ANALYTICAL REPORT

September 19, 2022

Pace Analytical Services, LLC
2025.04.30 21:43:35 -05'00'
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Caerus Oil and Gas

Sample Delivery Group:	L1532232
Samples Received:	09/02/2022
Project Number:	
Description:	OP15 P&H Assessment
Site:	OP15 PAD
Report To:	Brett Middleton 143 Diamond Avenue Parachute, CO 81635

Entire Report Reviewed By:

Chris Ward
Project Manager

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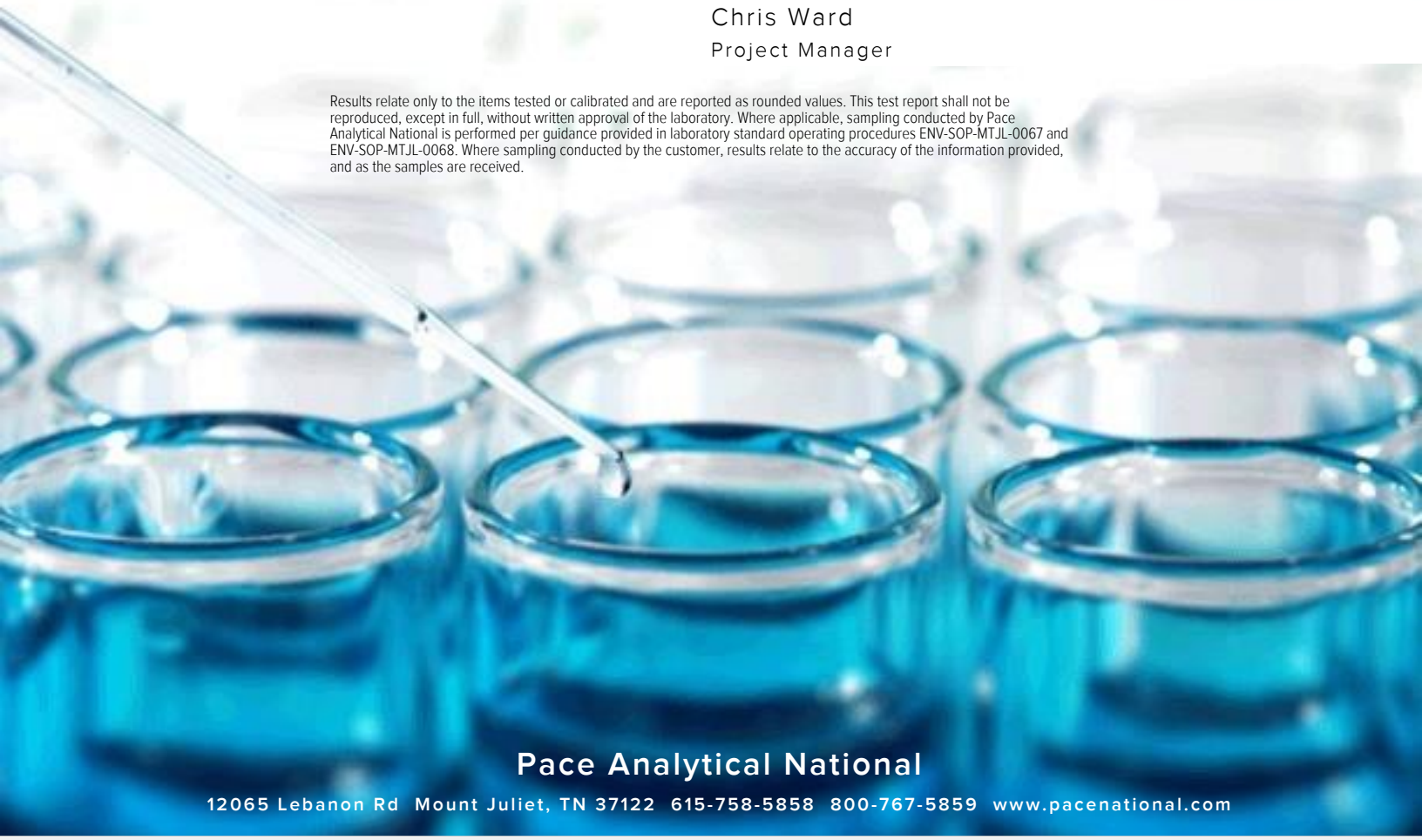

Pace Analytical National
12065 Lebanon Rd Mount Juliet, TN 37122 615-758-5858 800-767-5859 www.pacenational.com

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20220831_OP15_WHTP_COMP L1532232-01 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 13:54 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:07	09/16/22 21:07	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 18:50	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1924978	1	09/13/22 10:00	09/13/22 12:39	ARS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1922628	1	09/10/22 08:05	09/12/22 17:33	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:31	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1922625	5	09/10/22 08:09	09/11/22 19:16	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1921493	1	09/04/22 11:06	09/08/22 16:20	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 15:32	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924026	1	09/10/22 20:40	09/12/22 06:41	NH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 13:56	AMM	Mt. Juliet, TN

20220831_OP15_PL01TP_COMP L1532232-02 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 14:15 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:10	09/16/22 21:10	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 18:56	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1924978	1	09/13/22 10:00	09/13/22 12:39	ARS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1922628	1	09/10/22 08:05	09/12/22 16:47	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:33	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1922625	5	09/10/22 08:09	09/11/22 18:12	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1921493	1	09/04/22 11:06	09/08/22 16:43	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 15:52	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924026	1	09/10/22 20:40	09/12/22 06:29	NH	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 10:04	AMM	Mt. Juliet, TN

20220831_OP15_PL01 N WALL @ 8FT L1532232-03 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 14:35 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:13	09/16/22 21:13	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 19:11	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1924978	1	09/13/22 10:00	09/13/22 12:39	ARS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1922628	1	09/10/22 08:05	09/12/22 17:36	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:36	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1922625	5	09/10/22 08:09	09/11/22 19:19	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1923429	1	09/04/22 11:06	09/09/22 09:38	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 16:11	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 21:46	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 10:22	AMM	Mt. Juliet, TN

20220831_OP15_PL01 E WALL @ 8FT L1532232-04 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 14:40 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:16	09/16/22 21:16	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 19:22	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1924978	1	09/13/22 10:00	09/13/22 12:39	ARS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1922628	1	09/10/22 08:05	09/12/22 17:39	ZSA	Mt. Juliet, TN

20220831_OP15_PL01 E WALL @ 8FT L1532232-04 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 14:40 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:39	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1922625	5	09/10/22 08:09	09/11/22 19:22	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1923429	1	09/04/22 11:06	09/09/22 10:00	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 16:30	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 21:58	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 10:40	AMM	Mt. Juliet, TN

20220831_OP15_PL01 S WALL @ 8FT L1532232-05 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 14:45 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:24	09/16/22 21:24	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 19:27	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1924978	1	09/13/22 10:00	09/13/22 12:39	ARS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1922628	1	09/10/22 08:05	09/12/22 17:47	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:42	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1922625	5	09/10/22 08:09	09/11/22 19:33	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1923429	1	09/04/22 11:06	09/09/22 10:50	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 16:49	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 22:11	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 10:58	AMM	Mt. Juliet, TN

20220831_OP15_PL01 W WALL @ 8FT L1532232-06 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 14:50 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:27	09/16/22 21:27	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 19:32	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1924978	1	09/13/22 10:00	09/13/22 12:39	ARS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1922628	1	09/10/22 08:05	09/12/22 17:50	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:45	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1922625	5	09/10/22 08:09	09/11/22 19:36	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1923429	1	09/04/22 11:06	09/09/22 11:13	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 17:08	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 22:23	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 11:16	AMM	Mt. Juliet, TN

20220831_OP15_PL01 @ 8FT L1532232-07 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 14:55 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:30	09/16/22 21:30	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 19:37	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1924978	1	09/13/22 10:00	09/13/22 12:39	ARS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1922628	1	09/10/22 08:05	09/12/22 17:53	ZSA	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:48	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1922625	5	09/10/22 08:09	09/11/22 19:39	SJM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1923429	1	09/04/22 11:06	09/09/22 11:36	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 17:26	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 21:33	TJD	Mt. Juliet, TN

20220831_OP15_PL01 @ 8FT L1532232-07 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 14:55 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 11:33	AMM	Mt. Juliet, TN

20220831_OP15_PL06 N WALL @ 7FT L1532232-08 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 15:14 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:33	09/16/22 21:33	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 19:42	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1924978	1	09/13/22 10:00	09/13/22 12:39	ARS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1923222	1	09/12/22 16:14	09/14/22 00:36	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:51	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1923227	5	09/12/22 16:23	09/13/22 20:47	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1923429	1	09/04/22 11:06	09/09/22 11:59	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 17:46	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 22:36	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 11:51	AMM	Mt. Juliet, TN

