Finley

Collected date/time
07/30/24 08:30

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 12:26	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 15:50	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 10:49	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 22:10	DSH	Mt. Juliet, TN

20240729-LOVE RANCH 8-(SB MW11)@12 L1762660-08 Solid

Collected by
Ryan Finley

Collected date/time
07/30/24 08:42

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336100	1	08/08/24 11:40	08/08/24 11:40	MAP	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2332344	1	08/07/24 11:57	08/08/24 00:53	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338803	1	08/08/24 10:19	08/08/24 11:29	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2338805	1	08/08/24 10:22	08/08/24 15:03	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:42	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:24	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336101	1	08/06/24 11:24	08/07/24 09:53	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 14:11	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 16:09	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 09:08	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 22:28	DSH	Mt. Juliet, TN

20240729-LOVE RANCH 8-(SB MW11)@23 L1762660-09 Solid

Collected by
Ryan Finley

Collected date/time
07/30/24 09:05

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 14:37	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 16:27	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 10:34	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 22:45	DSH	Mt. Juliet, TN

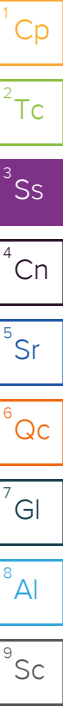
20240729-LOVE RANCH 8-(SB MW12)@4 L1762660-10 Solid

Collected by
Ryan Finley

Collected date/time
07/30/24 13:38

Received date/time
08/01/24 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG2336103	1	08/08/24 18:14	08/08/24 18:14	ZSA	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG2332344	1	08/02/24 19:16	08/08/24 01:02	VSS	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG2338849	1	08/08/24 11:17	08/08/24 12:07	BJM	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG2338858	1	08/08/24 11:20	08/08/24 15:23	BJM	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:44	MAP	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:26	DJS	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336102	1	08/06/24 14:48	08/07/24 11:04	MAP	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 15:01	NCD	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 16:47	ACG	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 11:03	JAS	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 23:03	DSH	Mt. Juliet, TN



SAMPLE SUMMARY

20240729-LOVE RANCH 8-(SB RDC19)@4 L1762660-11 Solid				Collected by Ryan Finley	Collected date/time 07/30/24 13:05	Received date/time 08/01/24 09:00	1Cp
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location	2Tc
Calculated Results	WG2336100	1	08/08/24 11:41	08/08/24 11:41	MAP	Mt. Juliet, TN	3Ss
Wet Chemistry by Method 7199	WG2332344	1	08/07/24 11:57	08/08/24 01:11	VSS	Mt. Juliet, TN	4Cn
Wet Chemistry by Method 9045D	WG2338803	1	08/08/24 10:19	08/08/24 11:29	BJM	Mt. Juliet, TN	5Sr
Wet Chemistry by Method 9050AMod	WG2338805	1	08/08/24 10:22	08/08/24 15:03	BJM	Mt. Juliet, TN	6Qc
Metals (ICP) by Method 6010B	WG2334918	1	08/04/24 21:34	08/05/24 11:46	MAP	Mt. Juliet, TN	7Gl
Metals (ICP) by Method 6010B	WG2336887	1	08/07/24 07:36	08/07/24 18:28	DJS	Mt. Juliet, TN	8Al
Metals (ICP) by Method 6010B-NE493 Ch 2	WG2336101	1	08/06/24 11:24	08/07/24 09:54	MAP	Mt. Juliet, TN	9Sc
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG2336772	1	08/04/24 11:04	08/06/24 15:24	NCD	Mt. Juliet, TN	
Volatile Organic Compounds (GC/MS) by Method 8260B	WG2336464	1	08/04/24 11:04	08/05/24 17:07	ACG	Mt. Juliet, TN	
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG2336843	1	08/06/24 14:18	08/07/24 13:27	JAS	Mt. Juliet, TN	
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG2336839	1	08/06/24 07:46	08/06/24 23:21	DSH	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.



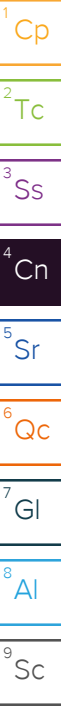
Chris Ward
Project Manager

Report Revision History

Level II Report - Version 1: 08/15/24 14:16
Level II Report - Version 2: 08/15/24 16:52

Project Narrative

Report reissued to work on EDD
Report reissued for selenium reruns - Tony Gibson 09/05/2024



Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	6.46		1	08/08/2024 18:07	WG2336103

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.300	J	0.255	1.00	1	08/13/2024 02:01	WG2335486

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.65	T8	1	08/08/2024 12:07	WG2338849

Sample Narrative:

L1762660-01 WG2338849: 8.65 at 24.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1380		10.0	1	08/08/2024 15:23	WG2338858

Sample Narrative:

L1762660-01 WG2338858: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.84		0.518	2.00	1	08/05/2024 11:29	WG2334918
Barium	247		0.0852	0.500	1	08/05/2024 11:29	WG2334918
Cadmium	0.179	J	0.0471	0.500	1	08/05/2024 11:29	WG2334918
Copper	10.4		0.400	2.00	1	08/05/2024 11:29	WG2334918
Lead	11.0		0.208	0.500	1	08/05/2024 11:29	WG2334918
Nickel	14.2		0.132	2.00	1	08/05/2024 11:29	WG2334918
Selenium	1.11	J	0.764	2.00	1	08/05/2024 11:29	WG2334918
Silver	0.171	J	0.127	1.00	1	08/05/2024 11:29	WG2334918
Zinc	32.6		0.832	5.00	1	08/07/2024 18:09	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.723		0.0167	0.200	1	08/07/2024 10:57	WG2336102

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.103	B	0.0217	0.100	1	08/06/2024 09:39	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	99.7			77.0-120		08/06/2024 09:39	WG2336772

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 13:56	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 13:56	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 13:56	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 13:56	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 13:56	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 13:56	WG2336464
(S) Toluene-d8	108			75.0-131		08/05/2024 13:56	WG2336464
(S) 4-Bromofluorobenzene	104			67.0-138		08/05/2024 13:56	WG2336464
(S) 1,2-Dichloroethane-d4	90.6			70.0-130		08/05/2024 13:56	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 08:25	WG2336843
C28-C36 Motor Oil Range	0.283	J	0.274	4.00	1	08/07/2024 08:25	WG2336843
(S) o-Terphenyl	30.6			18.0-148		08/07/2024 08:25	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 20:24	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 20:24	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 20:24	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 20:24	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 20:24	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 20:24	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 20:24	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 20:24	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 20:24	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 20:24	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 20:24	WG2336839
1-Methylnaphthalene	0.0146	J	0.00449	0.0200	1	08/06/2024 20:24	WG2336839
2-Methylnaphthalene	0.0169	J	0.00427	0.0200	1	08/06/2024 20:24	WG2336839
Naphthalene	0.00781	J	0.00408	0.0200	1	08/06/2024 20:24	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 20:24	WG2336839
(S) p-Terphenyl-d14	68.0			23.0-120		08/06/2024 20:24	WG2336839
(S) Nitrobenzene-d5	69.9			14.0-149		08/06/2024 20:24	WG2336839
(S) 2-Fluorobiphenyl	66.3			34.0-125		08/06/2024 20:24	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	7.17		1	08/08/2024 18:09	WG2336103

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.264	J	0.255	1.00	1	08/13/2024 02:08	WG2335486

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.43	T8	1	08/08/2024 12:07	WG2338849

Sample Narrative:

L1762660-02 WG2338849: 8.43 at 24.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	2250		10.0	1	08/08/2024 15:23	WG2338858

Sample Narrative:

L1762660-02 WG2338858: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.07	J	0.518	2.00	1	08/05/2024 11:31	WG2334918
Barium	263		0.0852	0.500	1	08/05/2024 11:31	WG2334918
Cadmium	0.197	J	0.0471	0.500	1	08/05/2024 11:31	WG2334918
Copper	10.7		0.400	2.00	1	08/05/2024 11:31	WG2334918
Lead	10.9		0.208	0.500	1	08/05/2024 11:31	WG2334918
Nickel	13.0		0.132	2.00	1	08/05/2024 11:31	WG2334918
Selenium	U		0.764	2.00	1	08/05/2024 11:31	WG2334918
Silver	0.231	J	0.127	1.00	1	08/05/2024 11:31	WG2334918
Zinc	37.9		0.832	5.00	1	08/07/2024 18:14	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.647		0.0167	0.200	1	08/07/2024 10:59	WG2336102

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.396	J	0.180	2.50	5	09/01/2024 14:28	WG2353820

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0687	B J	0.0217	0.100	1	08/06/2024 10:03	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 10:03	WG2336772

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 14:14	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 14:14	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 14:14	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 14:14	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 14:14	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 14:14	WG2336464
(S) Toluene-d8	104			75.0-131		08/05/2024 14:14	WG2336464
(S) 4-Bromofluorobenzene	102			67.0-138		08/05/2024 14:14	WG2336464
(S) 1,2-Dichloroethane-d4	90.7			70.0-130		08/05/2024 14:14	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 10:20	WG2336843
C28-C36 Motor Oil Range	1.33	J	0.274	4.00	1	08/07/2024 10:20	WG2336843
(S) o-Terphenyl	39.5			18.0-148		08/07/2024 10:20	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 20:41	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 20:41	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 20:41	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 20:41	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 20:41	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 20:41	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 20:41	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 20:41	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 20:41	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 20:41	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 20:41	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 20:41	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 20:41	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 20:41	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 20:41	WG2336839
(S) p-Terphenyl-d14	60.4			23.0-120		08/06/2024 20:41	WG2336839
(S) Nitrobenzene-d5	61.8			14.0-149		08/06/2024 20:41	WG2336839
(S) 2-Fluorobiphenyl	62.2			34.0-125		08/06/2024 20:41	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.22		1	08/08/2024 11:31	WG2336100

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	08/13/2024 02:26	WG2335486

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.67	T8	1	08/08/2024 11:29	WG2338803

Sample Narrative:
L1762660-03 WG2338803: 8.67 at 23.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	919		10.0	1	08/08/2024 15:03	WG2338805

Sample Narrative:
L1762660-03 WG2338805: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	2.46		0.518	2.00	1	08/05/2024 11:32	WG2334918
Barium	242		0.0852	0.500	1	08/05/2024 11:32	WG2334918
Cadmium	0.225	J	0.0471	0.500	1	08/05/2024 11:32	WG2334918
Copper	9.15		0.400	2.00	1	08/05/2024 11:32	WG2334918
Lead	10.7		0.208	0.500	1	08/05/2024 11:32	WG2334918
Nickel	13.5		0.132	2.00	1	08/05/2024 11:32	WG2334918
Selenium	U		0.764	2.00	1	08/05/2024 11:32	WG2334918
Silver	0.214	J	0.127	1.00	1	08/05/2024 11:32	WG2334918
Zinc	33.7		0.832	5.00	1	08/07/2024 18:16	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.590		0.0167	0.200	1	08/07/2024 09:48	WG2336101

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.436	J	0.180	2.50	5	09/01/2024 14:31	WG2353820

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0696	B J	0.0217	0.100	1	08/06/2024 10:51	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 10:51	WG2336772

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 14:33	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 14:33	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 14:33	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 14:33	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 14:33	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 14:33	WG2336464
(S) Toluene-d8	105			75.0-131		08/05/2024 14:33	WG2336464
(S) 4-Bromofluorobenzene	105			67.0-138		08/05/2024 14:33	WG2336464
(S) 1,2-Dichloroethane-d4	103			70.0-130		08/05/2024 14:33	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 08:39	WG2336843
C28-C36 Motor Oil Range	0.475	J	0.274	4.00	1	08/07/2024 08:39	WG2336843
(S) o-Terphenyl	41.0			18.0-148		08/07/2024 08:39	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 20:59	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 20:59	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 20:59	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 20:59	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 20:59	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 20:59	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 20:59	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 20:59	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 20:59	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 20:59	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 20:59	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 20:59	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 20:59	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 20:59	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 20:59	WG2336839
(S) p-Terphenyl-d14	63.2			23.0-120		08/06/2024 20:59	WG2336839
(S) Nitrobenzene-d5	67.0			14.0-149		08/06/2024 20:59	WG2336839
(S) 2-Fluorobiphenyl	66.7			34.0-125		08/06/2024 20:59	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	8.46		1	08/08/2024 11:36	WG2336100

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.258	J	0.255	1.00	1	08/13/2024 02:32	WG2335486

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.68	T8	1	08/08/2024 11:29	WG2338803

Sample Narrative:
L1762660-04 WG2338803: 8.68 at 23.4C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1580		10.0	1	08/08/2024 15:03	WG2338805

Sample Narrative:
L1762660-04 WG2338805: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.51		0.518	2.00	1	08/05/2024 11:06	WG2334918
Barium	202		0.0852	0.500	1	08/05/2024 11:06	WG2334918
Cadmium	0.195	J	0.0471	0.500	1	08/05/2024 11:06	WG2334918
Copper	6.76		0.400	2.00	1	08/05/2024 11:06	WG2334918
Lead	9.87		0.208	0.500	1	08/05/2024 11:06	WG2334918
Nickel	11.5		0.132	2.00	1	08/05/2024 11:06	WG2334918
Selenium	1.08	J	0.764	2.00	1	08/05/2024 11:06	WG2334918
Silver	0.257	J	0.127	1.00	1	08/05/2024 11:06	WG2334918
Zinc	36.8		0.832	5.00	1	08/07/2024 18:17	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.640		0.0167	0.200	1	08/07/2024 09:49	WG2336101

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0511	B J	0.0217	0.100	1	08/06/2024 11:15	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 11:15	WG2336772