20220831_OP15_PL06 E WALL @ 7FT L1532232-09 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 15:20 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:36	09/16/22 21:36	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 19:48	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1925207	1	09/13/22 15:00	09/13/22 16:00	RLS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1923222	1	09/12/22 16:14	09/14/22 00:39	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 21:59	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1923227	5	09/12/22 16:23	09/13/22 20:50	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1923429	1	09/04/22 11:06	09/09/22 12:22	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 18:05	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 22:48	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 12:09	AMM	Mt. Juliet, TN

20220831_OP15_PL06 S WALL @ 7FT L1532232-10 Solid

Collected by: Tristan Schmalz | Collected date/time: 08/31/22 15:25 | Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:39	09/16/22 21:39	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 19:53	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1925207	1	09/13/22 15:00	09/13/22 16:00	RLS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1923222	1	09/12/22 16:14	09/14/22 00:42	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 22:02	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1923227	5	09/12/22 16:23	09/13/22 20:54	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1923429	1	09/04/22 11:06	09/09/22 12:44	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 18:24	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 23:01	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 12:27	AMM	Mt. Juliet, TN

20220831_OP15_PL06 W WALL @ 7FT L1532232-11 Solid

Collected by: Tristan Schmalz
Collected date/time: 08/31/22 15:30
Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:41	09/16/22 21:41	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 20:13	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1925207	1	09/13/22 15:00	09/13/22 16:00	RLS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924190	1	09/14/22 10:17	09/16/22 14:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1923222	1	09/12/22 16:14	09/14/22 00:45	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921386	1	09/05/22 14:41	09/13/22 22:05	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1923227	5	09/12/22 16:23	09/13/22 20:57	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1921706	1	09/04/22 11:06	09/07/22 14:38	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 18:43	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 20:43	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 12:45	AMM	Mt. Juliet, TN

20220831_OP15_PL06 @ 7FT L1532232-12 Solid

Collected by: Tristan Schmalz
Collected date/time: 08/31/22 15:35
Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:44	09/16/22 21:44	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 20:19	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1925207	1	09/13/22 15:00	09/13/22 16:00	RLS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924190	1	09/14/22 10:17	09/16/22 14:10	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1923222	1	09/12/22 16:14	09/14/22 00:48	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921387	1	09/05/22 15:36	09/14/22 00:13	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1923227	5	09/12/22 16:23	09/13/22 21:00	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1921706	1	09/04/22 11:06	09/07/22 14:59	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 19:02	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 20:56	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 13:02	AMM	Mt. Juliet, TN

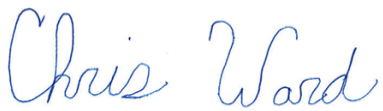
20220831_OP15_PL06 TP_COMP L1532232-13 Solid

Collected by: Tristan Schmalz
Collected date/time: 08/31/22 15:45
Received date/time: 09/02/22 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Calculated Results	WG1924599	1	09/16/22 21:47	09/16/22 21:47	KMG	Mt. Juliet, TN
Wet Chemistry by Method 7199	WG1924000	1	09/10/22 22:05	09/13/22 20:24	ARD	Mt. Juliet, TN
Wet Chemistry by Method 9045D	WG1925207	1	09/13/22 15:00	09/13/22 16:00	RLS	Mt. Juliet, TN
Wet Chemistry by Method 9050AMod	WG1924187	1	09/14/22 10:04	09/16/22 12:35	NTG	Mt. Juliet, TN
Metals (ICP) by Method 6010B	WG1923222	1	09/12/22 16:14	09/14/22 00:51	CCE	Mt. Juliet, TN
Metals (ICP) by Method 6010B-NE493 Ch 2	WG1921387	1	09/05/22 15:36	09/14/22 00:16	CCE	Mt. Juliet, TN
Metals (ICPMS) by Method 6020	WG1923227	5	09/12/22 16:23	09/13/22 21:03	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method 8015D/GRO	WG1921706	1	09/04/22 11:06	09/07/22 15:19	BAM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260B	WG1923252	1	09/04/22 11:06	09/08/22 19:21	JAH	Mt. Juliet, TN
Semi-Volatile Organic Compounds (GC) by Method 8015M	WG1924331	1	09/12/22 09:17	09/12/22 21:08	TJD	Mt. Juliet, TN
Semi Volatile Organic Compounds (GC/MS) by Method 8270C-SIM	WG1923002	1	09/09/22 05:07	09/10/22 13:20	AMM	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

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	3.52		1	09/16/2022 21:07	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 18:50	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	su				
pH	8.22	T8	1	09/13/2022 12:39	WG1924978

Sample Narrative:

L1532232-01 WG1924978: 8.22 at 20.8C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	424		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-01 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	1160		0.500	1	09/12/2022 17:33	WG1922628
Cadmium	ND		0.500	1	09/12/2022 17:33	WG1922628
Copper	28.6		2.00	1	09/12/2022 17:33	WG1922628
Lead	8.07		0.500	1	09/12/2022 17:33	WG1922628
Nickel	12.7		2.00	1	09/12/2022 17:33	WG1922628
Selenium	ND		2.00	1	09/12/2022 17:33	WG1922628
Silver	ND		1.00	1	09/12/2022 17:33	WG1922628
Zinc	82.1		5.00	1	09/12/2022 17:33	WG1922628

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	0.322		0.200	1	09/13/2022 21:31	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	3.94		1.00	5	09/11/2022 19:16	WG1922625

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.123	B	0.100	1	09/08/2022 16:20	WG1921493
(S) a,a,a-Trifluorotoluene(FID)	*104*		*77.0-120*		*09/08/2022 16:20*	WG1921493

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 15:32	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 15:32	WG1923252
Toluene	ND		0.00500	1	09/08/2022 15:32	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 15:32	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 15:32	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 15:32	WG1923252
(S) Toluene-d8	*95.8*		*75.0-131*		*09/08/2022 15:32*	WG1923252
(S) 4-Bromofluorobenzene	*109*		*67.0-138*		*09/08/2022 15:32*	WG1923252
(S) 1,2-Dichloroethane-d4	*112*		*70.0-130*		*09/08/2022 15:32*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	15.0		4.00	1	09/12/2022 06:41	WG1924026
C28-C36 Motor Oil Range	32.6		4.00	1	09/12/2022 06:41	WG1924026
(S) o-Terphenyl	*42.1*		*18.0-148*		*09/12/2022 06:41*	WG1924026

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 13:56	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 13:56	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 13:56	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 13:56	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 13:56	WG1923002
(S) p-Terphenyl-d14	*77.2*		*23.0-120*		*09/10/2022 13:56*	WG1923002
(S) Nitrobenzene-d5	*81.6*		*14.0-149*		*09/10/2022 13:56*	WG1923002
(S) 2-Fluorobiphenyl	*83.8*		*34.0-125*		*09/10/2022 13:56*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	14.0		1	09/16/2022 21:10	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 18:56	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.21	T8	1	09/13/2022 12:39	WG1924978

Sample Narrative:

L1532232-02 WG1924978: 8.21 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	2310		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-02 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	160	J5	0.500	1	09/12/2022 16:47	WG1922628
Cadmium	ND		0.500	1	09/12/2022 16:47	WG1922628
Copper	11.8		2.00	1	09/12/2022 16:47	WG1922628
Lead	8.53		0.500	1	09/12/2022 16:47	WG1922628
Nickel	12.4		2.00	1	09/12/2022 16:47	WG1922628
Selenium	ND		2.00	1	09/12/2022 16:47	WG1922628
Silver	ND		1.00	1	09/12/2022 16:47	WG1922628
Zinc	36.4		5.00	1	09/12/2022 16:47	WG1922628

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.08		0.200	1	09/13/2022 21:33	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	4.44		1.00	5	09/11/2022 18:12	WG1922625

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.137	B	0.100	1	09/08/2022 16:43	WG1921493
(S) a,a,a-Trifluorotoluene(FID)	*103*		*77.0-120*		*09/08/2022 16:43*	WG1921493