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 14:52	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 14:52	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 14:52	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 14:52	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 14:52	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 14:52	WG2336464
(S) Toluene-d8	107			75.0-131		08/05/2024 14:52	WG2336464
(S) 4-Bromofluorobenzene	103			67.0-138		08/05/2024 14:52	WG2336464
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		08/05/2024 14:52	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 09:37	WG2336843
C28-C36 Motor Oil Range	2.41	J	0.274	4.00	1	08/07/2024 09:37	WG2336843
(S) o-Terphenyl	42.3			18.0-148		08/07/2024 09:37	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 21:17	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 21:17	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 21:17	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 21:17	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 21:17	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 21:17	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 21:17	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 21:17	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 21:17	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 21:17	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 21:17	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 21:17	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 21:17	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 21:17	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 21:17	WG2336839
(S) p-Terphenyl-d14	64.0			23.0-120		08/06/2024 21:17	WG2336839
(S) Nitrobenzene-d5	63.0			14.0-149		08/06/2024 21:17	WG2336839
(S) 2-Fluorobiphenyl	64.6			34.0-125		08/06/2024 21:17	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	6.08		1	08/08/2024 18:11	WG2336103

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	08/13/2024 02:38	WG2335486

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.59	T8	1	08/08/2024 12:07	WG2338849

Sample Narrative:

L1762660-05 WG2338849: 8.59 at 24.3C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1010		10.0	1	08/08/2024 15:23	WG2338858

Sample Narrative:

L1762660-05 WG2338858: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.81	J	0.518	2.00	1	08/05/2024 11:34	WG2334918
Barium	230		0.0852	0.500	1	08/05/2024 11:34	WG2334918
Cadmium	0.192	J	0.0471	0.500	1	08/05/2024 11:34	WG2334918
Copper	8.76		0.400	2.00	1	08/05/2024 11:34	WG2334918
Lead	9.64		0.208	0.500	1	08/05/2024 11:34	WG2334918
Nickel	13.2		0.132	2.00	1	08/05/2024 11:34	WG2334918
Selenium	U		0.764	2.00	1	08/05/2024 11:34	WG2334918
Silver	0.243	J	0.127	1.00	1	08/05/2024 11:34	WG2334918
Zinc	36.7		0.832	5.00	1	08/07/2024 18:19	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.594		0.0167	0.200	1	08/07/2024 11:01	WG2336102

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Selenium	0.387	J	0.180	2.50	5	09/01/2024 14:49	WG2353820

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0569	B J	0.0217	0.100	1	08/06/2024 11:38	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 11:38	WG2336772

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 15:12	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 15:12	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 15:12	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 15:12	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 15:12	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 15:12	WG2336464
(S) Toluene-d8	107			75.0-131		08/05/2024 15:12	WG2336464
(S) 4-Bromofluorobenzene	102			67.0-138		08/05/2024 15:12	WG2336464
(S) 1,2-Dichloroethane-d4	91.4			70.0-130		08/05/2024 15:12	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 08:54	WG2336843
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/07/2024 08:54	WG2336843
(S) o-Terphenyl	33.5			18.0-148		08/07/2024 08:54	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 21:34	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 21:34	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 21:34	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 21:34	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 21:34	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 21:34	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 21:34	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 21:34	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 21:34	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 21:34	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 21:34	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 21:34	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 21:34	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 21:34	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 21:34	WG2336839
(S) p-Terphenyl-d14	46.3			23.0-120		08/06/2024 21:34	WG2336839
(S) Nitrobenzene-d5	57.4			14.0-149		08/06/2024 21:34	WG2336839
(S) 2-Fluorobiphenyl	53.5			34.0-125		08/06/2024 21:34	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	7.02		1	08/08/2024 11:38	WG2336100

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	08/13/2024 02:45	WG2335486

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.62	T8	1	08/08/2024 11:29	WG2338803

Sample Narrative:

L1762660-06 WG2338803: 8.62 at 23.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1690		10.0	1	08/08/2024 15:03	WG2338805

Sample Narrative:

L1762660-06 WG2338805: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	1.73	J	0.518	2.00	1	08/05/2024 11:36	WG2334918
Barium	227		0.0852	0.500	1	08/05/2024 11:36	WG2334918
Cadmium	0.110	J	0.0471	0.500	1	08/05/2024 11:36	WG2334918
Copper	6.47		0.400	2.00	1	08/05/2024 11:36	WG2334918
Lead	8.32		0.208	0.500	1	08/05/2024 11:36	WG2334918
Nickel	10.5		0.132	2.00	1	08/05/2024 11:36	WG2334918
Selenium	1.17	J	0.764	2.00	1	08/05/2024 11:36	WG2334918
Silver	0.158	J	0.127	1.00	1	08/05/2024 11:36	WG2334918
Zinc	32.0		0.832	5.00	1	08/07/2024 18:21	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.791		0.0167	0.200	1	08/07/2024 09:51	WG2336101

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0402	B J	0.0217	0.100	1	08/06/2024 12:02	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 12:02	WG2336772

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 15:31	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 15:31	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 15:31	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 15:31	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 15:31	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 15:31	WG2336464
(S) Toluene-d8	105			75.0-131		08/05/2024 15:31	WG2336464
(S) 4-Bromofluorobenzene	104			67.0-138		08/05/2024 15:31	WG2336464
(S) 1,2-Dichloroethane-d4	90.7			70.0-130		08/05/2024 15:31	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	2.46	J	1.61	4.00	1	08/07/2024 13:56	WG2336843
C28-C36 Motor Oil Range	4.09		0.274	4.00	1	08/07/2024 13:56	WG2336843
(S) o-Terphenyl	44.9			18.0-148		08/07/2024 13:56	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 21:52	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 21:52	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 21:52	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 21:52	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 21:52	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 21:52	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 21:52	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 21:52	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 21:52	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 21:52	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 21:52	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 21:52	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 21:52	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 21:52	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 21:52	WG2336839
(S) p-Terphenyl-d14	65.4			23.0-120		08/06/2024 21:52	WG2336839
(S) Nitrobenzene-d5	70.6			14.0-149		08/06/2024 21:52	WG2336839
(S) 2-Fluorobiphenyl	68.0			34.0-125		08/06/2024 21:52	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	18.4		1	08/08/2024 18:12	WG2336103

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	08/13/2024 02:51	WG2335486

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.84	T8	1	08/08/2024 12:07	WG2338849

Sample Narrative:

L1762660-07 WG2338849: 8.84 at 24.1C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	3060		10.0	1	08/08/2024 15:23	WG2338858

Sample Narrative:

L1762660-07 WG2338858: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.08		0.518	2.00	1	08/05/2024 11:37	WG2334918
Barium	212		0.0852	0.500	1	08/05/2024 11:37	WG2334918
Cadmium	0.153	J	0.0471	0.500	1	08/05/2024 11:37	WG2334918
Copper	7.10		0.400	2.00	1	08/05/2024 11:37	WG2334918
Lead	9.30		0.208	0.500	1	08/05/2024 11:37	WG2334918
Nickel	11.8		0.132	2.00	1	08/05/2024 11:37	WG2334918
Selenium	0.941	J	0.764	2.00	1	08/05/2024 11:37	WG2334918
Silver	0.200	J	0.127	1.00	1	08/05/2024 11:37	WG2334918
Zinc	26.9		0.832	5.00	1	08/07/2024 18:23	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.883		0.0167	0.200	1	08/07/2024 11:02	WG2336102

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0480	B J	0.0217	0.100	1	08/06/2024 12:26	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 12:26	WG2336772

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 15:50	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 15:50	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 15:50	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 15:50	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 15:50	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 15:50	WG2336464
(S) Toluene-d8	106			75.0-131		08/05/2024 15:50	WG2336464
(S) 4-Bromofluorobenzene	101			67.0-138		08/05/2024 15:50	WG2336464
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		08/05/2024 15:50	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 10:49	WG2336843
C28-C36 Motor Oil Range	1.77	J	0.274	4.00	1	08/07/2024 10:49	WG2336843
(S) o-Terphenyl	38.0			18.0-148		08/07/2024 10:49	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 22:10	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 22:10	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 22:10	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 22:10	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 22:10	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 22:10	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 22:10	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 22:10	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 22:10	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 22:10	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 22:10	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 22:10	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 22:10	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 22:10	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 22:10	WG2336839
(S) p-Terphenyl-d14	72.6			23.0-120		08/06/2024 22:10	WG2336839
(S) Nitrobenzene-d5	72.3			14.0-149		08/06/2024 22:10	WG2336839
(S) 2-Fluorobiphenyl	74.2			34.0-125		08/06/2024 22:10	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	5.35		1	08/08/2024 11:40	WG2336100

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	0.304	J	0.255	1.00	1	08/08/2024 00:53	WG2332344

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.85	T8	1	08/08/2024 11:29	WG2338803

Sample Narrative:
L1762660-08 WG2338803: 8.85 at 23.5C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	1020		10.0	1	08/08/2024 15:03	WG2338805

Sample Narrative:
L1762660-08 WG2338805: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.21		0.518	2.00	1	08/05/2024 11:42	WG2334918
Barium	220		0.0852	0.500	1	08/05/2024 11:42	WG2334918
Cadmium	0.209	J	0.0471	0.500	1	08/05/2024 11:42	WG2334918
Copper	12.9		0.400	2.00	1	08/05/2024 11:42	WG2334918
Lead	12.5		0.208	0.500	1	08/05/2024 11:42	WG2334918
Nickel	14.5		0.132	2.00	1	08/05/2024 11:42	WG2334918
Selenium	1.60	J	0.764	2.00	1	08/05/2024 11:42	WG2334918
Silver	0.313	J	0.127	1.00	1	08/05/2024 11:42	WG2334918
Zinc	25.5		0.832	5.00	1	08/07/2024 18:24	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.641		0.0167	0.200	1	08/07/2024 09:53	WG2336101

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0870	B J	0.0217	0.100	1	08/06/2024 14:11	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 14:11	WG2336772

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	0.000600	J	0.000467	0.00100	1	08/05/2024 16:09	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 16:09	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 16:09	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 16:09	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 16:09	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 16:09	WG2336464
(S) Toluene-d8	106			75.0-131		08/05/2024 16:09	WG2336464
(S) 4-Bromofluorobenzene	103			67.0-138		08/05/2024 16:09	WG2336464
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		08/05/2024 16:09	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 09:08	WG2336843
C28-C36 Motor Oil Range	U		0.274	4.00	1	08/07/2024 09:08	WG2336843
(S) o-Terphenyl	36.5			18.0-148		08/07/2024 09:08	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 22:28	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 22:28	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 22:28	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 22:28	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 22:28	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 22:28	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 22:28	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 22:28	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 22:28	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 22:28	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 22:28	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 22:28	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 22:28	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 22:28	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 22:28	WG2336839
(S) p-Terphenyl-d14	68.8			23.0-120		08/06/2024 22:28	WG2336839
(S) Nitrobenzene-d5	71.3			14.0-149		08/06/2024 22:28	WG2336839
(S) 2-Fluorobiphenyl	70.7			34.0-125		08/06/2024 22:28	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0429	B J	0.0217	0.100	1	08/06/2024 14:37	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 14:37	WG2336772

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 16:27	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 16:27	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 16:27	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 16:27	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 16:27	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 16:27	WG2336464
(S) Toluene-d8	105			75.0-131		08/05/2024 16:27	WG2336464
(S) 4-Bromofluorobenzene	103			67.0-138		08/05/2024 16:27	WG2336464
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		08/05/2024 16:27	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 10:34	WG2336843
C28-C36 Motor Oil Range	1.10	J	0.274	4.00	1	08/07/2024 10:34	WG2336843
(S) o-Terphenyl	32.4			18.0-148		08/07/2024 10:34	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 22:45	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 22:45	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 22:45	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 22:45	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 22:45	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 22:45	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 22:45	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 22:45	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 22:45	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 22:45	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 22:45	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 22:45	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 22:45	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 22:45	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 22:45	WG2336839
(S) p-Terphenyl-d14	67.5			23.0-120		08/06/2024 22:45	WG2336839
(S) Nitrobenzene-d5	69.1			14.0-149		08/06/2024 22:45	WG2336839
(S) 2-Fluorobiphenyl	71.1			34.0-125		08/06/2024 22:45	WG2336839

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	4.80		1	08/08/2024 18:14	WG2336103

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	08/08/2024 01:02	WG2332344

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.62	T8	1	08/08/2024 12:07	WG2338849

Sample Narrative:
L1762660-10 WG2338849: 8.62 at 24.1C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	990		10.0	1	08/08/2024 15:23	WG2338858

Sample Narrative:
L1762660-10 WG2338858: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	3.69		0.518	2.00	1	08/05/2024 11:44	WG2334918
Barium	190		0.0852	0.500	1	08/05/2024 11:44	WG2334918
Cadmium	0.255	J	0.0471	0.500	1	08/05/2024 11:44	WG2334918
Copper	11.2		0.400	2.00	1	08/05/2024 11:44	WG2334918
Lead	14.7		0.208	0.500	1	08/05/2024 11:44	WG2334918
Nickel	14.4		0.132	2.00	1	08/05/2024 11:44	WG2334918
Selenium	0.937	J	0.764	2.00	1	08/05/2024 11:44	WG2334918
Silver	0.204	J	0.127	1.00	1	08/05/2024 11:44	WG2334918
Zinc	32.1		0.832	5.00	1	08/07/2024 18:26	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	0.992		0.0167	0.200	1	08/07/2024 11:04	WG2336102

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0582	B J	0.0217	0.100	1	08/06/2024 15:01	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	99.6			77.0-120		08/06/2024 15:01	WG2336772

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 16:47	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 16:47	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 16:47	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 16:47	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 16:47	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 16:47	WG2336464
(S) Toluene-d8	107			75.0-131		08/05/2024 16:47	WG2336464
(S) 4-Bromofluorobenzene	101			67.0-138		08/05/2024 16:47	WG2336464
(S) 1,2-Dichloroethane-d4	89.9			70.0-130		08/05/2024 16:47	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	U		1.61	4.00	1	08/07/2024 11:03	WG2336843
C28-C36 Motor Oil Range	1.54	J	0.274	4.00	1	08/07/2024 11:03	WG2336843
(S) o-Terphenyl	38.5			18.0-148		08/07/2024 11:03	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 23:03	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 23:03	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 23:03	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 23:03	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 23:03	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 23:03	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 23:03	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 23:03	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 23:03	WG2336839
Fluorene	U		0.00205	0.00600	1	08/06/2024 23:03	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 23:03	WG2336839
1-Methylnaphthalene	U		0.00449	0.0200	1	08/06/2024 23:03	WG2336839
2-Methylnaphthalene	U		0.00427	0.0200	1	08/06/2024 23:03	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 23:03	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 23:03	WG2336839
(S) p-Terphenyl-d14	69.7			23.0-120		08/06/2024 23:03	WG2336839
(S) Nitrobenzene-d5	69.2			14.0-149		08/06/2024 23:03	WG2336839
(S) 2-Fluorobiphenyl	71.5			34.0-125		08/06/2024 23:03	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	4.03		1	08/08/2024 11:41	WG2336100

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	U		0.255	1.00	1	08/08/2024 01:11	WG2332344

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
pH	8.22	T8	1	08/08/2024 11:29	WG2338803

Sample Narrative:
L1762660-11 WG2338803: 8.22 at 23.3C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	839		10.0	1	08/08/2024 15:03	WG2338805

Sample Narrative:
L1762660-11 WG2338805: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	7.42		0.518	2.00	1	08/05/2024 11:46	WG2334918
Barium	378		0.0852	0.500	1	08/05/2024 11:46	WG2334918
Cadmium	0.326	J	0.0471	0.500	1	08/05/2024 11:46	WG2334918
Copper	16.5		0.400	2.00	1	08/05/2024 11:46	WG2334918
Lead	16.7		0.208	0.500	1	08/05/2024 11:46	WG2334918
Nickel	18.8		0.132	2.00	1	08/05/2024 11:46	WG2334918
Selenium	1.21	J	0.764	2.00	1	08/05/2024 11:46	WG2334918
Silver	0.272	J	0.127	1.00	1	08/05/2024 11:46	WG2334918
Zinc	51.0		0.832	5.00	1	08/07/2024 18:28	WG2336887

Metals (ICP) by Method 6010B-NE493 Ch 2

Analyte	Result mg/l	Qualifier	MDL mg/l	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	1.52		0.0167	0.200	1	08/07/2024 09:54	WG2336101

Volatile Organic Compounds (GC) by Method 8015D/GRO

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	0.0635	B J	0.0217	0.100	1	08/06/2024 15:24	WG2336772
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-120		08/06/2024 15:24	WG2336772

Cp

Tc

Ss

Cn

Sr

Qc

Gl

Al

Sc

Volatile Organic Compounds (GC/MS) by Method 8260B

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	U		0.000467	0.00100	1	08/05/2024 17:07	WG2336464
Toluene	U		0.00130	0.00500	1	08/05/2024 17:07	WG2336464
Ethylbenzene	U		0.000737	0.00250	1	08/05/2024 17:07	WG2336464
Xylenes, Total	U		0.000880	0.00650	1	08/05/2024 17:07	WG2336464
1,2,4-Trimethylbenzene	U		0.00158	0.00500	1	08/05/2024 17:07	WG2336464
1,3,5-Trimethylbenzene	U		0.00200	0.00500	1	08/05/2024 17:07	WG2336464
(S) Toluene-d8	105			75.0-131		08/05/2024 17:07	WG2336464
(S) 4-Bromofluorobenzene	105			67.0-138		08/05/2024 17:07	WG2336464
(S) 1,2-Dichloroethane-d4	103			70.0-130		08/05/2024 17:07	WG2336464

Semi-Volatile Organic Compounds (GC) by Method 8015M

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	3.11	J	1.61	4.00	1	08/07/2024 13:27	WG2336843
C28-C36 Motor Oil Range	6.00		0.274	4.00	1	08/07/2024 13:27	WG2336843
(S) o-Terphenyl	44.5			18.0-148		08/07/2024 13:27	WG2336843

Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM

Analyte	Result mg/kg	Qualifier	MDL mg/kg	RDL mg/kg	Dilution	Analysis date / time	Batch
Acenaphthene	U		0.00209	0.00600	1	08/06/2024 23:21	WG2336839
Anthracene	U		0.00230	0.00600	1	08/06/2024 23:21	WG2336839
Benzo(a)anthracene	U		0.00173	0.00600	1	08/06/2024 23:21	WG2336839
Benzo(b)fluoranthene	U		0.00153	0.00600	1	08/06/2024 23:21	WG2336839
Benzo(k)fluoranthene	U		0.00215	0.00600	1	08/06/2024 23:21	WG2336839
Benzo(a)pyrene	U		0.00179	0.00600	1	08/06/2024 23:21	WG2336839
Chrysene	U		0.00232	0.00600	1	08/06/2024 23:21	WG2336839
Dibenz(a,h)anthracene	U		0.00172	0.00600	1	08/06/2024 23:21	WG2336839
Fluoranthene	U		0.00227	0.00600	1	08/06/2024 23:21	WG2336839
Fluorene	0.00255	J	0.00205	0.00600	1	08/06/2024 23:21	WG2336839
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600	1	08/06/2024 23:21	WG2336839
1-Methylnaphthalene	0.0263		0.00449	0.0200	1	08/06/2024 23:21	WG2336839
2-Methylnaphthalene	0.0239		0.00427	0.0200	1	08/06/2024 23:21	WG2336839
Naphthalene	U		0.00408	0.0200	1	08/06/2024 23:21	WG2336839
Pyrene	U		0.00200	0.00600	1	08/06/2024 23:21	WG2336839
(S) p-Terphenyl-d14	47.7			23.0-120		08/06/2024 23:21	WG2336839
(S) Nitrobenzene-d5	70.0			14.0-149		08/06/2024 23:21	WG2336839
(S) 2-Fluorobiphenyl	50.8			34.0-125		08/06/2024 23:21	WG2336839

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4104086-1 08/07/24 22:04

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Hexavalent Chromium	U		0.255	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1762630-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1762630-03 08/08/24 00:27 • (DUP) R4104086-7 08/08/24 00:35

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	U	U	1	0.000		20

L1763320-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1763320-02 08/08/24 02:50 • (DUP) R4104086-12 08/08/24 02:59

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4104086-2 08/07/24 22:12

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Hexavalent Chromium	10.0	11.4	114	80.0-120	

L1761216-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1761216-03 08/07/24 22:48 • (MS) R4104086-3 08/07/24 22:57 • (MSD) R4104086-4 08/07/24 23:06

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Hexavalent Chromium	20.0	U	21.8	22.3	109	111	1	75.0-125			2.24	20

L1763144-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1763144-04 08/08/24 01:56 • (MS) R4104086-8 08/08/24 02:05 • (MSD) R4104086-9 08/08/24 02:14

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Hexavalent Chromium	20.0	U	20.8	20.8	104	104	1	75.0-125			0.00616	20

L1761216-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1761216-03 08/07/24 22:48 • (MS) R4104086-5 08/07/24 23:15

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Hexavalent Chromium	633	U	623	98.4	50	75.0-125	

L1763144-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1763144-04 08/08/24 01:56 • (MS) R4104086-10 08/08/24 02:23

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	<u>MS Qualifier</u>
Hexavalent Chromium	643	U	551	85.7	50	75.0-125	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4105863-1 08/12/24 22:36

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Hexavalent Chromium	U		0.255	1.00

L1762157-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1762157-02 08/12/24 22:57 • (DUP) R4105863-3 08/12/24 23:03

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	U	U	1	0.000		20

L1762672-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1762672-02 08/13/24 03:03 • (DUP) R4105863-8 08/13/24 03:09

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	mg/kg	mg/kg		%		%
Hexavalent Chromium	U	U	1	0.000		20

Laboratory Control Sample (LCS)

(LCS) R4105863-2 08/12/24 22:45

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Hexavalent Chromium	10.0	10.1	101	80.0-120	

L1762630-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762630-06 08/13/24 00:11 • (MS) R4105863-4 08/13/24 00:17 • (MSD) R4105863-5 08/13/24 00:24

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Hexavalent Chromium	20.0	U	20.6	20.3	103	101	1	75.0-125			1.53	20

L1762630-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1762630-06 08/13/24 00:11 • (MS) R4105863-6 08/13/24 01:47

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	mg/kg	mg/kg	mg/kg	%		%	
Hexavalent Chromium	641	U	568	88.6	50	75.0-125	

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

L1762189-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1762189-02 08/08/24 11:29 • (DUP) R4104247-2 08/08/24 11:29

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	pH	su		%		%
pH	8.00	7.96	1	0.501		1

Sample Narrative:

OS: 8 at 23.8C
DUP: 7.96 at 23.8C

Laboratory Control Sample (LCS)

(LCS) R4104247-1 08/08/24 11:29

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

Sample Narrative:

LCS: 10 at 23C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

L1762660-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762660-01 08/08/24 12:07 • (DUP) R4104267-2 08/08/24 12:07

	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	pH	su		%		%
pH	8.65	8.63	1	0.231		1

Sample Narrative:

OS: 8.65 at 24.6C

DUP: 8.63 at 24.8C

Laboratory Control Sample (LCS)

(LCS) R4104267-1 08/08/24 12:07

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

Sample Narrative:

LCS: 10 at 22.8C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4104468-1 08/08/24 15:03

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

L1762660-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1762660-08 08/08/24 15:03 • (DUP) R4104468-3 08/08/24 15:03

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	1020	1020	1	0.0983		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4104468-2 08/08/24 15:03

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	733	749	102	85.0-115	

Sample Narrative:

LCS: at 25C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4104466-1 08/08/24 15:23

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

L1762672-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1762672-01 08/08/24 15:23 • (DUP) R4104466-3 08/08/24 15:23

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	468	469	1	0.213		20

Sample Narrative:

OS: at 25C

DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R4104466-2 08/08/24 15:23

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	733	744	102	85.0-115	

Sample Narrative:

LCS: at 25C

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4102794-1 08/05/24 11:02

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.518	2.00
Barium	U		0.0852	0.500
Cadmium	U		0.0471	0.500
Copper	U		0.400	2.00
Lead	U		0.208	0.500
Nickel	U		0.132	2.00
Selenium	U		0.764	2.00
Silver	U		0.127	1.00

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4102794-2 08/05/24 11:04

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	100	100	80.0-120	
Barium	100	103	103	80.0-120	
Cadmium	100	101	101	80.0-120	
Copper	100	103	103	80.0-120	
Lead	100	100	100	80.0-120	
Nickel	100	96.8	96.8	80.0-120	
Selenium	100	97.5	97.5	80.0-120	
Silver	20.0	20.9	105	80.0-120	

L1762660-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762660-04 08/05/24 11:06 • (MS) R4102794-5 08/05/24 11:11 • (MSD) R4102794-6 08/05/24 11:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Arsenic	100	3.51	100	98.7	96.6	95.2	1	75.0-125			1.45	20
Barium	100	202	324	322	121	120	1	75.0-125			0.484	20
Cadmium	100	0.195	96.8	95.3	96.6	95.1	1	75.0-125			1.59	20
Copper	100	6.76	111	110	104	103	1	75.0-125			1.02	20
Lead	100	9.87	111	110	101	99.7	1	75.0-125			1.49	20
Nickel	100	11.5	113	112	102	101	1	75.0-125			0.873	20
Selenium	100	1.08	104	104	103	103	1	75.0-125			0.239	20
Silver	20.0	0.257	21.9	21.8	108	108	1	75.0-125			0.486	20

Method Blank (MB)

(MB) R4104105-1 08/07/24 17:53

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Zinc	U		0.832	5.00

Laboratory Control Sample (LCS)

(LCS) R4104105-2 08/07/24 17:55

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Zinc	100	95.3	95.3	80.0-120	

L1763320-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1763320-01 08/07/24 17:57 • (MS) R4104105-5 08/07/24 18:02 • (MSD) R4104105-6 08/07/24 18:04

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Zinc	100	42.1	152	147	109	105	1	75.0-125			2.75	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4103751-1 08/07/24 09:43

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4103751-2 08/07/24 09:44 • (LCSD) R4103751-3 08/07/24 09:46

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 %
Hot Water Sol. Boron	1.00	1.08	1.08	108	108	80.0-120			0.0748	20

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R4103754-1 08/07/24 10:51

Analyte	MB Result mg/l	MB Qualifier	MB MDL mg/l	MB RDL mg/l
Hot Water Sol. Boron	U		0.0167	0.200

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4103754-2 08/07/24 10:53 • (LCSD) R4103754-3 08/07/24 10:54

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 %
Hot Water Sol. Boron	1.00	1.04	1.08	104	108	80.0-120			3.15	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4114476-1 09/01/24 14:02

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
Selenium	U		0.180	2.50

Laboratory Control Sample (LCS)

(LCS) R4114476-2 09/01/24 14:05

	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Analyte	mg/kg	mg/kg	%	%	
Selenium	100	88.3	88.3	80.0-120	

L1762189-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762189-05 09/01/24 14:09 • (MS) R4114476-5 09/01/24 14:19 • (MSD) R4114476-6 09/01/24 14:22

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
Selenium	100	0.449	101	97.9	101	97.5	5	75.0-125			3.52	20

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4103432-2 08/06/24 02:52

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0289	⬇	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	101			77.0-120

Laboratory Control Sample (LCS)

(LCS) R4103432-1 08/06/24 02:05

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.00	5.12	102	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			111	77.0-120	

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Method Blank (MB)

(MB) R4102743-3 08/05/24 11:28

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Benzene	U		0.000467	0.00100
Toluene	U		0.00130	0.00500
Ethylbenzene	U		0.000737	0.00250
Xylenes, Total	U		0.000880	0.00650
1,2,4-Trimethylbenzene	U		0.00158	0.00500
1,3,5-Trimethylbenzene	U		0.00200	0.00500
(S) Toluene-d8	106			75.0-131
(S) 4-Bromofluorobenzene	103			67.0-138
(S) 1,2-Dichloroethane-d4	104			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R4102743-1 08/05/24 09:54 • (LCSD) R4102743-2 08/05/24 10:13

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	0.111	0.106	88.8	84.8	70.0-123			4.61	20
Toluene	0.125	0.114	0.112	91.2	89.6	75.0-121			1.77	20
Ethylbenzene	0.125	0.117	0.116	93.6	92.8	74.0-126			0.858	20
Xylenes, Total	0.375	0.347	0.337	92.5	89.9	72.0-127			2.92	20
1,2,4-Trimethylbenzene	0.125	0.108	0.107	86.4	85.6	70.0-126			0.930	20
1,3,5-Trimethylbenzene	0.125	0.111	0.111	88.8	88.8	73.0-127			0.000	20
(S) Toluene-d8				103	104	75.0-131				
(S) 4-Bromofluorobenzene				107	104	67.0-138				
(S) 1,2-Dichloroethane-d4				108	103	70.0-130				

L1762660-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762660-01 08/05/24 13:56 • (MS) R4102743-4 08/05/24 20:15 • (MSD) R4102743-5 08/05/24 20:34

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.125	U	0.108	0.114	86.4	91.2	1	10.0-149			5.41	37
Toluene	0.125	U	0.118	0.119	94.4	95.2	1	10.0-156			0.844	38
Ethylbenzene	0.125	U	0.123	0.125	98.4	100	1	10.0-160			1.61	38
Xylenes, Total	0.375	U	0.359	0.361	95.7	96.3	1	10.0-160			0.556	38
1,2,4-Trimethylbenzene	0.125	U	0.115	0.117	92.0	93.6	1	10.0-160			1.72	36
1,3,5-Trimethylbenzene	0.125	U	0.116	0.120	92.8	96.0	1	10.0-160			3.39	38
(S) Toluene-d8					104	101		75.0-131				
(S) 4-Bromofluorobenzene					105	102		67.0-138				
(S) 1,2-Dichloroethane-d4					91.8	86.9		70.0-130				

1

Cp

2

Tc

3

Ss

4

Cn

5

Sr

6

Qc

7

Gl

8

Al

9

Sc

Method Blank (MB)

(MB) R4103720-1 08/07/24 06:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
C10-C28 Diesel Range	U		1.61	4.00
C28-C36 Motor Oil Range	U		0.274	4.00
(S) o-Terphenyl	43.5			18.0-148

Laboratory Control Sample (LCS)

(LCS) R4103720-2 08/07/24 07:00

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	30.7	61.4	50.0-150	
(S) o-Terphenyl			38.9	18.0-148	

L1762672-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762672-01 08/07/24 11:17 • (MS) R4103720-3 08/07/24 11:32 • (MSD) R4103720-4 08/07/24 11:46

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
C10-C28 Diesel Range	50.0	32.9	73.0	73.4	80.2	81.0	1	50.0-150			0.546	20
(S) o-Terphenyl					44.0	44.7		18.0-148				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

9Sc

Method Blank (MB)

(MB) R4103553-2 08/06/24 17:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acenaphthene	U		0.00209	0.00600
Anthracene	U		0.00230	0.00600
Benzo(a)anthracene	U		0.00173	0.00600
Benzo(b)fluoranthene	U		0.00153	0.00600
Benzo(k)fluoranthene	U		0.00215	0.00600
Benzo(a)pyrene	U		0.00179	0.00600
Chrysene	U		0.00232	0.00600
Dibenz(a,h)anthracene	U		0.00172	0.00600
Fluoranthene	U		0.00227	0.00600
Fluorene	U		0.00205	0.00600
Indeno(1,2,3-cd)pyrene	U		0.00181	0.00600
1-Methylnaphthalene	U		0.00449	0.0200
2-Methylnaphthalene	U		0.00427	0.0200
Naphthalene	U		0.00408	0.0200
Pyrene	U		0.00200	0.00600
(S) p-Terphenyl-d14	77.6			23.0-120
(S) Nitrobenzene-d5	80.8			14.0-149
(S) 2-Fluorobiphenyl	79.7			34.0-125

¹Cp

²Tc

³Ss

⁴Cn

⁵Sr

⁶Qc

⁷Gl

⁸Al

⁹Sc

Laboratory Control Sample (LCS)

(LCS) R4103553-1 08/06/24 17:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0599	74.9	50.0-120	
Anthracene	0.0800	0.0622	77.8	50.0-126	
Benzo(a)anthracene	0.0800	0.0637	79.6	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0629	78.6	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0613	76.6	49.0-125	
Benzo(a)pyrene	0.0800	0.0576	72.0	42.0-120	
Chrysene	0.0800	0.0633	79.1	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0688	86.0	47.0-125	
Fluoranthene	0.0800	0.0661	82.6	49.0-129	
Fluorene	0.0800	0.0660	82.5	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0661	82.6	46.0-125	
1-Methylnaphthalene	0.0800	0.0658	82.3	51.0-121	
2-Methylnaphthalene	0.0800	0.0636	79.5	50.0-120	
Naphthalene	0.0800	0.0613	76.6	50.0-120	
Pyrene	0.0800	0.0599	74.9	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R4103553-1 08/06/24 17:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			74.6	23.0-120	
(S) Nitrobenzene-d5			78.8	14.0-149	
(S) 2-Fluorobiphenyl			76.1	34.0-125	

L1762672-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1762672-01 08/06/24 23:38 • (MS) R4103553-3 08/06/24 23:56 • (MSD) R4103553-4 08/07/24 00:14

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acenaphthene	0.0780	U	0.0563	0.0542	72.2	69.5	1	14.0-127			3.80	27
Anthracene	0.0780	U	0.0574	0.0558	73.6	71.5	1	10.0-145			2.83	30
Benzo(a)anthracene	0.0780	U	0.0610	0.0591	78.2	75.8	1	10.0-139			3.16	30
Benzo(b)fluoranthene	0.0780	U	0.0591	0.0582	75.8	74.6	1	10.0-140			1.53	36
Benzo(k)fluoranthene	0.0780	U	0.0566	0.0548	72.6	70.3	1	10.0-137			3.23	31
Benzo(a)pyrene	0.0780	U	0.0588	0.0575	75.4	73.7	1	10.0-141			2.24	31
Chrysene	0.0780	U	0.0641	0.0612	82.2	78.5	1	10.0-145			4.63	30
Dibenz(a,h)anthracene	0.0780	U	0.0647	0.0627	82.9	80.4	1	10.0-132			3.14	31
Fluoranthene	0.0780	U	0.0629	0.0610	80.6	78.2	1	10.0-153			3.07	33
Fluorene	0.0780	U	0.0636	0.0622	81.5	79.7	1	11.0-130			2.23	29
Indeno(1,2,3-cd)pyrene	0.0780	U	0.0630	0.0614	80.8	78.7	1	10.0-137			2.57	32
1-Methylnaphthalene	0.0780	U	0.0637	0.0604	81.7	77.4	1	10.0-142			5.32	28
2-Methylnaphthalene	0.0780	0.00430	0.0633	0.0602	75.6	71.7	1	10.0-137			5.02	28
Naphthalene	0.0780	U	0.0585	0.0564	75.0	72.3	1	10.0-135			3.66	27
Pyrene	0.0780	U	0.0578	0.0557	74.1	71.4	1	10.0-148			3.70	35
(S) p-Terphenyl-d14					73.3	69.0		23.0-120				
(S) Nitrobenzene-d5					76.0	73.8		14.0-149				
(S) 2-Fluorobiphenyl					75.5	71.8		34.0-125				

1Cp

2Tc

3Ss

4Cn

5Sr

6Qc

7Gl

8Al

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.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
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.
T8	Sample(s) received past/too close to holding time expiration.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

ACCREDITATIONS & LOCATIONS

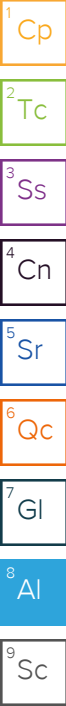
Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122


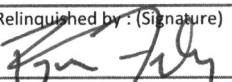
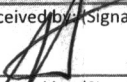

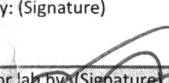
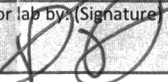
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Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey--NELAP	TN002
California	2932	New Mexico ¹	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina 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: Caerus Oil & Gas 143 Diamond Ave Parachute, CO 81635				Billing Information: Same as left.				Pres Chk	Analysis / Container / Preservative										Chain of Custody Page <u>1</u> of <u>2</u>	
																			 PEOPLE ADVANCING SCIENCE 12065 Lebanon Rd Mount Juliet, TN 37122 Phone: 615-758-5858 Alt: 800-767-5859 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	
Report to: Blair Rollins				Email To: brollins@caerusoilandgas.com				No. of Cntrs TABLE 915 GRO/DRO/ORO TABLE 915 Metals TABLE 915 VOCs TABLE 915 pH, SPCON, SAR TABLE 915 PAHs											SDG # <u>L1762660</u>	
Project Description: Love Ranch 8 Remediation				City/State Collected:					Please Circle: PT MT CT ET				Table #							
Phone: (970) 640-6919		Client Project #		Lab Project #												Acctnum:				
Collected by (print): Ryan Finley		Site/Facility ID # Love Ranch 8 Remediation		P.O. #												Template:				
Collected by (signature): Immediately Packed on Ice N <u> </u> Y <u>X</u>		Rush? (Lab MUST Be Notified) <input type="checkbox"/> Same Day <input checked="" type="checkbox"/> Five Day <input type="checkbox"/> Next Day <input type="checkbox"/> 5 Day (Rad Only) <input type="checkbox"/> Two Day <input type="checkbox"/> 10 Day (Rad Only) <input type="checkbox"/> Three Day		Quote #												Prelogin:				
				Date Results Needed												PM:				
																PB:				
																Shipped Via:				
																Remarks				
																Sample # (lab only)				
Sample ID		Comp/Grab	Matrix*	Depth	Date	Time														
20240729-LOVE RANCH 8-(SB MW05)@5		Grab	SS	5-7'	2024-07-29	0930	4	X	X	X	X	X								01
20240729-LOVE RANCH 8-(SB MW07)@5		Grab	SS	5-7'	2024-07-29	1115	4	X	X	X	X	X								02
20240729-LOVE RANCH 8-(SB MW08)@4		Grab	SS	4-6'	2024-07-29	1210	4	X	X	X	X	X								03
20240729-LOVE RANCH 8-(SB MW06)@4		Grab	SS	4-6'	2024-07-29	1317	4	X	X	X	X	X								04
20240729-LOVE RANCH 8-(SB MW09)@4		Grab	SS	4-6'	2024-07-29	1416	4	X	X	X	X	X								05
20240729-LOVE RANCH 8-(SB MW10)@4		Grab	SS	4-6'	2024-07-29	1510	4	X	X	X	X	X								06
20240730-LOVE RANCH 8-(SB MW11)@4		Grab	SS	4-6'	2024-07-30	0830	4	X	X	X	X	X								07
20240730-LOVE RANCH 8-(SB MW11)@12		Grab	SS	12-14'	2024-07-30	0842	4	X	X	X	X	X								08
20240730-LOVE RANCH 8-(SB MW11)@23		Grab	SS	23'	2024-07-30	0905	1	X		X		X								09
20240730-LOVE RANCH 8-(SB MW12)@4		Grab	SS	4-6'	2024-07-30	1338	4	X	X	X	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 _____				Sample Receipt Checklist: COC Seal Present/Intact: <input type="checkbox"/> NP <input checked="" type="checkbox"/> Y <input type="checkbox"/> N COC Signed/Accurate: <input checked="" type="checkbox"/> <input type="checkbox"/> N Bottles arrive intact: <input checked="" type="checkbox"/> <input type="checkbox"/> N Correct bottles used: <input checked="" type="checkbox"/> <input type="checkbox"/> N Sufficient volume sent: <input checked="" type="checkbox"/> <input type="checkbox"/> N If Applicable VOA Zero Headspace: <input checked="" type="checkbox"/> <input type="checkbox"/> N Preservation Correct/Checked: <input checked="" type="checkbox"/> <input type="checkbox"/> N RAD Screen <0.5 mR/hr: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N										
Samples returned via: <input type="checkbox"/> UPS <input type="checkbox"/> FedEx <input type="checkbox"/> Courier		Tracking #																		
Relinquished by: (Signature) 		Date: <u>7/31/24</u>		Time: <u>1100</u>		Received by: (Signature) 		Trip Blank Received: Yes / <u>No</u> HCL / MeOH TBR												
Relinquished by: (Signature) 		Date: <u>7/31/24</u>		Time: <u>1500</u>		Received by: (Signature) 		Temp: _____ °C Bottles Received: <u>39</u>		If preservation required by Login: Date/Time										
Relinquished by: (Signature)		Date:		Time:		Received for lab by: (Signature) 		Date: <u>8/1/24</u> Time: <u>900</u>		Hold:		Condition: NCF / <u>OK</u>								

[illegible]