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 15:52	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 15:52	WG1923252
Toluene	ND		0.00500	1	09/08/2022 15:52	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 15:52	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 15:52	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 15:52	WG1923252
(S) Toluene-d8	*98.8*		*75.0-131*		*09/08/2022 15:52*	WG1923252
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*09/08/2022 15:52*	WG1923252
(S) 1,2-Dichloroethane-d4	*108*		*70.0-130*		*09/08/2022 15:52*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	30.4		4.00	1	09/12/2022 06:29	WG1924026
C28-C36 Motor Oil Range	7.97		4.00	1	09/12/2022 06:29	WG1924026
(S) o-Terphenyl	*51.9*		*18.0-148*		*09/12/2022 06:29*	WG1924026

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 10:04	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 10:04	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 10:04	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 10:04	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 10:04	WG1923002
(S) p-Terphenyl-d14	*68.2*		*23.0-120*		*09/10/2022 10:04*	WG1923002
(S) Nitrobenzene-d5	*72.8*		*14.0-149*		*09/10/2022 10:04*	WG1923002
(S) 2-Fluorobiphenyl	*73.3*		*34.0-125*		*09/10/2022 10:04*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	10.8		1	09/16/2022 21:13	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 19:11	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.03	T8	1	09/13/2022 12:39	WG1924978

Sample Narrative:

L1532232-03 WG1924978: 8.03 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	3920		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-03 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	218		0.500	1	09/12/2022 17:36	WG1922628
Cadmium	ND		0.500	1	09/12/2022 17:36	WG1922628
Copper	15.0		2.00	1	09/12/2022 17:36	WG1922628
Lead	11.4		0.500	1	09/12/2022 17:36	WG1922628
Nickel	16.9		2.00	1	09/12/2022 17:36	WG1922628
Selenium	ND		2.00	1	09/12/2022 17:36	WG1922628
Silver	ND		1.00	1	09/12/2022 17:36	WG1922628
Zinc	50.3		5.00	1	09/12/2022 17:36	WG1922628

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	0.951		0.200	1	09/13/2022 21:36	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	7.12		1.00	5	09/11/2022 19:19	WG1922625

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.111		0.100	1	09/09/2022 09:38	WG1923429
(S) a,a,a-Trifluorotoluene(FID)	*104*		*77.0-120*		*09/09/2022 09:38*	WG1923429

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 16:11	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 16:11	WG1923252
Toluene	ND		0.00500	1	09/08/2022 16:11	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 16:11	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 16:11	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 16:11	WG1923252
(S) Toluene-d8	*100*		*75.0-131*		*09/08/2022 16:11*	WG1923252
(S) 4-Bromofluorobenzene	*103*		*67.0-138*		*09/08/2022 16:11*	WG1923252
(S) 1,2-Dichloroethane-d4	*106*		*70.0-130*		*09/08/2022 16:11*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	09/12/2022 21:46	WG1924331
C28-C36 Motor Oil Range	14.5		4.00	1	09/12/2022 21:46	WG1924331
(S) o-Terphenyl	*47.7*		*18.0-148*		*09/12/2022 21:46*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 10:22	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 10:22	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 10:22	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 10:22	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 10:22	WG1923002
(S) p-Terphenyl-d14	*84.2*		*23.0-120*		*09/10/2022 10:22*	WG1923002
(S) Nitrobenzene-d5	*85.0*		*14.0-149*		*09/10/2022 10:22*	WG1923002
(S) 2-Fluorobiphenyl	*86.5*		*34.0-125*		*09/10/2022 10:22*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	31.1		1	09/16/2022 21:16	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 19:22	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.23	T8	1	09/13/2022 12:39	WG1924978

Sample Narrative:

L1532232-04 WG1924978: 8.23 at 21.2C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	9630		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-04 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	230		0.500	1	09/12/2022 17:39	WG1922628
Cadmium	ND		0.500	1	09/12/2022 17:39	WG1922628
Copper	18.0		2.00	1	09/12/2022 17:39	WG1922628
Lead	12.6		0.500	1	09/12/2022 17:39	WG1922628
Nickel	17.4		2.00	1	09/12/2022 17:39	WG1922628
Selenium	ND		2.00	1	09/12/2022 17:39	WG1922628
Silver	ND		1.00	1	09/12/2022 17:39	WG1922628
Zinc	49.2		5.00	1	09/12/2022 17:39	WG1922628

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.73		0.200	1	09/13/2022 21:39	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	9.87		1.00	5	09/11/2022 19:22	WG1922625

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.190		0.100	1	09/09/2022 10:00	WG1923429
(S) a,a,a-Trifluorotoluene(FID)	*104*		*77.0-120*		*09/09/2022 10:00*	WG1923429

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 16:30	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 16:30	WG1923252
Toluene	ND		0.00500	1	09/08/2022 16:30	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 16:30	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 16:30	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 16:30	WG1923252
(S) Toluene-d8	*95.1*		*75.0-131*		*09/08/2022 16:30*	WG1923252
(S) 4-Bromofluorobenzene	*109*		*67.0-138*		*09/08/2022 16:30*	WG1923252
(S) 1,2-Dichloroethane-d4	*110*		*70.0-130*		*09/08/2022 16:30*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.97		4.00	1	09/12/2022 21:58	WG1924331
C28-C36 Motor Oil Range	23.8		4.00	1	09/12/2022 21:58	WG1924331
(S) o-Terphenyl	*42.1*		*18.0-148*		*09/12/2022 21:58*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 10:40	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 10:40	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 10:40	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 10:40	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 10:40	WG1923002
(S) p-Terphenyl-d14	*78.3*		*23.0-120*		*09/10/2022 10:40*	WG1923002
(S) Nitrobenzene-d5	*74.4*		*14.0-149*		*09/10/2022 10:40*	WG1923002
(S) 2-Fluorobiphenyl	*78.3*		*34.0-125*		*09/10/2022 10:40*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	19.7		1	09/16/2022 21:24	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 19:27	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.08	T8	1	09/13/2022 12:39	WG1924978

Sample Narrative:

L1532232-05 WG1924978: 8.08 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	6850		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-05 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	205		0.500	1	09/12/2022 17:47	WG1922628
Cadmium	ND		0.500	1	09/12/2022 17:47	WG1922628
Copper	16.0		2.00	1	09/12/2022 17:47	WG1922628
Lead	11.6		0.500	1	09/12/2022 17:47	WG1922628
Nickel	15.9		2.00	1	09/12/2022 17:47	WG1922628
Selenium	ND		2.00	1	09/12/2022 17:47	WG1922628
Silver	ND		1.00	1	09/12/2022 17:47	WG1922628
Zinc	46.3		5.00	1	09/12/2022 17:47	WG1922628

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.32		0.200	1	09/13/2022 21:42	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	8.58		1.00	5	09/11/2022 19:33	WG1922625

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.108		0.100	1	09/09/2022 10:50	WG1923429
(S) a,a,a-Trifluorotoluene(FID)	*105*		*77.0-120*		*09/09/2022 10:50*	WG1923429

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 16:49	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 16:49	WG1923252
Toluene	ND		0.00500	1	09/08/2022 16:49	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 16:49	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 16:49	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 16:49	WG1923252
(S) Toluene-d8	*99.1*		*75.0-131*		*09/08/2022 16:49*	WG1923252
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*09/08/2022 16:49*	WG1923252
(S) 1,2-Dichloroethane-d4	*110*		*70.0-130*		*09/08/2022 16:49*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.30		4.00	1	09/12/2022 22:11	WG1924331
C28-C36 Motor Oil Range	14.7		4.00	1	09/12/2022 22:11	WG1924331
(S) o-Terphenyl	*27.7*		*18.0-148*		*09/12/2022 22:11*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 10:58	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 10:58	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 10:58	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 10:58	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 10:58	WG1923002
(S) p-Terphenyl-d14	*80.6*		*23.0-120*		*09/10/2022 10:58*	WG1923002
(S) Nitrobenzene-d5	*80.1*		*14.0-149*		*09/10/2022 10:58*	WG1923002
(S) 2-Fluorobiphenyl	*82.0*		*34.0-125*		*09/10/2022 10:58*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	18.5		1	09/16/2022 21:27	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 19:32	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.07	T8	1	09/13/2022 12:39	WG1924978

Sample Narrative:

L1532232-06 WG1924978: 8.07 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	6190		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-06 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	210		0.500	1	09/12/2022 17:50	WG1922628
Cadmium	ND		0.500	1	09/12/2022 17:50	WG1922628
Copper	12.7		2.00	1	09/12/2022 17:50	WG1922628
Lead	10.9		0.500	1	09/12/2022 17:50	WG1922628
Nickel	12.9		2.00	1	09/12/2022 17:50	WG1922628
Selenium	ND		2.00	1	09/12/2022 17:50	WG1922628
Silver	ND		1.00	1	09/12/2022 17:50	WG1922628
Zinc	40.5		5.00	1	09/12/2022 17:50	WG1922628

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.27		0.200	1	09/13/2022 21:45	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	7.97		1.00	5	09/11/2022 19:36	WG1922625

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.125		0.100	1	09/09/2022 11:13	WG1923429
(S) a,a,a-Trifluorotoluene(FID)	*103*		*77.0-120*		*09/09/2022 11:13*	WG1923429

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 17:08	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 17:08	WG1923252
Toluene	ND		0.00500	1	09/08/2022 17:08	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 17:08	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 17:08	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 17:08	WG1923252
(S) Toluene-d8	*98.1*		*75.0-131*		*09/08/2022 17:08*	WG1923252
(S) 4-Bromofluorobenzene	*101*		*67.0-138*		*09/08/2022 17:08*	WG1923252
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*09/08/2022 17:08*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	8.90		4.00	1	09/12/2022 22:23	WG1924331
C28-C36 Motor Oil Range	27.7		4.00	1	09/12/2022 22:23	WG1924331
(S) o-Terphenyl	*27.8*		*18.0-148*		*09/12/2022 22:23*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 11:16	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 11:16	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 11:16	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 11:16	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 11:16	WG1923002
(S) p-Terphenyl-d14	*75.0*		*23.0-120*		*09/10/2022 11:16*	WG1923002
(S) Nitrobenzene-d5	*74.8*		*14.0-149*		*09/10/2022 11:16*	WG1923002
(S) 2-Fluorobiphenyl	*78.5*		*34.0-125*		*09/10/2022 11:16*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	19.4		1	09/16/2022 21:30	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 19:37	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.14	T8	1	09/13/2022 12:39	WG1924978

Sample Narrative:

L1532232-07 WG1924978: 8.14 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	7060		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-07 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	178		0.500	1	09/12/2022 17:53	WG1922628
Cadmium	ND		0.500	1	09/12/2022 17:53	WG1922628
Copper	11.5		2.00	1	09/12/2022 17:53	WG1922628
Lead	8.43		0.500	1	09/12/2022 17:53	WG1922628
Nickel	12.9		2.00	1	09/12/2022 17:53	WG1922628
Selenium	ND		2.00	1	09/12/2022 17:53	WG1922628
Silver	ND		1.00	1	09/12/2022 17:53	WG1922628
Zinc	38.3		5.00	1	09/12/2022 17:53	WG1922628

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.15		0.200	1	09/13/2022 21:48	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	4.87		1.00	5	09/11/2022 19:39	WG1922625

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.124		0.100	1	09/09/2022 11:36	WG1923429
(S) a,a,a-Trifluorotoluene(FID)	*105*		*77.0-120*		*09/09/2022 11:36*	WG1923429

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 17:26	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 17:26	WG1923252
Toluene	ND		0.00500	1	09/08/2022 17:26	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 17:26	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 17:26	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 17:26	WG1923252
(S) Toluene-d8	*98.4*		*75.0-131*		*09/08/2022 17:26*	WG1923252
(S) 4-Bromofluorobenzene	*101*		*67.0-138*		*09/08/2022 17:26*	WG1923252
(S) 1,2-Dichloroethane-d4	*108*		*70.0-130*		*09/08/2022 17:26*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	09/12/2022 21:33	WG1924331
C28-C36 Motor Oil Range	17.7		4.00	1	09/12/2022 21:33	WG1924331
(S) o-Terphenyl	*57.1*		*18.0-148*		*09/12/2022 21:33*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 11:33	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 11:33	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 11:33	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 11:33	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 11:33	WG1923002
(S) p-Terphenyl-d14	*77.3*		*23.0-120*		*09/10/2022 11:33*	WG1923002
(S) Nitrobenzene-d5	*77.6*		*14.0-149*		*09/10/2022 11:33*	WG1923002
(S) 2-Fluorobiphenyl	*79.2*		*34.0-125*		*09/10/2022 11:33*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	14.2		1	09/16/2022 21:33	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 19:42	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.52	T8	1	09/13/2022 12:39	WG1924978

Sample Narrative:

L1532232-08 WG1924978: 8.52 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	1280		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-08 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	237		0.500	1	09/14/2022 00:36	WG1923222
Cadmium	ND		0.500	1	09/14/2022 00:36	WG1923222
Copper	15.2		2.00	1	09/14/2022 00:36	WG1923222
Lead	9.02		0.500	1	09/14/2022 00:36	WG1923222
Nickel	19.2		2.00	1	09/14/2022 00:36	WG1923222
Selenium	ND		2.00	1	09/14/2022 00:36	WG1923222
Silver	ND		1.00	1	09/14/2022 00:36	WG1923222
Zinc	37.4		5.00	1	09/14/2022 00:36	WG1923222

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.36		0.200	1	09/13/2022 21:51	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	9.61		1.00	5	09/13/2022 20:47	WG1923227

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.120		0.100	1	09/09/2022 11:59	WG1923429
(S) a,a,a-Trifluorotoluene(FID)	*105*		*77.0-120*		*09/09/2022 11:59*	WG1923429

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 17:46	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 17:46	WG1923252
Toluene	ND		0.00500	1	09/08/2022 17:46	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 17:46	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 17:46	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 17:46	WG1923252
(S) Toluene-d8	*99.5*		*75.0-131*		*09/08/2022 17:46*	WG1923252
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*09/08/2022 17:46*	WG1923252
(S) 1,2-Dichloroethane-d4	*106*		*70.0-130*		*09/08/2022 17:46*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	8.48		4.00	1	09/12/2022 22:36	WG1924331
C28-C36 Motor Oil Range	22.2		4.00	1	09/12/2022 22:36	WG1924331
(S) o-Terphenyl	*29.3*		*18.0-148*		*09/12/2022 22:36*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 11:51	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 11:51	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 11:51	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 11:51	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 11:51	WG1923002
(S) p-Terphenyl-d14	*68.7*		*23.0-120*		*09/10/2022 11:51*	WG1923002
(S) Nitrobenzene-d5	*72.1*		*14.0-149*		*09/10/2022 11:51*	WG1923002
(S) 2-Fluorobiphenyl	*70.6*		*34.0-125*		*09/10/2022 11:51*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	33.0		1	09/16/2022 21:36	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 19:48	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.77	T8	1	09/13/2022 16:00	WG1925207

Sample Narrative:

L1532232-09 WG1925207: 8.77 at 20.8C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	4810		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-09 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	204		0.500	1	09/14/2022 00:39	WG1923222
Cadmium	ND		0.500	1	09/14/2022 00:39	WG1923222
Copper	16.0		2.00	1	09/14/2022 00:39	WG1923222
Lead	9.83		0.500	1	09/14/2022 00:39	WG1923222
Nickel	21.7		2.00	1	09/14/2022 00:39	WG1923222
Selenium	ND		2.00	1	09/14/2022 00:39	WG1923222
Silver	ND		1.00	1	09/14/2022 00:39	WG1923222
Zinc	37.0		5.00	1	09/14/2022 00:39	WG1923222

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.69		0.200	1	09/13/2022 21:59	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	9.63		1.00	5	09/13/2022 20:50	WG1923227

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.126		0.100	1	09/09/2022 12:22	WG1923429
(S) a,a,a-Trifluorotoluene(FID)	*105*		*77.0-120*		*09/09/2022 12:22*	WG1923429

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 18:05	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 18:05	WG1923252
Toluene	ND		0.00500	1	09/08/2022 18:05	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 18:05	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 18:05	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 18:05	WG1923252
(S) Toluene-d8	*99.5*		*75.0-131*		*09/08/2022 18:05*	WG1923252
(S) 4-Bromofluorobenzene	*101*		*67.0-138*		*09/08/2022 18:05*	WG1923252
(S) 1,2-Dichloroethane-d4	*107*		*70.0-130*		*09/08/2022 18:05*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	6.64		4.00	1	09/12/2022 22:48	WG1924331
C28-C36 Motor Oil Range	11.5		4.00	1	09/12/2022 22:48	WG1924331
(S) o-Terphenyl	*27.0*		*18.0-148*		*09/12/2022 22:48*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 12:09	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 12:09	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 12:09	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 12:09	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 12:09	WG1923002
(S) p-Terphenyl-d14	*76.4*		*23.0-120*		*09/10/2022 12:09*	WG1923002
(S) Nitrobenzene-d5	*77.8*		*14.0-149*		*09/10/2022 12:09*	WG1923002
(S) 2-Fluorobiphenyl	*79.1*		*34.0-125*		*09/10/2022 12:09*	WG1923002

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

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	26.5		1	09/16/2022 21:39	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 19:53	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.60	T8	1	09/13/2022 16:00	WG1925207

Sample Narrative:

L1532232-10 WG1925207: 8.6 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	ND		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-10 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	233		0.500	1	09/14/2022 00:42	WG1923222
Cadmium	ND		0.500	1	09/14/2022 00:42	WG1923222
Copper	15.7		2.00	1	09/14/2022 00:42	WG1923222
Lead	11.3		0.500	1	09/14/2022 00:42	WG1923222
Nickel	23.2		2.00	1	09/14/2022 00:42	WG1923222
Selenium	ND		2.00	1	09/14/2022 00:42	WG1923222
Silver	ND		1.00	1	09/14/2022 00:42	WG1923222
Zinc	36.4		5.00	1	09/14/2022 00:42	WG1923222

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.35		0.200	1	09/13/2022 22:02	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	12.8		1.00	5	09/13/2022 20:54	WG1923227

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	0.110		0.100	1	09/09/2022 12:44	WG1923429
(S) a,a,a-Trifluorotoluene(FID)	*105*		*77.0-120*		*09/09/2022 12:44*	WG1923429

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 18:24	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 18:24	WG1923252
Toluene	ND		0.00500	1	09/08/2022 18:24	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 18:24	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 18:24	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 18:24	WG1923252
(S) Toluene-d8	*99.7*		*75.0-131*		*09/08/2022 18:24*	WG1923252
(S) 4-Bromofluorobenzene	*101*		*67.0-138*		*09/08/2022 18:24*	WG1923252
(S) 1,2-Dichloroethane-d4	*109*		*70.0-130*		*09/08/2022 18:24*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	8.12		4.00	1	09/12/2022 23:01	WG1924331
C28-C36 Motor Oil Range	22.9		4.00	1	09/12/2022 23:01	WG1924331
(S) o-Terphenyl	*30.3*		*18.0-148*		*09/12/2022 23:01*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 12:27	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 12:27	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 12:27	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 12:27	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 12:27	WG1923002
(S) p-Terphenyl-d14	*70.3*		*23.0-120*		*09/10/2022 12:27*	WG1923002
(S) Nitrobenzene-d5	*71.2*		*14.0-149*		*09/10/2022 12:27*	WG1923002
(S) 2-Fluorobiphenyl	*71.7*		*34.0-125*		*09/10/2022 12:27*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	38.8		1	09/16/2022 21:41	WG1924599

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2022 20:13	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	8.76	T8	1	09/13/2022 16:00	WG1925207

Sample Narrative:
L1532232-11 WG1925207: 8.76 at 20.7C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	3740		10.0	1	09/16/2022 14:10	WG1924190

Sample Narrative:
L1532232-11 WG1924190: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	220		0.500	1	09/14/2022 00:45	WG1923222
Cadmium	ND		0.500	1	09/14/2022 00:45	WG1923222
Copper	15.6		2.00	1	09/14/2022 00:45	WG1923222
Lead	9.28		0.500	1	09/14/2022 00:45	WG1923222
Nickel	23.3		2.00	1	09/14/2022 00:45	WG1923222
Selenium	ND		2.00	1	09/14/2022 00:45	WG1923222
Silver	ND		1.00	1	09/14/2022 00:45	WG1923222
Zinc	35.9		5.00	1	09/14/2022 00:45	WG1923222

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	1.42		0.200	1	09/13/2022 22:05	WG1921386

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	12.0		1.00	5	09/13/2022 20:57	WG1923227

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/07/2022 14:38	WG1921706
(S) a,a,a-Trifluorotoluene(FID)	*90.8*		*77.0-120*		*09/07/2022 14:38*	WG1921706

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 18:43	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 18:43	WG1923252
Toluene	ND		0.00500	1	09/08/2022 18:43	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 18:43	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 18:43	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 18:43	WG1923252
(S) Toluene-d8	*99.6*		*75.0-131*		*09/08/2022 18:43*	WG1923252
(S) 4-Bromofluorobenzene	*102*		*67.0-138*		*09/08/2022 18:43*	WG1923252
(S) 1,2-Dichloroethane-d4	*108*		*70.0-130*		*09/08/2022 18:43*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	4.13		4.00	1	09/12/2022 20:43	WG1924331
C28-C36 Motor Oil Range	11.1		4.00	1	09/12/2022 20:43	WG1924331
(S) o-Terphenyl	*50.5*		*18.0-148*		*09/12/2022 20:43*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 12:45	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 12:45	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 12:45	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 12:45	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 12:45	WG1923002
(S) p-Terphenyl-d14	*73.0*		*23.0-120*		*09/10/2022 12:45*	WG1923002
(S) Nitrobenzene-d5	*71.9*		*14.0-149*		*09/10/2022 12:45*	WG1923002
(S) 2-Fluorobiphenyl	*74.0*		*34.0-125*		*09/10/2022 12:45*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Sodium Adsorption Ratio	42.3		1	09/16/2022 21:44	WG1924599

Wet Chemistry by Method 7199

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Hexavalent Chromium	ND		1.00	1	09/13/2022 20:19	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result pH	Qualifier	Dilution	Analysis date / time	Batch
pH	9.05	T8	1	09/13/2022 16:00	WG1925207

Sample Narrative:
L1532232-12 WG1925207: 9.05 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result umhos/cm	Qualifier	RDL umhos/cm	Dilution	Analysis date / time	Batch
Specific Conductance	4030		10.0	1	09/16/2022 14:10	WG1924190

Sample Narrative:
L1532232-12 WG1924190: at 25C

Metals (ICP) by Method 6010B

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Barium	181		0.500	1	09/14/2022 00:48	WG1923222
Cadmium	ND		0.500	1	09/14/2022 00:48	WG1923222
Copper	16.9		2.00	1	09/14/2022 00:48	WG1923222
Lead	9.28		0.500	1	09/14/2022 00:48	WG1923222
Nickel	31.8		2.00	1	09/14/2022 00:48	WG1923222
Selenium	ND		2.00	1	09/14/2022 00:48	WG1923222
Silver	ND		1.00	1	09/14/2022 00:48	WG1923222
Zinc	36.3		5.00	1	09/14/2022 00:48	WG1923222

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

Analyte	Result mg/l	Qualifier	RDL mg/l	Dilution	Analysis date / time	Batch
Hot Water Sol. Boron	1.61		0.200	1	09/14/2022 00:13	WG1921387

Metals (ICPMS) by Method 6020

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Arsenic	8.62		1.00	5	09/13/2022 21:00	WG1923227

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
TPH (GC/FID) Low Fraction	ND		0.100	1	09/07/2022 14:59	WG1921706
(S) a,a,a-Trifluorotoluene(FID)	*90.5*		*77.0-120*		*09/07/2022 14:59*	WG1921706

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 19:02	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 19:02	WG1923252
Toluene	ND		0.00500	1	09/08/2022 19:02	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 19:02	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 19:02	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 19:02	WG1923252
(S) Toluene-d8	*96.2*		*75.0-131*		*09/08/2022 19:02*	WG1923252
(S) 4-Bromofluorobenzene	*110*		*67.0-138*		*09/08/2022 19:02*	WG1923252
(S) 1,2-Dichloroethane-d4	*110*		*70.0-130*		*09/08/2022 19:02*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	ND		4.00	1	09/12/2022 20:56	WG1924331
C28-C36 Motor Oil Range	6.92		4.00	1	09/12/2022 20:56	WG1924331
(S) o-Terphenyl	*56.6*		*18.0-148*		*09/12/2022 20:56*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 13:02	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 13:02	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 13:02	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 13:02	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 13:02	WG1923002
(S) p-Terphenyl-d14	*74.6*		*23.0-120*		*09/10/2022 13:02*	WG1923002
(S) Nitrobenzene-d5	*78.1*		*14.0-149*		*09/10/2022 13:02*	WG1923002
(S) 2-Fluorobiphenyl	*77.5*		*34.0-125*		*09/10/2022 13:02*	WG1923002

Calculated Results

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	SAR				
Sodium Adsorption Ratio	32.2		1	09/16/2022 21:47	WG1924599

Wet Chemistry by Method 7199

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Hexavalent Chromium	ND		1.00	1	09/13/2022 20:24	WG1924000

Wet Chemistry by Method 9045D

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
	pH				
pH	8.87	T8	1	09/13/2022 16:00	WG1925207

Sample Narrative:

L1532232-13 WG1925207: 8.87 at 20.6C

Wet Chemistry by Method 9050AMod

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	umhos/cm		umhos/cm			
Specific Conductance	4060		10.0	1	09/16/2022 12:35	WG1924187

Sample Narrative:

L1532232-13 WG1924187: at 25C

Metals (ICP) by Method 6010B

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Barium	213		0.500	1	09/14/2022 00:51	WG1923222
Cadmium	ND		0.500	1	09/14/2022 00:51	WG1923222
Copper	15.5		2.00	1	09/14/2022 00:51	WG1923222
Lead	9.30		0.500	1	09/14/2022 00:51	WG1923222
Nickel	21.2		2.00	1	09/14/2022 00:51	WG1923222
Selenium	ND		2.00	1	09/14/2022 00:51	WG1923222
Silver	ND		1.00	1	09/14/2022 00:51	WG1923222
Zinc	37.5		5.00	1	09/14/2022 00:51	WG1923222

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/l		mg/l			
Hot Water Sol. Boron	1.53		0.200	1	09/14/2022 00:16	WG1921387

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
Arsenic	11.4		1.00	5	09/13/2022 21:03	WG1923227

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

Analyte	Result	Qualifier	RDL	Dilution	Analysis date / time	Batch
	mg/kg		mg/kg			
TPH (GC/FID) Low Fraction	ND		0.100	1	09/07/2022 15:19	WG1921706
(S) a,a,a-Trifluorotoluene(FID)	*91.0*		*77.0-120*		*09/07/2022 15:19*	WG1921706

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Benzene	ND		0.00100	1	09/08/2022 19:21	WG1923252
Ethylbenzene	ND		0.00250	1	09/08/2022 19:21	WG1923252
Toluene	ND		0.00500	1	09/08/2022 19:21	WG1923252
1,2,4-Trimethylbenzene	ND		0.00500	1	09/08/2022 19:21	WG1923252
1,3,5-Trimethylbenzene	ND		0.00500	1	09/08/2022 19:21	WG1923252
Xylenes, Total	ND		0.00650	1	09/08/2022 19:21	WG1923252
(S) Toluene-d8	*93.9*		*75.0-131*		*09/08/2022 19:21*	WG1923252
(S) 4-Bromofluorobenzene	*110*		*67.0-138*		*09/08/2022 19:21*	WG1923252
(S) 1,2-Dichloroethane-d4	*114*		*70.0-130*		*09/08/2022 19:21*	WG1923252

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
C10-C28 Diesel Range	5.19		4.00	1	09/12/2022 21:08	WG1924331
C28-C36 Motor Oil Range	13.9		4.00	1	09/12/2022 21:08	WG1924331
(S) o-Terphenyl	*58.4*		*18.0-148*		*09/12/2022 21:08*	WG1924331

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

Analyte	Result mg/kg	Qualifier	RDL mg/kg	Dilution	Analysis date / time	Batch
Anthracene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Acenaphthene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Benzo(a)anthracene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Benzo(a)pyrene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Benzo(b)fluoranthene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Benzo(k)fluoranthene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Chrysene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Dibenz(a,h)anthracene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Fluoranthene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Fluorene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Indeno(1,2,3-cd)pyrene	ND		0.00600	1	09/10/2022 13:20	WG1923002
Naphthalene	ND		0.0200	1	09/10/2022 13:20	WG1923002
Pyrene	ND		0.00600	1	09/10/2022 13:20	WG1923002
1-Methylnaphthalene	ND		0.0200	1	09/10/2022 13:20	WG1923002
2-Methylnaphthalene	ND		0.0200	1	09/10/2022 13:20	WG1923002
(S) p-Terphenyl-d14	*78.9*		*23.0-120*		*09/10/2022 13:20*	WG1923002
(S) Nitrobenzene-d5	*78.5*		*14.0-149*		*09/10/2022 13:20*	WG1923002
(S) 2-Fluorobiphenyl	*80.4*		*34.0-125*		*09/10/2022 13:20*	WG1923002

Method Blank (MB)

(MB) R3837202-1 09/13/22 18:09

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

L1532232-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1532232-03 09/13/22 19:11 • (DUP) R3837202-11 09/13/22 19:16

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

L1532232-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1532232-10 09/13/22 19:53 • (DUP) R3837202-12 09/13/22 19:58

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

Laboratory Control Sample (LCS)

(LCS) R3837202-2 09/13/22 18:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexavalent Chromium	10.0	10.3	103	80.0-120	

L1532219-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1532219-01 09/13/22 18:24 • (MS) R3837202-7 09/13/22 18:30 • (MSD) R3837202-8 09/13/22 18:35

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 %
Hexavalent Chromium	20.0	ND	12.7	14.3	63.4	71.6	1	75.0-125	J6	J6	12.1	20

Sample Narrative:

OS: Sample is a reducer.

L1532219-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L1532219-01 09/13/22 18:24 • (MS) R3837202-10 09/13/22 18:45

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Hexavalent Chromium	636	ND	368	57.9	50	75.0-125	J6

Sample Narrative:

OS: Sample is a reducer.

L1532041-66 Original Sample (OS) • Duplicate (DUP)

(OS) L1532041-66 09/13/22 12:39 • (DUP) R3836516-2 09/13/22 12:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	su	su		%		%
pH	7.73	7.71	1	0.259		1

Sample Narrative:

OS: 7.73 at 21.1C

DUP: 7.71 at 21C

L1532232-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1532232-04 09/13/22 12:39 • (DUP) R3836516-3 09/13/22 12:39

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	pH	su		%		%
pH	8.23	8.16	1	0.854		1

Sample Narrative:

OS: 8.23 at 21.2C

DUP: 8.16 at 21.1C

Laboratory Control Sample (LCS)

(LCS) R3836516-1 09/13/22 12:39

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.91	99.1	99.0-101	

Sample Narrative:

LCS: 9.91 at 21.2C

L1532241-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1532241-02 09/13/22 16:00 • (DUP) R3836727-2 09/13/22 16:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	pH	su		%		%
pH	8.08	8.14	1	0.740		1

Sample Narrative:

OS: 8.08 at 20.8C

DUP: 8.14 at 20.3C

L1532263-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1532263-02 09/13/22 16:00 • (DUP) R3836727-3 09/13/22 16:00

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	pH	su		%		%
pH	8.14	8.09	1	0.616		1

Sample Narrative:

OS: 8.14 at 20.7C

DUP: 8.09 at 20.8C

Laboratory Control Sample (LCS)

(LCS) R3836727-1 09/13/22 16:00

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	su	su	%	%	
pH	10.0	9.92	99.2	99.0-101	

Sample Narrative:

LCS: 9.92 at 19.4C

Method Blank (MB)

(MB) R3838001-1 09/16/22 12:35

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

L1532217-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1532217-01 09/16/22 12:35 • (DUP) R3838001-3 09/16/22 12:35

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	519	517	1	0.386		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1532232-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1532232-09 09/16/22 12:35 • (DUP) R3838001-4 09/16/22 12:35

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	4810	4840	1	0.622		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3838001-2 09/16/22 12:35

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	1120	1090	96.9	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3838102-1 09/16/22 14:10

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

L1532241-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1532241-03 09/16/22 14:10 • (DUP) R3838102-3 09/16/22 14:10

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	490	488	1	0.409		20

Sample Narrative:
OS: at 25C
DUP: at 25C

L1532610-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1532610-01 09/16/22 14:10 • (DUP) R3838102-4 09/16/22 14:10

Analyte	Original Result umhos/cm	DUP Result umhos/cm	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Specific Conductance	151	152	1	0.662		20

Sample Narrative:
OS: at 25C
DUP: at 25C

Laboratory Control Sample (LCS)

(LCS) R3838102-2 09/16/22 14:10

Analyte	Spike Amount umhos/cm	LCS Result umhos/cm	LCS Rec. %	Rec. Limits %	LCS Qualifier
Specific Conductance	1120	1150	102	85.0-115	

Sample Narrative:
LCS: at 25C

Method Blank (MB)

(MB) R3836296-1 09/12/22 16:41

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

Laboratory Control Sample (LCS)

(LCS) R3836296-2 09/12/22 16:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	102	102	80.0-120	
Cadmium	100	98.0	98.0	80.0-120	
Copper	100	98.8	98.8	80.0-120	
Lead	100	98.3	98.3	80.0-120	
Nickel	100	97.9	97.9	80.0-120	
Selenium	100	100	100	80.0-120	
Silver	20.0	18.5	92.5	80.0-120	
Zinc	100	96.2	96.2	80.0-120	

L1532232-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1532232-02 09/12/22 16:47 • (MS) R3836296-5 09/12/22 16:55 • (MSD) R3836296-6 09/12/22 16:58

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 %
Barium	100	160	271	304	111	144	1	75.0-125		J5	11.2	20
Cadmium	100	ND	110	103	110	103	1	75.0-125			6.86	20
Copper	100	11.8	125	119	113	107	1	75.0-125			4.79	20
Lead	100	8.53	121	114	112	106	1	75.0-125			5.50	20
Nickel	100	12.4	123	118	111	105	1	75.0-125			4.89	20
Selenium	100	ND	113	105	113	105	1	75.0-125			7.10	20
Silver	20.0	ND	21.1	19.9	106	99.7	1	75.0-125			5.93	20
Zinc	100	36.4	134	129	97.2	93.0	1	75.0-125			3.20	20

Method Blank (MB)

(MB) R3836818-1 09/13/22 23:30

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

Laboratory Control Sample (LCS)

(LCS) R3836818-2 09/13/22 23:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Barium	100	91.3	91.3	80.0-120	
Cadmium	100	89.9	89.9	80.0-120	
Copper	100	93.5	93.5	80.0-120	
Lead	100	88.7	88.7	80.0-120	
Nickel	100	91.0	91.0	80.0-120	
Selenium	100	93.4	93.4	80.0-120	
Silver	20.0	18.3	91.3	80.0-120	
Zinc	100	86.6	86.6	80.0-120	

L1532206-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1532206-01 09/13/22 23:35 • (MS) R3836818-5 09/13/22 23:43 • (MSD) R3836818-6 09/13/22 23:46

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 %
Barium	100	263	365	364	103	101	1	75.0-125			0.361	20
Cadmium	100	0.673	97.7	97.4	97.0	96.7	1	75.0-125			0.310	20
Copper	100	24.3	125	123	101	98.8	1	75.0-125			1.83	20
Lead	100	12.4	107	107	94.5	94.3	1	75.0-125			0.183	20
Nickel	100	18.9	117	115	97.8	96.4	1	75.0-125			1.24	20
Selenium	100	ND	101	100	101	100	1	75.0-125			0.402	20
Silver	20.0	ND	20.1	20.1	101	100	1	75.0-125			0.286	20
Zinc	100	61.0	141	147	79.5	86.3	1	75.0-125			4.72	20

Method Blank (MB)

(MB) R3836824-1 09/13/22 20:52

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) R3836824-2 09/13/22 20:55 • (LCSD) R3836824-3 09/13/22 20:58

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	0.997	0.984	99.7	98.4	80.0-120			1.35	20

Method Blank (MB)

(MB) R3836834-1 09/14/22 00:04

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) R3836834-2 09/14/22 00:07 • (LCSD) R3836834-3 09/14/22 00:10

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	1.07	1.04	107	104	80.0-120			2.98	20

Method Blank (MB)

(MB) R3835944-1 09/11/22 18:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00

Laboratory Control Sample (LCS)

(LCS) R3835944-2 09/11/22 18:09

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	87.1	87.1	80.0-120	

L1532232-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1532232-02 09/11/22 18:12 • (MS) R3835944-5 09/11/22 18:22 • (MSD) R3835944-6 09/11/22 18:25

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	4.44	103	95.8	98.3	91.4	5	75.0-125			6.99	20

Method Blank (MB)

(MB) R3836775-1 09/13/22 19:14

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Arsenic	U		0.100	1.00

Laboratory Control Sample (LCS)

(LCS) R3836775-2 09/13/22 19:17

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Arsenic	100	91.1	91.1	80.0-120	

L1532206-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1532206-01 09/13/22 19:20 • (MS) R3836775-5 09/13/22 19:30 • (MSD) R3836775-6 09/13/22 19:33

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	6.79	100	99.5	93.3	92.7	5	75.0-125			0.566	20

Method Blank (MB)

(MB) R3835287-2 09/08/22 08:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	0.0218	J	0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3835287-1 09/08/22 06:47

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	6.77	123	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*117*	*77.0-120*	

Method Blank (MB)

(MB) R3834752-2 09/07/22 09:32

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*95.6*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3834752-1 09/07/22 08:31

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	5.84	106	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*101*	*77.0-120*	

Method Blank (MB)

(MB) R3835617-2 09/09/22 06:33

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
TPH (GC/FID) Low Fraction	U		0.0217	0.100
(S) a,a,a-Trifluorotoluene(FID)	*107*			*77.0-120*

Laboratory Control Sample (LCS)

(LCS) R3835617-1 09/09/22 05:30

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
TPH (GC/FID) Low Fraction	5.50	4.60	83.6	72.0-127	
(S) a,a,a-Trifluorotoluene(FID)			*112*	*77.0-120*	

L1532232-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1532232-03 09/09/22 09:38 • (MS) R3835617-3 09/09/22 15:53 • (MSD) R3835617-4 09/09/22 16:15

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 %
TPH (GC/FID) Low Fraction	5.50	0.111	3.10	2.87	54.3	50.2	1	10.0-151			7.71	28
(S) a,a,a-Trifluorotoluene(FID)					*107*	*107*		*77.0-120*				

Method Blank (MB)

(MB) R3835373-3 09/08/22 13:12

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	*95.4*			*75.0-131*
(S) 4-Bromofluorobenzene	*107*			*67.0-138*
(S) 1,2-Dichloroethane-d4	*113*			*70.0-130*

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

(LCS) R3835373-1 09/08/22 11:01 • (LCSD) R3835373-2 09/08/22 11:20

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	0.117	0.123	93.6	98.4	70.0-123			5.00	20
Toluene	0.125	0.107	0.115	85.6	92.0	75.0-121			7.21	20
Ethylbenzene	0.125	0.111	0.124	88.8	99.2	74.0-126			11.1	20
Xylenes, Total	0.375	0.321	0.369	85.6	98.4	72.0-127			13.9	20
1,2,4-Trimethylbenzene	0.125	0.107	0.109	85.6	87.2	70.0-126			1.85	20
1,3,5-Trimethylbenzene	0.125	0.109	0.104	87.2	83.2	73.0-127			4.69	20
(S) Toluene-d8				*99.9*	*94.8*	*75.0-131*				
(S) 4-Bromofluorobenzene				*99.0*	*108*	*67.0-138*				
(S) 1,2-Dichloroethane-d4				*115*	*117*	*70.0-130*				

Method Blank (MB)

(MB) R3836064-1 09/12/22 04:31

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	*97.7*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3836064-2 09/12/22 04:44

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	39.5	79.0	50.0-150	
(S) o-Terphenyl			*91.6*	*18.0-148*	

Method Blank (MB)

(MB) R3836308-1 09/12/22 20:43

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	0.350	J	0.274	4.00
(S) o-Terphenyl	*47.9*			*18.0-148*

Laboratory Control Sample (LCS)

(LCS) R3836308-2 09/12/22 20:56

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
C10-C28 Diesel Range	50.0	27.5	55.0	50.0-150	
(S) o-Terphenyl			*58.7*	*18.0-148*	

L1532262-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1532262-02 09/12/22 21:08 • (MS) R3836308-3 09/12/22 21:21 • (MSD) R3836308-4 09/12/22 21:33

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	47.8	ND	23.2	24.0	42.9	43.8	1	50.0-150	J6	J6	3.39	20
(S) o-Terphenyl					*35.0*	*36.1*		*18.0-148*				

Method Blank (MB)

(MB) R3836112-2 09/10/22 08:53

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	*85.9*			*23.0-120*
(S) Nitrobenzene-d5	*88.4*			*14.0-149*
(S) 2-Fluorobiphenyl	*89.2*			*34.0-125*

Laboratory Control Sample (LCS)

(LCS) R3836112-1 09/10/22 08:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acenaphthene	0.0800	0.0676	84.5	50.0-120	
Anthracene	0.0800	0.0616	77.0	50.0-126	
Benzo(a)anthracene	0.0800	0.0668	83.5	45.0-120	
Benzo(b)fluoranthene	0.0800	0.0602	75.3	42.0-121	
Benzo(k)fluoranthene	0.0800	0.0586	73.3	49.0-125	
Benzo(a)pyrene	0.0800	0.0616	77.0	42.0-120	
Chrysene	0.0800	0.0642	80.3	49.0-122	
Dibenz(a,h)anthracene	0.0800	0.0588	73.5	47.0-125	
Fluoranthene	0.0800	0.0676	84.5	49.0-129	
Fluorene	0.0800	0.0669	83.6	49.0-120	
Indeno(1,2,3-cd)pyrene	0.0800	0.0617	77.1	46.0-125	
1-Methylnaphthalene	0.0800	0.0657	82.1	51.0-121	
2-Methylnaphthalene	0.0800	0.0687	85.9	50.0-120	
Naphthalene	0.0800	0.0637	79.6	50.0-120	
Pyrene	0.0800	0.0678	84.8	43.0-123	

Laboratory Control Sample (LCS)

(LCS) R3836112-1 09/10/22 08:36

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCS Rec. %	Rec. Limits %	LCS Qualifier
(S) p-Terphenyl-d14			*86.0*	*23.0-120*	
(S) Nitrobenzene-d5			*94.8*	*14.0-149*	
(S) 2-Fluorobiphenyl			*92.3*	*34.0-125*	

L1532220-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1532220-11 09/10/22 14:14 • (MS) R3836112-3 09/10/22 14:31 • (MSD) R3836112-4 09/10/22 14:49

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	0.0800	ND	0.0674	0.0631	79.1	73.7	1	14.0-127			6.59	27
Anthracene	0.0800	0.00877	0.0625	0.0601	67.2	64.2	1	10.0-145			3.92	30
Benzo(a)anthracene	0.0800	0.0299	0.0848	0.0787	68.6	61.0	1	10.0-139			7.46	30
Benzo(b)fluoranthene	0.0800	0.0407	0.0865	0.0820	57.3	51.6	1	10.0-140			5.34	36
Benzo(k)fluoranthene	0.0800	0.0133	0.0658	0.0629	65.6	62.0	1	10.0-137			4.51	31
Benzo(a)pyrene	0.0800	0.0290	0.0853	0.0810	70.4	65.0	1	10.0-141			5.17	31
Chrysene	0.0800	0.0284	0.0829	0.0783	68.1	62.4	1	10.0-145			5.71	30
Dibenz(a,h)anthracene	0.0800	ND	0.0597	0.0557	69.5	64.5	1	10.0-132			6.93	31
Fluoranthene	0.0800	0.0709	0.102	0.0989	38.9	35.0	1	10.0-153			3.09	33
Fluorene	0.0800	ND	0.0674	0.0617	80.1	73.0	1	11.0-130			8.83	29
Indeno(1,2,3-cd)pyrene	0.0800	0.0228	0.0761	0.0715	66.6	60.9	1	10.0-137			6.23	32
1-Methylnaphthalene	0.0800	0.0243	0.0945	0.0876	87.8	79.1	1	10.0-142			7.58	28
2-Methylnaphthalene	0.0800	0.0318	0.102	0.0968	87.8	81.3	1	10.0-137			5.23	28
Naphthalene	0.0800	ND	0.0845	0.0787	83.8	76.5	1	10.0-135			7.11	27
Pyrene	0.0800	0.0582	0.0979	0.0945	49.6	45.4	1	10.0-148			3.53	35
(S) p-Terphenyl-d14					*81.5*	*78.2*		*23.0-120*				
(S) Nitrobenzene-d5					*85.1*	*81.7*		*14.0-149*				
(S) 2-Fluorobiphenyl					*89.2*	*84.3*		*34.0-125*				

GLOSSARY OF TERMS

Guide to Reading and Understanding Your Laboratory Report

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

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

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(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.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
T8	Sample(s) received past/too close to holding time expiration.

ACCREDITATIONS & LOCATIONS

Pace Analytical National 12065 Lebanon Rd Mount Juliet, TN 37122

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN000032021-1
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey–NELAP	TN002
California	2932	New Mexico [1]	TN00003
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina [1]	DW21704
Georgia	NELAP	North Carolina [3]	41
Georgia [1]	923	North Dakota	R-140
Idaho	TN00003	Ohio–VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LAO000356
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.

Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information: SAME AS LEFT

Report to: Blair Rollins

Email To: brollins@caerusoilandgas.com

Project Description: OP15 P+A Assessment

City/State Collected: Piceance Crk, CO

Please Circle: PT (MT) CT ET

Phone: (970) 640-6919

Client Project #

Lab Project #

Collected by (print): Tristan Schmalz

Site/Facility ID #: OP15 Pad

P.O. #

Collected by (signature): Tristan Schmalz

Immediately Packed on Ice N ___ Y X

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

Quote #

Date Results Needed: Standard TAT

Analysis / Container / Preservative

Pres Chk

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	COGCC Table 915-1	EC, pH, SAR	Arsenic, Boron	COGCC Table 910-1	Remarks	Sample # (lab only)
20220831_OP15_WHTP_comp	COMP	SS	GS	8/31/2022	13:54	2	X					-01
20220831_OP15_PLOITP_COMP	Comp	SS	GS	8/31/2022	14:15	2	X					-02
20220831_OP15_PLOINWall@8ft	Grab	SS	8 ft	8/31/2022	14:55	2	X					-03
20220831_OP15_PLOIEWall@8ft	Grab	SS	8ft	8/31/2022	14:40	2	X					-04
20220831_OP15_PLOISWall@8ft	Grab	SS	8ft	8/31/2022	14:45	2	X					-05
20220831_OP15_PLOIWWall@8ft	Grab	SS	8ft	8/31/2022	14:50	2	X					-06
20220831_OP15_PLOI@8ft	Grab	SS	8ft	8/31/2022	14:55	2	X					-07
20220831_OP15_PLO6NWall@7ft	Grab	SS	7ft	8/31/2022	15:14	1	X					-08
20220831_OP15_PLO6EWall@7ft	Grab	SS	7ft	8/31/2022	15:20	1	X					-09
20220831_OP15_PLO6SWall@7ft	Grab	SS	7ft	8/31/2022	15:25	1	X					-10

Chain of Custody Page ___ of ___

Pace Analytical® National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1532232

B047

Acctnum:

Template:

Prelogin:

PM:

PB:

Shipped Via:

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 5755 8085 0190

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: X N
Bottles arrive intact: X N
Correct bottles used: X N
Sufficient volume sent: X N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N
RAD Screen <0.5 mR/hr: X N

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Trip Blank Received: Yes / No HCL / MeoH TBR
Tristan Schmalz	9/1/22	9:35		
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)	Temp: °C Bottles Received:
	9/1/22	1500		1.5+0=1.5 17
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)	Date: Time:
			M. Wilk	9/2/22 900

If preservation required by Login: Date/Time

Hold: Condition: NCF / OK

Caerus Oil and Gas
143 Diamond Avenue
Parachute, CO 81635

Billing Information: SAME AS LEFT

Report to: Blair Rollins

Email To: brollins@caerusoilandgas.com

Project Description: OP15 P+A Assessment

City/State Collected: Piceance Crk, CO

Please Circle: PT (MT) CT ET

Phone: (970) 640-6919

Client Project #

Lab Project #

Collected by (print): Tristan Schmalz

Site/Facility ID #: OP15 Pad

P.O. #

Collected by (signature): Tristan Schmalz

Immediately Packed on Ice N ____ Y X

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

Quote #

Date Results Needed: Standard TAT

Sample ID	Comp/Grab	Matrix*	Depth	Date	Time	No. of Cntrs	COGCC Table 915-1	EC, pH, SAR	Arsenic, Boron	COGCC Table 910-1	Remarks	Sample # (lab only)
20220831_OP15_PL06WWall@7ft	Grab	SS	7ft	8/31/2022	15:30	1	X					-11
20220831_OP15_PL06@7ft	Grab	SS	7ft	8/31/2022	15:55	1	X					-12
20220831_OP15_PL06TP_COMP	COMP	SS	GS	8/31/2022	15:45	1	X					-13

Tristan Schmalz
8/31/2022

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

Remarks:

pH _____ Temp _____

Flow _____ Other _____

Samples returned via:
__ UPS __ FedEx __ Courier __ _____

Tracking # 5755 8085 0190

Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
Tristan Schmalz	9/1/22	935	
Relinquished by : (Signature)	Date:	Time:	Received by: (Signature)
	9/1/22	1500	
Relinquished by : (Signature)	Date:	Time:	Received for lab by: (Signature)
			M. Webb

Trip Blank Received: Yes / No HCL / MeoH TBR

Temp: 1.5 °C Bottles Received: 3

Date: 9/2/22 Time: 900

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OK

Sample Receipt Checklist
COC Seal Present/Intact: __Y __N
COC Signed/Accurate: __Y __N
Bottles arrive intact: __Y __N
Correct bottles used: __Y __N
Sufficient volume sent: __Y __N
If Applicable
VOA Zero Headspace: __Y __N
Preservation Correct/Checked: __Y __N
RAD Screen <0.5 mR/hr: __Y __N

Chain of Custody Page ___ of ___

Pace Analytical®
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

SDG # L1532732

Table #

Acctnum:
Template:
Prelogin:
PM:
PB:

Shipped Via: